

EVERY CONFERENCE BRINGS NEW HORIZONS



INTERNATIONAL CONFERENCE ON NEW HORIZONS IN EDUCATION



INTERNATIONAL DISTANCE EDUCATION CONFERENCE



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Editors

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Dear Guests...

Welcome to the 8h INTE & ITICAM & IDEC -2017.

International Conference on New Horizons (INTE) and, International Trends and Issues in Communication & Media Conference (ITICAM) and International Distance Education Conference (IDEC) are international academic conferences for academics, teachers and educators. They promote the development and dissemination of theoretical knowledge, conceptual research, and professional knowledge through conferences activities, the conference proceedings books and TOJET, TOJNED Journals. Their focus is to create and disseminate knowledge about new developments in these academic fields.

INTE & ITICAM & IDEC conferences are now well-known international academic events and the number of paper submissions and attendees are increasing every year. This year our conferences have received more than 900 applications. The Conference Academic Advisory Board has accepted approximately 600 papers to be presented in Berlin, Germany.

We would like to thank Prof. Dr. Muzaffer ELMAS, Rector of Sakarya University for his support of organizing these conferences.

We also would like to thank our distinguished guests, keynote speakers for their collaborations and contributions for the success of these conferences.

And finally, we would like to thank to all of our participants who have presented their academic works in INTE & ITICAM& IDEC- 2017, Berlin, Germany.

Without their participation, INTE, ITICAM & IDEC-2017 would, of course, have been impossible.

We would like to sincerely thank all of you for coming, presenting, and joining in the academic activities.

We would also like to thank all of those who have contributed to the reviewing process of INTE, ITICAM & IDEC conference papers, which will be also published in TOJET, TOJNED.

Finally, we would like to wish you all a successful conference, pleasant stay in Berlin, Germany.

Thank you

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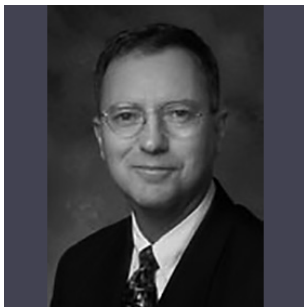
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KEYNOTES



The Future of Teaching, Learning, and Technology in Higher Education

Prof. Dr. Teresa FRANKLIN
Ohio University, United States



*Preparing students to live in a complex world:
Connecting the curriculum and co curriculum to
enhance holistic student learning*

Prof. Dr. Douglas FRANKLIN
Ohio University, United States



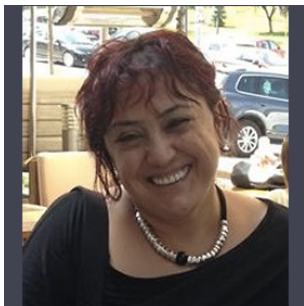
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Prof. Dr. Robert G. DOYLE
Harvard University, United States



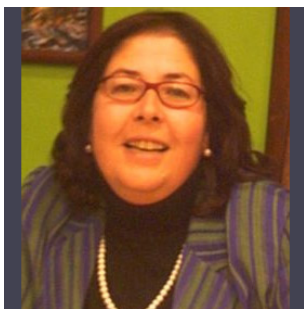
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Prof. Dr. John HITCHCOCK
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21st Century Skills Beyond the Classroom

Prof. Dr. Buket AKKOYUNLU
Cankaya University, Turkey



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Prof. Dr. Ferhan ODABAŞI

Anadolu University, Turkey



Quality Process in Higher Education

Prof. Dr. Muzaffer ELMAS

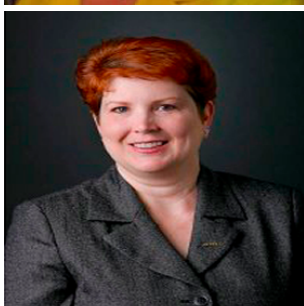
Sakarya University, Turkey



Strange Pairings – The case for “Science and Literacy” in an era of populist science!

Prof. Dr. Colleen SEXTON

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Project-Based Learning

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“I LOVE IT BUT I DON’T USE IT”: STUDENTS’ PERCEPTIONS ON THE USE OF PADLET AS AN EDUCATIONAL TOOL FOR LEARNING

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ABSTRACT

Web 2.0 tools have become ubiquitous in many university classrooms. These tools support collaboration and community building, enhance media sharing, and improve collective knowledge constructions- features that are valuable to learning. Many studies have in fact found that the inclusion of these tools into the teaching and learning processes creates positive learning experiences with many reported preferences of using these tools over traditional methods of learning. This small-scale study which involved 37 undergraduate students, investigated students’ perceptions on the use of a web 2.0 tool, namely Padlet, as an educational tool and students’ frequency of use of and their engagement with it to support their learning of communication concepts. The study, which employed a qualitative approach used two data collection tools: a qualitative questionnaire and analyses of students’ activities on the virtual walls. The study found that even though a small number of students had some negative perceptions of Padlet use, disclosing technical issues, lack of notification and reward, and preference over paper to technology, most of the students perceived Padlet use very positively. Despite this, the study found that most students were only actively engaged with Padlet activities on case-study-related tasks and only prior to assessments but not for independent learning tasks. The study also shows that students’ positive perception of Padlet as a learning tool did not influence students’ frequency of use. Pedagogical strategies are shared to improve the use of Padlet as an educational tool to support students’ learning.

INTRODUCTION

Integration of web 2.0 tools and their impact on learning in higher education has been documented in many studies. Many of these studies have uncovered the benefits of incorporating web 2.0 tools into teaching. Blogging, for example has been found to be a good tool to trigger reflection and promote learning in collective environment (Baird & Fisher, 2005). Findings from a study by Farmer and Bartlett-Bragg (2005) support these findings as they found that blogging improved learners’ ability to regulate and personalise their learning. The use of Twitter, on the other hand, because of its functionality, encouraged participants to produce concise but critical reflections and created a sense of connections between users (Ruckert et al., 2014, p. 17). Similarly, Gilbert, Morton & Rowley, (2007) reported that discussion boards and peer collaborative support were the highlighted aspects of an e-learning module investigated. A study by Leow and Neo (2014) who analysed 182 students’ interactions when using web 2.00 tools also found that peer interactions on this platform “stimulated students to actively use internet resources” and encouraged peer evaluation to avoid misunderstanding and to reduce mistakes (p. 192). A study by Wood and Ryan (2010) supported these findings when it found that web 2.0 tools like blogs and social bookmarking services had a positive effect on students’ learning of History as they generated significant interactions between students and their peers as well as with their tutors (p. 195).

Studies on students’ perceptions on the use of web 2.0 tools as educational tools, however, often report mixed results. The assumption that students who are digital natives would embrace the use of these tools for learning has been challenged and proven erroneous in many studies. A study by Wynn (2013), for example, found that even though students wanted and anticipated technological tools in their classroom, they did not welcome these tools to be part of their learning. In many cases, students were reluctant to use ICTs to interact with each other for academic purposes (Veira, Leacock & Warrican, 2014) and they showed reservation about mixing academic and social spheres when tools like Twitter and Facebook were adopted as learning tools (Osgerby & Rush, 2015). In fact, it was found that students often feel “disempowered, disenchanted and alienated when it comes to technology-related activities” (Veira, Leacock & Warrican, 2014, p. 229). This could be because many students are unfamiliar with their use and functions (Edirisingha et al., 2007) as they are not intentionally designed for learning. It would be a waste of an academic’s time and effort if his or her students refuse to engage with a specific technology simply because they dislike it.

It is thus important to understand students’ perception on the use of web 2.0 tools to support their learning. Investigating students’ perceptions on the use of a web 2.0 tool for learning would also bridge the research gap

in the area as many past studies focused on the effectiveness of technological endeavours within the classroom but not on the investigation of student perceptions on the varied use of technological innovations introduced into the classroom (Wynn, 2013).

It is also important to understand whether students' perceptions of a web tool that is used for educational purposes has any effect on students' engagement with it. Logically, it can be assumed that if students have a negative perception of a web 2.0 tool, they will not use it often enough or perhaps would engage with it only superficially. A study by Ferreira and Santoso (2008) for example shows that student's positive perceptions of Accounting has a positive impact on students' engagement and performance in the subject. Past studies have reported that students' engagement with technological tools were influenced by the nature of the activities (Whitton, 2009), external pressures (Sharpe and Benfield, 2005), and relevance and needs (Eridisingha et al., 2007). There have been limited reports which link students' perceptions to participation in and engagement with web 2.0 tools. Findings from such studies contribute significantly to the understanding of the impact of students' perceptions of a technological tool on their use or engagement with it as a tool to support their learning.

This study attempted to gather understanding on students' perceptions of a web 2.0 tool, namely Padlet. The study also sought to understand whether students' perceptions of Padlet has an impact on the frequency of Padlet use. Its other objective is to understand students' perception of sharing on Padlet and identify whether students' perception on sharing on Padlet has an impact on their engagement with it. This is because past studies have reported that students distanced themselves from using 2.0 tools because of issues with openness (An, Aworua, Ballard & Williams, 2009) or fear of open communication (Ahmed, Almunim and Mbuh, 2016; An and Williams, 2010).

The current study thus has three important research questions:

1. What were students' perceptions of Padlet as an educational tool?
2. What were their perceptions of sharing on Padlet?
3. Did their perception of Padlet affect frequency of Padlet use?

THE STUDY

The Context of Padlet Use in the Current Study

Padlet is a web 2.0 tool that enables the creation of virtual walls. On these walls, users can post files in different format (audio, pictures, video etc.). In the current study, Padlet was used as an educational tool to support students' learning of communication concepts for Communication Skills module and prepare students for summative assessments.

After the completion of a topic, students would be given a Padlet task to complete as part of their revision of the topic. Most of the questions in these revision exercises were past year examination questions. Most of the time, revision exercises were done as part of independent learning. Prior to students' case study test, Padlet activities containing past year case study questions were also prepared. Some of case study-test-related Padlet tasks were done as part of classroom activity but some due to time limitation were done as part of independent learning.

Students were asked to immediately respond to Padlet exercises when they were done as part of classroom activities and their answers were marked and commented on often before the class ended. Often, answers that students submitted on Padlet walls during these in-class sessions became a source of discussion. When Padlet activities were done as part of independent learning, the teacher commented on or marked students' answers within 7 days.

As Padlet walls functions like a virtual (white)board, students could view and read each other's contributions to the wall. In this way, Padlet enabled collective knowledge sharing. Students could also read comments given by the teacher and view how answers were graded and in this way Padlet supported interactivity between students and the teacher particularly when the teacher reacted to students' answers and students reacted to teacher's comments and the grading of their work. This also somehow made teacher's comments formative as sometimes students worked on teachers' comments, and resubmitted their improved answers for a second round of marking. To ensure privacy and to encourage sharing some 'security measures' were imposed for example, the Padlet exercises were password protected and the links and the passwords were only made available for her students.

Methodology

The study adopted a classroom action research model and its main objective was to improve practice. Employing a qualitative approach, the study used two data collection tools: a survey (qualitative) questionnaire which comprised of 5 open-ended questions, and analyses of students' responses to the Padlet exercises. Even though analysis of open-ended responses is more tedious, the adoption of a qualitative survey questionnaire was pertinent because open-ended responses have more "nuance, depth, and substance than open-ended responses" (Ruel, Wagner III & Gillespie, 2016, p. 68).

The qualitative questionnaire sought to get students' responses on the following 1) their perception of the use of Padlet as an educational tool, 2) their perception on sharing on Padlet, 3) frequency of visits to Padlet walls, 4) reasons for visiting Padlet walls, and 5) suggestions for further improvement. Analyses of content of Padlet walls recorded 1) number of contributors per Padlet activity/wall, 2) students' reactions to Padlet activities and teacher's feedback, 3) number of viewers per padlet wall and, 4) peaked time for visits to Padlet walls. Out of 47 students, 37 Hospitality/Accounting and Finance students completed the qualitative survey questionnaire.

Data analyses for the qualitative survey questionnaire involved survey coding which was a process of categorising open-ended responses into groups (Popping, 2012). To understand students' general perceptions of Padlet as an educational tool and the idea of sharing on Padlet, frequency counts of recurring items were also done.

Analyses of students' responses or activities on Padlet wall were done once the semester was over. The teacher visited the walls and recorded the number of students' responses to the question on each wall, the number of times students resubmitted their work to be remarked, and whether students remained anonymous or revealed their identity when they shared their answers. As Padlet also recorded the number of visitors to the Padlet walls throughout the semester, the teacher also analysed the graph which recorded number of visits to Padlet walls (provided by Padlet) to get an overview of when visits to Padlet walls peaked and when it was at its lowest points.

FINDINGS

What were students' perceptions of Padlet as an educational tool?

The number of qualitative responses recorded on students' perception of Padlet was 38 statements and out of these, 29 were positive and 9 were negative. There were 6 categories of positive statements: 'ease of use', 'ease of access', 'perceived usefulness' (alternative source, platform for sharing, viewing others' work, feedback, source of reference, testing ground), - 'stress-free' (anonymity, flexibility), 'new medium of learning' and 'preferred learning medium'. Five categories of negative statements were identified: 'accessibility issues' (time-lag, require internet connection, not hassle free), 'readability issues', 'unfamiliar tool', 'not preferred learning method', and 'no clear guidelines'.

Positive statements made by students were clearly related to how Padlet assisted them in their learning of the module. Most importantly, students could identify the perceived usefulness of Padlet. Students mentioned that Padlet provided them with a platform to share their answers, view others' responses, and get feedback. Students also valued the function of Padlet as a place where resources were stored. It served as another source of reference. As an educational tool, students also found Padlet easy to use and access. The other aspects of Padlet use which students appreciated was closely related to the way the teacher has designed its use which promoted flexibility and anonymity.

As for negative statements, students' main grouses were generally concerned with technical factors (accessibility and readability) and the way Padlet was used. As most activities on Padlet was designed as part of students' independent learning, some might have felt lost and felt that more guidelines were necessary. These were reflected in the suggestions students gave to improve Padlet use in Communication Skills classrooms as some requested that more guidance is provided, and reminders are given to complete the tasks on Padlet walls. Some of the other suggestions given also showed that students prefer more teacher-controlled environment as some requested that the Padlet activities were completed during class time, and all the activities were made compulsory for all students to complete.

What were students' perception on sharing on Padlet?

Thirty-three statements were recorded when students were asked about their perceptions on sharing on Padlet and out of these, 31 were positive statements and two were negative. Students were appreciative of Padlet's ease

of access and use, and the way it was used which fostered anonymity and flexibility. One student also mentioned that sharing on Padlet evoked positive feelings.

Despite the measures taken to ensure anonymity, one student found that sharing answers on Padlet as a threatening experience. Another student who responded negatively to sharing on Padlet simply did not favour the use of technology for teaching and preferred the traditional pen and paper to answer questions.

Analyses of students' responses to Padlet tasks also showed that students generally preferred to respond to the tasks individually. Most students who contributed to the walls used pseudonyms with only four students who constantly used their real names.

Did students' perception of Padlet affect frequency of Padlet use?

Data from the qualitative questionnaire found that only six students were active users of Padlet as they always visited the walls 1) "to see how answers are marked and look at how other people answered the questions", 2) as "... "the only way I can test myself".

Thirty-one students admitted that they visited the walls 'sometimes' or 'rarely'. Students reported of having other commitments and this seemed to become a barrier for them to be active on Padlet. Students for example mentioned that they were "busy with other subjects that I rarely have time" and that their "focus was on other subjects". Others highlighted that they did not receive enough prompting or clear guidelines. One student for example explained his inactivity on Padlet wall because he/she "was not a self-learner" and required "guidelines from my lecturer before I use something". Some protested that "there is no notification when lecturer update/upload new questions" and that they will "forget unless people around me inform me". There is a possibility that some students found the independent learning tasks difficult to handle as they were not autonomous as reflected in some of the reasons students provided for visits to the walls: "Because the teacher said so"/ "when teacher asks us... to do work on it".

Students also highlighted the fact that they did not feel motivated because of lack of reward (no marks were given when Padlet exercises were completed), technology was not the preferred method of learning, and Padlet was not used by many thus "there's not much post in them" and was not their preferred tool for learning- "Less opportunity to think about Padlet unlike Facebook".

However, it was found that the number of visitors to Padlet walls peaked prior to assessments and there were clearly more number of contributors to Padlet walls containing case study questions. The number of contributors to case-study-test-related tasks, was 14 (the lowest) and 33 (the highest). Contributors to revision exercises, on the other hand, fluctuated between 2 and 5 students (even though these revision exercises comprised of past year examination questions). One possible reason for students' fluctuating pattern of Padlet use was because most of the revision tasks were done as part of independent learning. The higher recorded student contributors to the walls with case study questions could be because some of these were attempted in class. Having said that, the number of contributors to case-study-test-related activities remained higher than the number of contributors to the walls with revision exercises.

Also, it was interesting to note that the number of visitors to the walls peaked at 503 (the highest), recorded on October 2nd; and 278 (second highest), recorded on Dec 6th. Unsurprisingly, these dates coincided with students' preparation for two assessments, a case study test and a final examination respectively. At other times, students' collective number of visits to the walls was between 34 and 76 visits. Students' activity or inactivity on Padlet seemed to be influenced by assessments as found in some of the reasons given for visiting the walls: "because of exam and midterm test" and to "get a glimpse of how the exam question would actually look like".

It was also interesting to mention that only 5 students out of the 37 who mentioned that their main reason for visiting Padlet walls was to improve their understanding of lesson learnt: "To try to answer in Padlet... so that I can improve the level of my understanding". Most of the students mentioned that their main reasons for visiting the walls were to read teacher's feedback and view other students' answers: "To check my classmates' answers and comments from Ms. (the teacher)". This shows that even though students were not active contributors to Padlet walls, they were actively reading others contribution and teacher's comments.

DISCUSSIONS

The study found that students' perceptions of Padlet were generally positive. Many perceived Padlet as having values for learning. However, some students had some negative perceptions of Padlet use and these were found to be related to internal and external factors. Students' differences (Miller, 2009) relating to preference over method and tool for learning, lack of autonomy and low motivation were identified to be factors within students which resulted in negative perceptions of Padlet as an educational tool. The last two factors were not clearly

related to Padlet as a tool for learning but more to how Padlet was pedagogically embedded within teaching and used as a learning tool. As some Padlet activities were designed as part of independent learning, students who were not self-regulated or lack autonomy struggled. Furthermore, as Padlet activities were more formative than summative (thus there were no concrete rewards in term of marks), some students were not motivated to be active on Padlet walls.

The other identified factors were external and were related to the technical aspects (Ng, 2007; An, Aworuwa, Ballard & Williams, 2009): issues of accessibility and ease of Padlet use, and time constraint (An, Aworuwa, Ballard & Williams, 2009) due to workload from other modules. The teacher's pedagogical decisions to improve students' privacy had resulted in only one student feeling threatened and the rest feeling safe. Issues with openness, in other words, did not seem to inhibit participation on Padlet as observed in other studies (An, Aworuwa, Ballard & Williams, 2009). This was perhaps due to the layers of 'security measures' to protect students' identity and privacy. However, doing so created another barrier for Padlet use.

The study also found that positive perceptions of Padlet as an educational tool did not have a positive impact on students' Padlet use. Furthermore, the study showed that despite perceiving the use of Padlet as having learning values, which have been proven as the motivating factor for students' use of technological tools (Hardy et al., 2005; Cole, 2009), students' use of Padlet to support their learning was inconsistent. This shows that positive perceptions of Padlet was inadequate to sustain or encourage students to use Padlet for learning, particularly when external factors became main inhibitors. This also shows students' use of technological tool was very much context-dependent. It is also interesting to note that even though many students were not posting answers on the walls, except for case-study-related tasks, many of them mentioned that they visited Padlet walls to check and read others' submission and to read teachers' comments. In other words, these students were 'lurking' around, not being active contributors but still perhaps 'learning' from reading the responses and comments given (Slevin, 2008).

The findings of this study also show that students' participation on Padlet were assessment- driven, judging from the number of contributors and number of visitors to the walls. This shows that students' use of Padlet was purposive and this supports findings of other studies (Yaakop, 2015; Cole, 2009; Hardy et al., 2005).

From the suggestions given by the students to improve Padlet activities, it was also obvious that for some students having too much flexibility did not work for them. Some required more support, guidelines, and reminders from the teacher. Perhaps flexibility reduced students' sense of urgency and as they were not held accountable, not being active contributors on Padlet did not matter. This shows that technology does not guarantee participation as participation often requires prompting (Whitton, 2009).

The study also shows that pedagogical decisions involving the use of a specific web or technological tool can influence students' use of the tool, their perception and their motivation to use it for learning. This shows that at times, it is not the tool but the way the tool is used to support learning which influences its use.

IMPLICATIONS FOR TEACHING

The findings of this study have several pedagogical implications. It is important that a teacher identifies how students feel about a technological tool but what is also vital is to check on students' use of the tool to support their learning. This means that a quick survey to investigate how they feel about the tool (in this case, Padlet) and how they are managing their use of it could have signalled to the teacher and raised red flags if she needs to adjust her instructions to improve students' learning experiences. The study also found that students appreciated flexibility; however, too much flexibility held some of the students back in their participation on Padlet thus their learning. It is therefore important to reconsider flexibility. Perhaps, students should be gradually introduced to autonomy by providing clear guidance and scaffolding, and structuring the use of Padlet as part of classroom activities before introducing them as independent learning tasks. Students also want to be held accountable for completing their preparatory work (Ruckert et al., 2014) thus some work done on Padlet should perhaps be made compulsory and discussions are carried out on the answers that are posted on Padlet during classroom activities.

The study also finds that protecting students' privacy results in them having low inhibition about sharing on Padlet. However, to be inclusive, students need to also be given options to complete Padlet tasks on students' preferred medium of learning or of choice. To increase students' participation and use of technological tool for learning, it is also important to design activities that are closely related to assessments as students use of these tools are often found to be purposive.

The study also suggested that students' perceptions of Padlet were affected by Padlet as a tool and by how it was pedagogically embedded in the teaching and learning processes. In investigating perceptions on a technological tool, students' perceptions of the tool and how it is used to support learning should be made distinct.

CONCLUSION

This study found that students' positive perceptions of Padlet did not have a positive impact on students' use of Padlet. However, as a tool, despite some rejection from students, Padlet has been found to be supportive of students' learning of communication skills concept. To use the tool more effectively, teachers need to consider students' perceptions of the tool and its pedagogical design to support students' learning. It is also important for teacher to consistently monitor their students' engagement with the activities on Padlet. As students are diverse, it is also crucial that pedagogical decisions made about Padlet use (or any other technological tool) are constantly revised or readjusted to ensure inclusivity.

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“I NEED TO UNDERSTAND THIS FOR A NICE ACTIVITY”. ENGLISH FOR TEACHERS OF ARTS.

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The social and economic changes in the last and the present century have brought the English language to an international language status, used for general and specific communication purposes all around the globe. The main feature of English for Specific Purposes is, its practicality on grounds of learner needs. In our case, Arts teachers needed a sufficient amount of English language proficiency to comprehend written texts and some videos related to their teaching. Although the teachers had complete knowledge of their field in their native language; they expressed an overwhelming need for being able to read and understand content related passages and texts in English. Notwithstanding the fact that, this requires some certain level of general language proficiency, it also requires the teachers to be equipped with the knowledge of special terminology, idiomatic expressions and multiword units related to their field.

In order to cater for the needs of teachers of Arts working at private elementary schools in Turkey, we devised a study based on the concept of data driven learning. The current study first identified the urgent needs of Arts teachers by interviews for comprehending the language content in activity books and instructional videos. Next, it introduced the compilation of Arts specific written and spoken corpora that were gathered from the English Art textbooks and video transcripts provided by the teachers themselves. Second, the characteristics of the language used in the compiled data were investigated and domain-specific terminology was retrieved from the corpora through the use of a corpus analysis tool (AntConc). Then, the activities for improving the teachers' levels of comprehension were developed. Based on the language data gathered, the teachers were also introduced to paper based concordances retrieved from the corpora for language analysis activities. The comments from teachers indicated that they had started to comprehend many keys elements in English texts and were enthusiastic about their future efforts. Finally, we summarized the possible and long-term use of facilitating the language comprehension and improving understanding of field specific language use for teachers.

İLETİŞİM BİLİMLERİ FAKÜLTESİ ÖĞRETMEN ADAYLARININ İLETİŞİM BECERİLERİ

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ÖZET

Bu araştırmanın amacı, Lefke Avrupa Üniversitesi, iletişim bilimleri fakültesi öğretmen adaylarının iletişim becerisine yönelik öz yeterlik algılarının çeşitli değişkenlere göre belirlenmesidir. Bu amaç doğrultusunda öğretmen adaylarının iletişim öz yeterlik algı düzeyleri cinsiyet, yaş ve sınıf düzeyi bakımından incelenmiştir. Araştırmada tarama modeli kullanılmıştır. Veri toplama aracı olarak . Bölümde araştırmaya katılan deneklerin cinsiyet, yaş ve sınıf bilgilerini içeren demografik özellikler yer almaktadır. Araştırmanın örneklemini Lefke Avrupa Üniversitesi İletişim Fakültesi’nde öğrenim görmekte olan ve araştırmaya gönüllü olarak katılan 300 öğretmen adayı oluşturmaktadır. Verilerin analizinde betimsel istatistik, bağımsız gruplar için t-testi ve tek yönlü varyans analizinden yararlanılmıştır. Araştırma sonucunda öğretmen adaylarının genel iletişim becerileri yeterlik algılarının yüksek düzeyde olduğu, iletişim öz yeterlik algısının cinsiyete ve yaş’a göre istatistikî bakımdan anlamlı farklılık gösterdiği ancak öğrenim görülen sınıf düzeyinin iletişim öz yeterlik algısı üzerinde anlamlı farklılığa neden olmadığı belirlenmiştir.

Anahtar Kelimeler: İletişim becerisi, öğretmen adayı, öz yeterlilik

GİRİŞ

Kişi çevresiyle iletişim kurmadan kendisinin anlaşılmasını bekleyemez. Duygularını ve düşüncelerini ancak çevresiyle iletişim kurarak anlatabilir. İletişim, hayatın her alanında başvurulmuş bir “kendini ifade etme” sürecidir. Bu süreç, yani iletişim halinde olmak, insanları toplumsallaştırır. İletişim insan hayatında hava, su gibi bir ihtiyaçtır. İletişim olmasaydı toplumların kültürlerinin de oluşamayacağını ve nesilden nesile aktarılamayacağını unutmamak gerekir. İnsanın çevresiyle iletişim halinde olması kişinin benlik gelişimine de önemli katkılarda bulunur.

İletişimi, temel prensibi paylaşım, etkileşim ve ortaklık kurmak olan, çeşitli semboller ve araçlarla dünyayı daha yaşanılır kılan, ileti alışverişine dayalı sosyal bir süreçtir, diye tanımlayabiliriz. İnsanoglu, varolduğu günden bugüne dek iletişim kurmak için çeşitli araçlara başvurmuştur (Çevik, Özmaden, 2013). Kendi gelişimine paralel olarak kullanıldığı araçlar da gelişmiş; sürekli gelişen iletişim araçları birbirini tamamlamış; ancak birisi, diğerinin yerini alamamıştır. İletişimin en yalın, en ilkel araçlarından biri kabul edilen işaretlere, kelimelere dayalı olan yazı ve konuşma dilinin yanı sıra, beden dili ile sözsüz anlatımlar (jestler, mimikler, dokunma, cevap vermeme, sessiz kalma gibi davranış ve tutumlar; dans, resim, v.b.) da yüzyıllar boyunca kullanılagelmıştır (Cüceloğlu, 2000).

Bilgi ve iletişim teknolojilerinde hızlı değişim, Topluluğun üyelik yolunu açar. Ekonomiyi, sosyal ve kültürel Yaşamı yeniden şekillendiren bilgi Dönüşüm süreci, planı ve yorumu, yeni bilgiler yaratabilir ve sosyal, teknik problemleri düşünebilir. Bilgi toplumu Oluşacak bireylerin yetiştirilmesi ancak eğitim sisteminin en önemli unsurları arasında yer alan nitelikli öğretmenler tarafından sağlanabilir.

Gerçek hayatta karşılaşılan problemleri çözmek için geliştirilen sosyal problem çözme modeli probleme yönelimi ve problem çözme stillerinden oluşmaktadır. Prospektif oryantasyon, deneyimli durumla ilgili belirgin bilişsel ve duygusal planlar olan motivasyonla ilişkili bir süreçtir (Yüksel, 2010). Yapıcı oldukları kadar tahrip edici olabilecek bu planlar, problem çözme becerilerinin yanı sıra bir problem yaşarken genelde düşünce ve hislerini nasıl ifade ettiğini ifade eder. Sorun çözme stilleri, problem çözme becerilerinin uygulanmasında çözüm üzerinde gerçekçi bir araştırma yürütülmesini içerir.

Bazı araştırmacılara göre, sosyal problem çözme, bireylerin günlük hayatta karşılaştıkları sorunların algılanışını ve sorunlara etkili çözümler bulmayı içeren bir bilişsel davranışsal süreçtir (McClure, Nezu, Nezu, O’Hea ve McMahon,

2010). Çoğu birey, kaçınılmaz olarak günlük yaşamda uygun tepki ve kararlar gerektiren sorunlar ve durumlarla karşı karşıya kalır (Danju, 2015). Gerçek hayatta problem çözme becerileri, gerçek hayat durumlarına başarılı çözümler üretmektir. Etkili problem çözme becerileri hayatta başarılı olmak için gereklidir; Etkili problem çözme becerilerinin yokluğu ya da eksikliği, kişiler arası sorunlar ve diğer zihinsel ve davranışsal sorunlarla ilişkilidir (Dreer, Jakson ve Elliott, 2005).

Çağdaş, etkili öğretmen, insanlığa öğretme kadar değer veren, kendileri ve çevreleri ile etkili iletişim kuran, karşı karşıya kaldığı sorunları çözmeye gücü ve güveni vardır Yükselme sorumluluğunu taşıyan bir kişi. Bu bağlamda, öğretmenler öğrencileriyle etkili bir iletişim kurmada önemli bir role sahiptir. (Tunçeli,2013). Ayrıca öğrenci ve öğretmen arasında Etkili iletişimi gerçekleştirmek her iki taraf için de istenen bir durum ve eğitim açısından özel bir öneme sahiptir.

Öğretmen ve öğrenci, iletişim sürecindeki kaynak ve hedef Sürekli olarak rollerini değiştirerek geribildirim kullanabilirlerse etkili iletişim kurabilirler (Gercel, Yınal, 2015). Bu nedenle, öğretmenin iletişim sürecini iki yönlü yapması gerekir; Öğrencilerin katılımı, oluşumun oluşumunda büyük önem kazanabilir. Gerçekten de, çalışmalar, iletişim İyi becerilere sahip öğretmenlerin öğrencileri ile olumlu ilişkileri vardır ve bu olumlu ilişkileri başarılarına da yansımaktadır (Özer, 2008).

Eğitim kalitesi ve kalitesi öğretmenlerin kalitesi ile doğru orantılıysa; Eğitim sisteminde çalışacak öğretmenler, Eğitim hizmetlerinin kalitesi için iyi bir yol önemlidir (Erözkan, 2005). Kişilerarası iletişim becerileriyle ilgili çalışmalar incelendiğinde çoğunlukla empati, dinleme, kendini açma, dürüstlük ve hoşgörü kavramları üzerinde durulduğu görülmektedir (İşman, 2015). Kişilerarası iletişim düzeyini ölçmek için kullanılan ifadeler belirlenirken, empati, dinleme, kişisel gizlilik, dürüstlük ve kişilerarası iletişim becerilerine yönelik hoşgörü kavramları da dikkate alınmıştır. Fakat bu kavramlar ve güven arasındaki ilişki Kimlik bilgileri daha kapsamlıdır ve ayrı soruşturmalar gerektirir (Tunca, Avtürk Koldaş, 2013). Bu araştırmanın amacı, kişilerarası iletişim düzeyini genel olarak belirlemektir.

Araştırmanın Amacı

Bu araştırmanın amacı, araştırmaya katılan öğrencilerin iletişim becerileri düzeylerini saptamaktır.

YÖNTEM

Bu bölümde araştırmanın modeli, evren ve örneklem, veri toplama aracı ve verilerin analizine ilişkin bilgilere yer verilmiştir.

Araştırmanın Problemi

Bu araştırmanın ana problemi öğrencilerin İletişim Becerileri düzeylerinin belirlenmesidir. Bu probleme yönelik alt problemler aşağıda sıralanmıştır.

- Öğrencilerin İletişim Becerileri Düzeyinin ve alt boyutlarının öğrencilerin;
 - a.) Cinsiyet
 - b.) Yaş
 - c.) Sınıfa göre farklılaşmakta mıdır?
- Öğrencilerin İletişim Becerileri Düzeyinin ve alt boyutları düzeyleri arasında ilişki var mıdır?

Araştırmanın Modeli

Bu araştırma betimsel ve ilişkisel tarama modeline göre modellenmiştir. Araştırma katılanların var olan özelliklerinde hiçbir değişiklik yapılmaksızın veri toplanarak, var olan durum hakkında deneklerin görüşleri alınmaya çalışılmıştır. Betimleme yöntemi geçmişe ya da halen var olan bir durumu var olduğu şekliyle betimlemeyi amaçlayan araştırma yaklaşımlarıdır. Araştırmaya konu olan olay, kendi şartları içinde ve olduğu gibi tanımlamaya çalışılır. Olayı değiştirme ve etkileme çabası gösterilmez. Önemli olan bilmek istenen şeyi gözleyip belirleyebilmektir. Bu bağlamda araştırma modeli, öğrencilerin iletişim becerileri düzeylerini belirlenmek istendiğinden dolayı betimsel tarama modeline dayanmaktadır. İlişkisel tarama modellerinde, iki veya daha çok sayıda değişken arasındaki birlikte değişim varlığını ve/veya derecesini belirlemeyi amaçlayan araştırma modelidir. Bu bağlamda öğrencilerin iletişim düzeyleri ile alt boyutları arasındaki ilişkiler belirlenmek istendiğinden dolayı çalışma aynı zamanda ilişkisel tarama modeline dayanmaktadır. (Karasar, 2006).

Araştırmanın Evreni ve Örneklemi

Araştırmanın evrenini 2015 yılında KIBRIS adasında Lefke Avrupa Üniversite öğrencilerinin tamamını oluşturmaktadır.

Araştırmanın örnekleme basit tesadüfi örnekleme tekniği ile belirlenerek; Dolayısıyla 2015 yılında KIBRIS adasında Lefke Avrupa Üniversite öğrencilerinin tamamına ulaşılması hedeflenmiş olup; geri dönmeyen anketler, eksik bilgi, değişkenlerden boş bırakılması gibi sorunlardan dolayı 300 öğrenci araştırmaya dâhil edilmiştir.

Veri Toplama Araç ve Teknikleri

Araştırmada veri toplama aracı olarak anket formundan yararlanılmıştır. Ölçek iki bölümden oluşmakta olup birinci bölümde araştırmaya katılan deneklerin cinsiyet, yaş ve sınıf bilgilerini içeren demografik özellikler yer almaktadır, ikinci bölümde ise İletişim Becerileri Envanteri yer almaktadır.

İletişim Becerileri Envanteri (İBE)

İletişim Becerileri Envanteri ilk olarak Balcı (1996) tarafından geliştirilmiş ve kullanılmıştır. Gerekli geçerlik ve güvenilirlik çalışmaları yapılan envanterin bu ilk sürümünün madde sayısı 70'tir. Envanter daha sonra tekrar, 500 üniversite öğrencisinden oluşan bir örnekleme uygulanmış, yapılan faktör analizi sonucunda madde sayısı 45'e indirilmiştir (Ersanlı & Balcı, 1998). Ersanlı ve Balcı (1998) tarafından son hali verilen envanter, 5'li likert tipi 45 sorudan oluşmaktadır. Envanter zihinsel, duygusal ve davranışsal açıdan iletişim becerilerini ölçmektedir. Her bir boyutu ölçeğin 15 madde vardır. Her boyuta giren maddeler aşağıda görülmektedir:

Zihinsel: 1,3,6,12,15,17,18,20,24,28,30,33,37,43,45

Duygusal: 5,9,11,26,27,29,31,34,35,36,38,39,40,42,44

Davranışsal: 2,4,7,8,10,13,14,16,19,21,22,23,25,32,41

Maddeler, "her zaman", "genellikle", "bazen", "nadiren", "hiçbir zaman" olarak yanıtlanmaktadır. Boyutlarda ve genel (toplam) iletişim becerisinde yüksek puan, daha yüksek iletişim becerisine karşılık gelmektedir. Ersanlı ve Balcı (1998), 500 üniversite öğrencisi üzerinde yaptıkları uygulamanın ardından güvenilirliği test etmek üzere bir ay sonra 170 kişilik bir gruba tekrar uygulama yapmışlardır. İki yarım test yöntemi ile yapılan güvenilirlik çalışmasında iki yarı güvenilirlik katsayısı $r=0.64$ ve test tekrar test yöntemi ile yapılan güvenilirlik çalışmasında $r=0.68$ bulunmuştur. Ölçeğin iç tutarlılığını belirlemek amacıyla hesaplanan Cronbach Alpha katsayısı ise 0.72 olarak bulunmuştur. Yapılan faktör analizi sonucunda maddelerin üç boyut altında toplandığı görülmüş ve bu boyutlar, içerikleri dikkate alınarak zihinsel, duygusal ve davranışsal iletişim becerileri adlarını almıştır. Boyutlardan her biriyle toplam iletişim becerileri puanı arasındaki korelasyonlar sırası ile 0.83, 0.73 ve 0.82'dir. Korkut (1996) tarafından geliştirilen "İletişim Becerilerini Değerlendirme Ölçeği" ile yapılan geçerlik çalışmasında da ölçeğin geçerlik katsayısı 0.70 bulunmuştur (Ersanlı & Balcı, 1998).

Verilerin Analizi

Yapılan bu çalışmada katılımcı bireylerden elde edilen nicel veriler SPSS 23 paket programı aracılığı ile analiz edilmiştir. Bireylerden toplanan demografik özellikler için tanımlayıcı istatistiklerden olan frekans, yüzde, ortalama ve standart sapma değerleri hesaplanarak yorumlanmıştır. Araştırmada kullanmış olduğumuz ölçeğin güvenilirliği için Cronbach alfa katsayısı hesaplanmış ve yorumu yapılmıştır. Nicel değişkenlerimizin iki ilişkisiz örneklemden elde edilen puanların birbirinden anlamlı bir şekilde farklılık gösterip göstermediğini test etmek için Bağımsız T testi, ilişkisiz iki ya da daha çok örneklem ortalamasının birbirinden anlamlı bir şekilde farklılaşıp farklılaşmadığını test etmek için Tek Yönlü Varyans Analizi (ANOVA) uygulanmıştır. ANOVA sonucunda gruplar arasında anlamlı görülmesi durumunda farkın hangi gruplar arasında olduğunu belirlemek için, öncelikle varyansların homojenliğine bakılarak varyanslar homojen ise Tukey Testi, değilse Tamhane's T2 Testi uygulanmıştır. Ölçekler arasındaki ilişkiyi belirleyebilmek için korelasyon analizi uygulanmıştır. Sayısal gelişmelerle ilgili veriler tablolar haline getirilip yorumlanmış, bağımsız değişkenler arasında anlamlı bir farklılık olup olmadığı $\alpha = 0.05$ hata payı; korelasyon analizinde $\alpha = 0,01$ hata payında da test edilmiştir.

BULGULAR VE YORUMLAR

Araştırmanın bu bölümünde, örneklem grubuna ait demografik bilgilerin açıklanması ve araştırmanın alt problemlerinin yanıtlanması için elde edilen verilerin uygun istatistiksel yöntem ile analizi sonucunda ortaya çıkan bulgulara ve bu bulgulara yönelik yorumlara yer verilmiştir.

1. Ölçeğin Geçerlilik ve Güvenirlik Analizi Sonuçları

Bu aşamada çalışmanın araştırma bölümünde kullanılan ölçek için geçerlilik ve güvenilirlik analizi yapılmıştır. Anket sorularının geçerliliği ve güvenilirliği için Cronbach's Alpha test istatistiği kullanılmıştır. Cronbach's Alfa Katsayısının değerlendirilmesinde uyulan değerlendirme ölçütü;

$0.00 \leq \alpha < 0.40$ ise ölçek güvenilir değildir.
 $0.40 \leq \alpha < 0.60$ ise ölçek düşük güvenilirliktedir.
 $0.60 \leq \alpha < 0.80$ ise ölçek oldukça güvenilirliktedir.
 $0.80 \leq \alpha < 1.00$ ise ölçek yüksek derecede güvenilirliktedir (Büyüköztürk, 2010).

Tablo 1. İletişim Becerileri Ölçeği Güvenirlik Analizi Sonuçları

	Cronbach's Alpha	Standartlaştırılmış Cronbach's Alpha	Madde Sayısı
Zihinsel İletişim Becerileri	0,842	0,837	15
Duygusal İletişim Becerileri	0,857	0,857	15
Davranışsal İletişim Becerileri	0,837	0,835	15
İletişim Becerileri	0,944	0,943	45

Tablo 1’de örneklem grubuna uygulanan İletişim Becerileri Ölçeği ilişkin ve alt boyutlarına güvenirlilik analizinin sonuçları verilmiştir. Zihinsel İletişim Becerileri alt boyutunun güvenirliliğinin $\alpha=0,837$, Duygusal İletişim Becerileri alt boyutunun güvenirliliğinin $\alpha=0,857$, Davranışsal İletişim Becerileri $\alpha=0,835$ ve genel olarak İletişim Becerileri ölçeğinin güvenirliliğinin $\alpha=0,943$ ve yüksek derecede güvenilir olduğu, dolayısıyla bu değerlerin araştırma için yeterli olduğu görülmektedir.

Tablo 2. İletişim Becerileri Ölçeğine Ait Betimleyici İstatistikler

	Ortalama	Varyans	Std. Sapma	Madde Sayısı
Zihinsel İletişim Becerileri	48,29	191,00	13,82	15
Duygusal İletişim Becerileri	44,44	186,44	13,65	15
Davranışsal İletişim Becerileri	47,72	178,96	13,38	15
İletişim Becerileri	143,18	1567,53	39,59	45

Tablo 2’de örneklem grubuna uygulanan İletişim Becerileri Ölçeği ilişkin Zihinsel İletişim Becerileri alt boyutunun 48,29 ortalama ve 13,82 standart sapma, Duygusal İletişim Becerileri alt boyutunun 44,44 ortalama ve 13,65 standart sapma, Davranışsal İletişim Becerileri 47,72 ortalama ve 13,38 standart sapma ve genel olarak İletişim Becerileri ölçeğinin 143,18 ortalama ve 39,59 standart sapma ile dağılmıştır.

2. Frekans Tablolarının Yorumlanması

Araştırmanın bu bölümünde, anket formunda yer alan kişisel bilgilere ait olarak toplu frekans dağılım tabloları oluşturulup yorumlanacaktır.

Tablo 3. Cinsiyet Değişkenine Ait Frekans Analizi

	f	%
Kadın	163	54,3
Erkek	137	45,7
Toplam	300	100,0

Tablo 3’te görüldüğü gibi; araştırmaya katılan öğrencilerin 163’ü (%54,3) kadın, 137’si (% 45,7) kadın öğrencilerden oluşmaktadır.



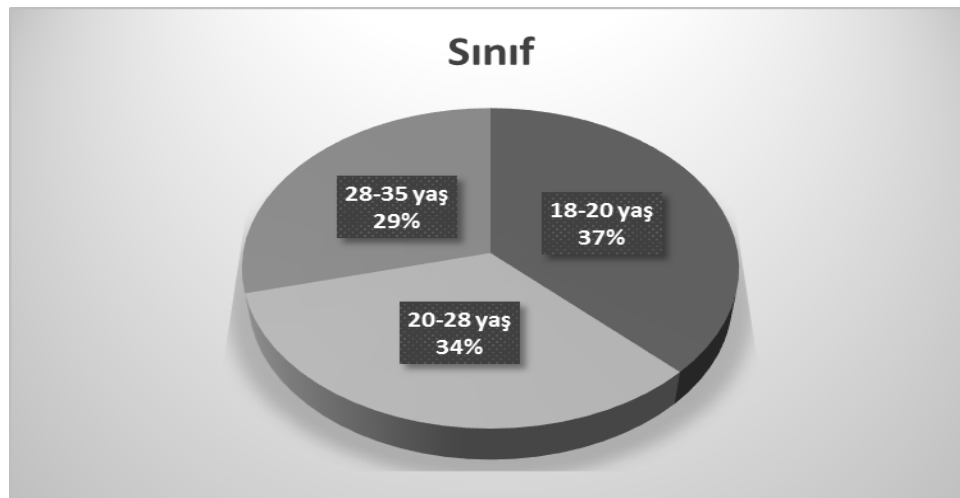
Şekil 1. Cinsiyet Dağılımı

Şekil 1’de görüldüğü gibi araştırmaya katılan öğrencilerin %54’ü erkek ve %46’sı kadın olarak dağılmaktadır. Böylelikle örneklemin çoğunluğu kadın öğrencilerin oluşturduğu görülmektedir.

Tablo 4. Yaş Değişkenine Ait Frekans Analizi

	f	%
18-20 yaş	112	37,3
20-28 yaş	101	33,7
28-35 yaş	87	29,0
Toplam	300	100,0

Tablo 4’te görüldüğü gibi; yaş değişkeni açısından incelendiğinde araştırmaya katılan öğrencilerin 112 tanesi (%37,3) 18-20 yaş, 101 tanesi (%33,7) 20-28 yaş ve 87 tanesi (%29,0) 28-35 yaş grubuna sahiptir.



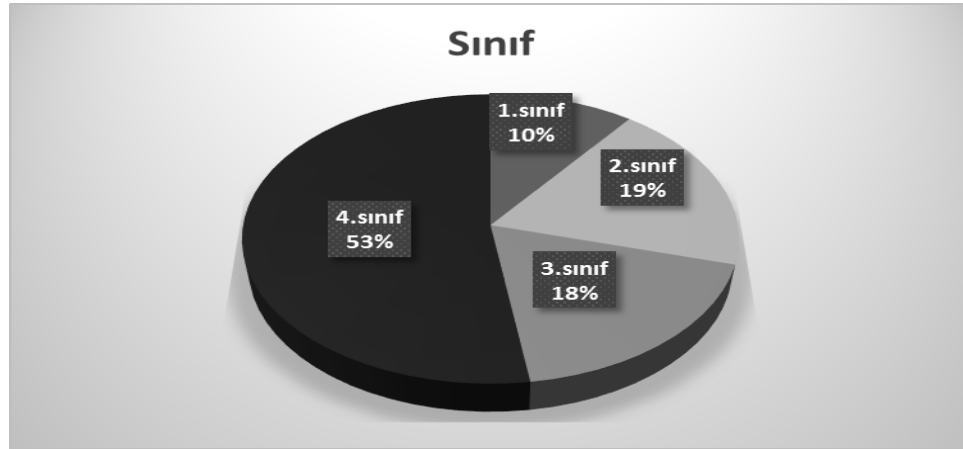
Şekil 2. Yaş Dağılımı

Şekil 2’de görüldüğü gibi araştırmaya katılan öğrencilerin %37’si 18-20 yaş, %34’ü 28-35 yaş, %29’u 20-28 yaş olarak dağılmaktadır. Böylelikle örneklemin çoğunluğu 18-20 yaş öğrencilerden oluşturduğu görülmektedir.

Tablo 5. Sınıf Değişkenine Ait Frekans Analizi

	f	%
1.sınıf	31	10,3
2.sınıf	57	19,0
3.sınıf	55	18,3
4.sınıf	157	52,3
Toplam	300	100,0

Tablo 5’de görüldüğü gibi; sınıf değişkeni açısından incelendiğinde araştırmaya katılan öğrencilerin 31 tanesi (%10,3) 1.sınıf, 57 tanesi (%19,0) 2.sınıf, 55 tanesi (%18,3) 3.sınıf ve 157 tanesi (%52,3) 4.sınıftır.

**Şekil 3. Sınıf Dağılımı**

Şekil 3’de görüldüğü gibi araştırmaya katılan öğrencilerin %10’u 1.sınıf, %19’u 2.sınıf, %18’i 3.sınıf ve %53’ü 4.sınıf olarak dağılmaktadır. Böylelikle örneklemin çoğunluğu 4.sınıf öğrencilerden oluştuğu görülmektedir.

Tablo 6. İletişim Becerileri Envanterinin Zihinsel İletişim Becerileri Alt Boyutuna Ait Tanımlayıcı İstatistikler

	Tamamen katılmıyorum		Katılmıyorum		Kararsızım		Katılıyorum		Tamamen Katılıyorum		Toplam	
	f	%	f	%	f	%	f	%	f	%	Ort.	SS
İnsanları anlamaya çalışırım.	44	15	52	17	54	18	89	30	61	20	3,24	1,35
Düşüncelerimi başkalarına tam olarak iletmede zorluk çekmem.	71	24	53	18	23	8	15	5	138	46	3,32	1,71
Dikkatimi karşımdakinin ilgi alanı üzerinde toplayabilirim.	63	21	71	24	27	9	9	3	130	43	3,24	1,67
Eleştirilerimi karşımdaki kişiyi incitmeden iletirim.	73	24	81	27	43	14	22	7	81	27	2,86	1,54
Karşımdaki kişiyle aynı görüşü paylaşmazsam bile fikirlerine saygı duyarım.	72	24	53	18	36	12	20	7	119	40	3,20	1,66
Karşımdaki kişinin konuşmaya ve dinlemeye istekli olup olmadığını anlamaya çalışırım.	67	22	61	20	20	7	16	5	136	45	3,31	1,70
Yanlış tutum ve davranışlarımı kolaylıkla kabul ederim.	72	24	59	20	26	9	15	5	128	43	3,23	1,69
Dinleyenim anlamaz görüldüğünde, iletme istediklerimi tekrarlar, yeni kelimelerle ifade eder, özetlerim.	77	26	48	16	35	12	15	5	125	42	3,21	1,69
Karşımdaki kişinin duygu ve düşünceleri bana ters düşse bile yargılamam.	85	28	64	21	33	11	28	9	90	30	2,91	1,63
Başkalarını dinlemek mecburiyetinde olmadığımı düşünürüm.	73	24	65	22	19	6	33	11	110	37	3,14	1,66
Tartışma sonunda, savunduğum düşüncelerin yanlış olduğunu kabul edebilirim.	68	23	49	16	21	7	19	6	143	48	3,40	1,70
İletişim kurduğum kişinin tutumundan daha çok sorununu anlamaya çalışırım.	73	24	62	21	26	9	22	7	117	39	3,16	1,67
Başkaları ile ilişkilerimi bozacak çıkışlar yapabilirim.	57	19	56	19	25	8	19	6	143	48	3,45	1,65
Öneride bulunduğum kişinin öneriye açık olup olmadığına dikkat ederim.	80	27	65	22	29	10	13	4	113	38	3,05	1,69
Kendimi karşımdaki kişinin yerine koyarak, duygu ve düşüncelerini anlamaya çalışırım.	75	25	21	7	26	9	13	4	165	55	3,57	1,73

Tablo 6’da görüldüğü gibi; araştırmaya katılan öğrencilerin İletişim Becerileri Ölçeği Zihinsel İletişim Becerileri boyutu ile ilgili maddelere verdikleri cevaplar aritmetik ortalamalar açısından değerlendirilmiştir. Yapılan analizde öğrencilerin Zihinsel İletişim Becerileri boyutu ile ilgili maddelerden “İnsanları anlamaya çalışırım.” ifadesine $\bar{X}=3,24$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Düşüncelerimi başkalarına tam olarak iletmede zorluk çekmem.” ifadesine $\bar{X}=3,32$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Dikkatimi karşımdakinin ilgi alanı üzerinde toplayabilirim.” ifadesine $\bar{X}=3,24$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Eleştirilerimi karşımdaki kişiyi incitmeden iletirim.” ifadesine $\bar{X}=2,86$ ortalama ile katılmıyorum düzeyinde katılmaktadırlar.

“Karşımdaki kişiyle aynı görüşü paylaşmazsam bile fikirlerine saygı duyarım.” ifadesine $\bar{X}=3,20$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Karşımdaki kişinin konuşmaya ve dinlemeye istekli olup olmadığını anlamaya çalışırım.” ifadesine $\bar{X}=3,31$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Yanlış tutum ve davranışlarımı kolaylıkla kabul ederim.” ifadesine $\bar{X}=3,23$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Dinleyenim anlamaz görüldüğünde, iletme istediklerimi tekrarlar, yeni kelimelerle ifade eder, özetlerim.” ifadesine $\bar{X}=3,21$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Karşımdaki kişinin duygu ve düşünceleri bana ters düşse bile yargılamam.” ifadesine $\bar{X}=2,91$ ortalama ile katılmıyorum düzeyinde katılmaktadırlar.

“Başkalarını dinlemek mecburiyetinde olmadığımı düşünürüm.” ifadesine $\bar{X}=3,14$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Tartışma sonunda, savunduğum düşüncelerin yanlış olduğunu kabul edebilirim.” ifadesine $\bar{X}=3,40$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“İletişim kurduğum kişinin tutumundan daha çok sorununu anlamaya çalışırım.” İfadesine $\bar{X}=3,16$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Başkaları ile ilişkilerimi bozacak çıkışlar yapabilirim.” ifadesine $\bar{X}=3,45$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Öneride bulunduğum kişinin öneriye açık olup olmadığına dikkat ederim.” ifadesine $\bar{X}=3,05$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Kendimi karşımdaki kişinin yerine koyarak, duygu ve düşüncelerini anlamaya çalışırım.” ifadesine $\bar{X}=3,57$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

Tablo 7. İletişim Becerileri Envanterinin Duygusal İletişim Becerileri Alt Boyutuna Ait Tanımlayıcı İstatistikler

	Tamamen katılmıyorum		Katılmıyorum		Kararsızım		Katılıyorum		Tamamen Katılıyorum		Toplam	
	f	%	f	%	f	%	f	%	f	%	Ort.	SS
Genelde eleştirilmekten hoşlanmam.	68	23	68	23	30	10	13	4	121	40	3,17	1,66
Karşımdaki kişiyi dinlerken hayal kurarım.	74	25	58	19	44	15	38	13	86	29	3,01	1,57
İnsanları dinlerken sıkıldığımı hissedirim.	63	21	68	23	33	11	20	7	116	39	3,19	1,63
Genellikle insanlara güvenirim.	103	34	61	20	32	11	22	7	82	27	2,73	1,64
İletişim kurduğum kişinin karşı cinsten olmasından rahatsızlık duymam.	70	23	58	19	26	9	9	3	137	46	3,28	1,71
Özür dilemek bana zor gelir.	90	30	53	18	29	10	27	9	101	34	2,99	1,68
Konuşurken sözümün kesilmesinden rahatsız olurum.	63	21	72	24	37	12	25	8	103	34	3,11	1,59
Çevremdekiler, insanlara karşı ilgisiz kaldığım kanısındalar.	63	21	53	18	25	8	27	9	132	44	3,37	1,65
Çoğunlukla duygularımdan emin olamıyorum.	69	23	65	22	39	13	22	7	105	35	3,10	1,62
İletişim kurduğum kimse tarafından anlaşılmaktan mutluluk duyarım.	65	22	74	25	26	9	20	7	115	38	3,15	1,64
Karşımdaki kişiye güvenmek beni mutlu eder.	64	21	61	20	36	12	29	10	110	37	3,20	1,61
Her insanı olumlu beklentilerle karşılarım.	63	21	59	20	20	7	17	6	141	47	3,38	1,68
İletişim kurduğum kimselere bir şeyler verdiğimi hissedirim.	75	25	47	16	38	13	38	13	102	34	3,15	1,62
Beni rahatsız eden duygularımı iletmede sıkıntı çekmem.	83	28	57	19	25	8	14	5	121	40	3,11	1,72
İletişim kurduğum insanlar tarafından anlaşıldığımı hissedirim.	78	26	47	16	32	11	16	5	127	42	3,22	1,70

Tablo 7’de görüldüğü gibi; araştırmaya katılan öğrencilerin İletişim Becerileri Ölçeği Duygusal İletişim Becerileri boyutu ile ilgili maddelere verdikleri cevaplar aritmetik ortalamalar açısından değerlendirilmiştir. Yapılan analizde öğrencilerin Duygusal İletişim Becerileri boyutu ile ilgili maddelerden “Genelde eleştirilmekten hoşlanmam.” ifadesine $\bar{X} = 3,17$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Karşımdaki kişiyi dinlerken hayal kurarım.” ifadesine $\bar{X} = 3,01$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“İnsanları dinlerken sıkıldığımı hissederim.” ifadesine $\bar{X} = 3,19$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Genellikle insanlara güvenirim.” ifadesine $\bar{X} = 2,73$ ortalama ile katılmıyorum düzeyinde katılmaktadırlar.

“İletişim kurduğum kişinin karşı cinsten olmasından rahatsızlık duymam” ifadesine $\bar{X} = 3,28$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Özür dilemek bana zor gelir.” ifadesine $\bar{X} = 2,99$ ortalama ile katılmıyorum düzeyinde katılmaktadırlar.

“Konuşurken sözümün kesilmesinden rahatsız olurum.” ifadesine $\bar{X} = 3,11$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Çevremdekiler, insanlara karşı ilgisiz kaldığım kanısındalar.” ifadesine $\bar{X} = 3,37$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Çoğunlukla duygularımdan emin olamıyorum.” ifadesine $\bar{X} = 3,10$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“İletişim kurduğum kimse tarafından anlaşılmaktan mutluluk duyarım.” ifadesine $\bar{X} = 3,15$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Karşımdaki kişiye güvenmek beni mutlu eder.” ifadesine $\bar{X} = 3,20$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Her insanı olumlu beklentilerle karşılarım” ifadesine $\bar{X} = 3,38$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“İletişim kurduğum kimselere bir şeyler verdiğimi hissederim.” ifadesine $\bar{X} = 3,15$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Beni rahatsız eden duygularımı iletmekte sıkıntı çekmem.” ifadesine $\bar{X} = 3,11$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“İletişim kurduğum insanlar tarafından anlaşıldığımı hissederim.” ifadesine $\bar{X} = 3,22$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

Tablo 8. İletişim Becerileri Envanterinin Davranışsal İletişim Becerileri Alt Boyutuna Ait Tanımlayıcı İstatistikler

	Tamamen katılmıyorum		Katılmıyorum		Kararsızım		Katılıyorum		Tamamen Katılıyorum		Toplam	
	f	%	f	%	f	%	f	%	f	%	Ort.	SS
İletişimde bulunduğum insanlardan gelen öğüt ve önerileri içtenlikle dinlerim.	30	10	28	9	26	9	78	26	138	46	3,89	1,35
Konuşurken, etkili bir göz iletişimi kurabilirim.	61	20	64	21	42	14	21	7	112	37	3,20	1,60
Kişilerin, anlatmak istediklerini dinlemek için yeterince zaman ayırıyorum.	84	28	73	24	37	12	15	5	91	30	2,85	1,62
Karşımdaki kişiye genellikle söz hakkı vermek istemem.	77	26	57	19	38	13	19	6	109	36	3,09	1,65
Başkaları konuşurken sabırlı olur, onların sözünü kesmem.	87	29	64	21	36	12	21	7	92	31	2,89	1,63
Konuşurken ilk adımı atmaktan çekinmem.	74	25	72	24	36	12	20	7	98	33	2,99	1,62
Konuşurken açık, sade ve düzgün cümleler kurarım.	84	28	45	15	34	11	28	9	109	36	3,11	1,68
İletişimde bulunduğum kişinin yüzüne baktığım halde sözlerini dinlemediğim olur.	77	26	63	21	43	14	38	13	79	26	2,93	1,56
Dinlediğim kişiyi daha iyi anlamak için sorular yöneltirim.	73	24	57	19	46	15	42	14	82	27	3,01	1,55
İnsanlarla görüşürken, bilerek onları rahatlatacak şeyler yaparım.	68	23	57	19	43	14	28	9	104	35	3,14	1,60
Dinlerken, karşımdaki kişinin sözünü kesmemeye özen gösteririm.	60	20	63	21	31	10	20	7	126	42	3,30	1,64
Küs olduğum birisiyle barışmak istediğimde ilk adımı atmaktan çekinmem.	54	18	65	22	25	8	23	8	133	44	3,39	1,63
Ses tonumu konunun özelliğine göre ayarlayabilirim.	66	22	42	14	22	7	22	7	148	49	3,48	1,69
İnsanları kontrol etmeye ve istediğim kalıba sokmaya çalışırım.	70	23	65	22	28	9	12	4	125	42	3,19	1,68
İnsanlara cevaplama zorlanacakları ani sorular yöneltmem.	75	25	47	16	28	9	20	7	130	43	3,28	1,70

Tablo 8’de görüldüğü gibi; araştırmaya katılan öğrencilerin İletişim Becerileri Ölçeği Davranışsal İletişim Becerileri boyutu ile ilgili maddelere verdikleri cevaplar aritmetik ortalamalar açısından değerlendirilmiştir. Yapılan analizde öğrencilerin Davranışsal İletişim Becerileri boyutu ile ilgili maddelerden “İletişimde bulunduğum insanlardan gelen öğüt ve önerileri içtenlikle dinlerim” ifadesine $\bar{X} = 3,89$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Konuşurken, etkili bir göz iletişimi kurabilirim” ifadesine $\bar{X} = 3,20$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Kişilerin, anlatmak istediklerini dinlemek için yeterince zaman ayırıyorum.” ifadesine $\bar{X} = 2,85$ ortalama ile katılmıyorum düzeyinde katılmaktadırlar.

“Karşımdaki kişiye genellikle söz hakkı vermek istemem.” ifadesine $\bar{X} = 3,09$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Başkaları konuşurken sabırlı olur, onların sözünü kesmem.” ifadesine $\bar{X} = 2,89$ ortalama ile katılmıyorum düzeyinde katılmaktadırlar.

“Konuşurken ilk adımı atmaktan çekinmem.” ifadesine $\bar{X} = 2,99$ ortalama ile katılmıyorum düzeyinde katılmaktadırlar.

“Konuşurken açık, sade ve düzgün cümleler kurarım.” ifadesine $\bar{X} = 3,11$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“İletişimde bulunduğum kişinin yüzüne baktığım halde sözlerini dinlemediğim olur.” ifadesine $\bar{X}=2,93$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Dinlediğim kişiyi daha iyi anlamak için sorular yöneltirim.” ifadesine $\bar{X}=3,01$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“İnsanlarla görüşürken, bilerek onları rahatlatacak şeyler yaparım” ifadesine $\bar{X}=3,14$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Dinlerken, karşımdaki kişinin sözünü kesmemeye özen gösteririm.” ifadesine $\bar{X}=3,30$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Küs olduğum birisiyle barışmak istediğimde ilk adımı atmaktan çekinmem” ifadesine $\bar{X}=3,39$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“Ses tonumu konunun özelliğine göre ayarlayabilirim.” ifadesine $\bar{X}=3,48$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“İnsanları kontrol etmeye ve istediğim kalıba sokmaya çalışırım.” ifadesine $\bar{X}=3,19$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

“İnsanlara cevaplamada zorlanacakları ani sorular yöneltmem.” ifadesine $\bar{X}=3,28$ ortalama ile kararsızım düzeyinde katılmaktadırlar.

3. İletişim Becerileri İle Demografik Değişkenler Arasında Farklılık Analizi

Bu bölümde öğrencilerin ölçekten aldıkları puanlarının demografik değişkenlere göre farklılaşıp farklılaşmadığını incelemek amacıyla iki ilişkisiz değişken (cinsiyet) için T testi yapılmış ve ikiden fazla ilişkisiz değişkenler (yaş ve sınıf) için Tek yönlü Varyans Analizi uygulanmış ve bulgular aşağıdaki tablolarda verilmiştir.

Tablo 9. İletişim Becerileri Tutumlarının ve Alt Boyutlarının Cinsiyete Göre Farklılık Analizi

		N	Ortalama	Std. Sapma	t	p
Zihinsel İletişim Becerileri	Kadın	163	3,25	0,92	0,736	0,462
	Erkek	137	3,18	0,92		
Duygusal İletişim Becerileri	Kadın	163	3,16	0,96	0,768	0,443
	Erkek	137	3,13	0,98		
Davranışsal İletişim Becerileri	Kadın	163	3,19	0,89	1,701	0,090
	Erkek	137	3,17	0,89		
İletişim Becerileri	Kadın	163	3,20	0,88	1,113	0,267
	Erkek	137	3,16	0,88		

Tablo 9’da görüldüğü gibi cinsiyete göre İletişim Becerileri Ölçeğinin alt boyutu olan Zihinsel İletişim Becerileri düzeylerinde farklılık olup olmadığını tespit etmek için yapılan T testi sonuçlarına göre kadın ve erkekler arasında anlamlı farklılık tespit edilememiştir. Diğer bir ifadeyle kadın ve erkek öğrencilerin Zihinsel İletişim Becerileri ortalamaları benzer düzeydedir ($p=0,462$, $p > 0.05$).

Cinsiyete göre İletişim Becerileri Ölçeğinin alt boyutu olan Duygusal İletişim Becerileri düzeylerinde farklılık olup olmadığını tespit etmek için yapılan T testi sonuçlarına göre kadın ve erkekler arasında anlamlı farklılık tespit edilememiştir. Diğer bir ifadeyle kadın ve erkek öğrencilerin Duygusal İletişim Becerileri ortalamaları benzer düzeydedir ($p=0,443$, $p > 0.05$).

Cinsiyete göre İletişim Becerileri Ölçeğinin alt boyutu olan Davranışsal İletişim Becerileri düzeylerinde farklılık olup olmadığını tespit etmek için yapılan T testi sonuçlarına göre kadın ve erkekler arasında anlamlı farklılık tespit

edilememiştir. Diğer bir ifadeyle kadın ve erkek öğrencilerin Davranışsal İletişim Becerileri ortalamaları benzer düzeydedir ($p=0,090$, $p > 0.05$).

Cinsiyete göre İletişim Becerileri düzeylerinde farklılık olup olmadığını tespit etmek için yapılan T testi sonuçlarına göre kadın ve erkekler arasında anlamlı farklılık tespit edilememiştir. Diğer bir ifadeyle kadın ve erkek öğrencilerin İletişim Becerileri ortalamaları benzer düzeydedir ($p=0,267$, $p > 0.05$).

Tablo 10. Yaş Göre İletişim Becerileri Tutumlarının ve Alt Boyutlarına İlişkin Tutum Puanlarına İlişkin N, Ortalama Ve Standart Sapma Değerleri

		N	Ortalama	Std. Sapma
Zihinsel İletişim Becerileri	18-20 yaş	112	3,17	0,89
	20-28 yaş	101	3,18	0,92
	28-35 yaş	87	3,39	0,92
	Toplam	300	3,22	0,92
Duygusal İletişim Becerileri	18-20 yaş	112	3,14	0,93
	20-28 yaş	101	3,11	0,97
	28-35 yaş	87	3,30	0,97
	Toplam	300	3,14	0,97
Davranışsal İletişim Becerileri	18-20 yaş	112	3,13	0,76
	20-28 yaş	101	3,17	0,90
	28-35 yaş	87	3,25	0,91
	Toplam	300	3,18	0,89
İletişim Becerileri	18-20 yaş	112	3,15	0,78
	20-28 yaş	101	3,15	0,89
	28-35 yaş	87	3,31	0,88
	Toplam	300	3,18	0,88

Tablo 10'da görüldüğü üzere, İletişim Becerileri Ölçeğinin alt boyutu olan Zihinsel İletişim Becerileri düzeyinin yaş değişkeni ortalamalarına bakıldığında, en yüksek puan ortalamasının 3,39 ile 28-35 yaş olan öğrencilere ait olduğu, onları sırasıyla 3,18 ile 20-28 yaş ve 3,17 ile 18-20 yaş grubundaki öğrencilerin izlediği görülmektedir.

Duygusal İletişim Becerileri düzeyinin yaş değişkeni ortalamalarına bakıldığında, en yüksek puan ortalamasının 3,30 ile 28-35 yaş olan öğrencilere ait olduğu, onları sırasıyla 3,14 ile 18-20 yaş ve 3,11 ile 20-28 yaş grubundaki öğrencilerin izlediği görülmektedir.

Davranışsal İletişim Becerileri düzeyinin yaş değişkeni ortalamalarına bakıldığında, en yüksek puan ortalamasının 3,25 ile 28-35 yaş olan öğrencilere ait olduğu, onları sırasıyla 3,17 ile 20-28 yaş ve 3,13 ile 18-20 yaş grubundaki öğrencilerin izlediği görülmektedir.

İletişim Becerileri düzeyinin yaş değişkeni ortalamalarına bakıldığında, en yüksek puan ortalamasının 3,31 ile 28-35 yaş olan öğrencilere ait olduğu, onları sırasıyla 3,15 ile 18-20 yaş ve 20-28 yaş grubundaki öğrencilerin izlediği görülmektedir.

Tablo 11. Yaş'a Göre İletişim Becerileri Tutumlarının ve Alt Boyutlarına İlişkin Tutum Puanlarına İlişkin Varyans Analizi Sonuçları

		Kareler Toplamı	S.D.	Kareler Ortalaması	F	P
Zihinsel İletişim Becerileri	Gruplar Arası	13,583	2	6,792	8,396	0,000
	Gruplar İçi	240,236	297	0,809		
	Toplam	253,819	299			
Duygusal İletişim Becerileri	Gruplar Arası	15,388	2	7,694	8,618	0,000
	Gruplar İçi	265,150	297	0,893		
	Toplam	280,538	299			
Davranışsal İletişim Becerileri	Gruplar Arası	13,243	2	6,622	8,757	0,000
	Gruplar İçi	224,579	297	0,756		
	Toplam	237,822	299			
İletişim Becerileri	Gruplar Arası	14,025	2	7,013	9,579	0,000
	Gruplar İçi	217,427	297	0,732		
	Toplam	231,452	299			

Tablo 11’de görüldüğü gibi İletişim Becerileri Ölçeği puanlarının yaş değişkenine göre anlamlı bir farklılık gösterip göstermediğini belirlemek amacıyla F testi yapılmıştır.

Zihinsel İletişim Becerileri puanları yaş değişkenine göre anlamlı bir farklılık gösterip göstermediğini belirlemek amacıyla gerçekleştirilen tek yönlü varyans analizi sonucunda yaş grup ortalamaları arasındaki fark istatistiksel açıdan anlamlı bulunmuştur ($F=8,396$; $p=0,000 < 0.05$).

Duygusal İletişim Becerileri puanları yaş değişkenine göre anlamlı bir farklılık gösterip göstermediğini belirlemek amacıyla gerçekleştirilen tek yönlü varyans analizi sonucunda yaş grup ortalamaları arasındaki fark istatistiksel açıdan anlamlı bulunmuştur ($F=8,618$; $p=0,000 < 0.05$).

Davranışsal İletişim Becerileri puanları yaş değişkenine göre anlamlı bir farklılık gösterip göstermediğini belirlemek amacıyla gerçekleştirilen tek yönlü varyans analizi sonucunda yaş grup ortalamaları arasındaki fark istatistiksel açıdan anlamlı bulunmuştur ($F=8,757$; $p=0,000 < 0.05$).

İletişim Becerileri puanları yaş değişkenine göre anlamlı bir farklılık gösterip göstermediğini belirlemek amacıyla gerçekleştirilen tek yönlü varyans analizi sonucunda yaş grup ortalamaları arasındaki fark istatistiksel açıdan anlamlı bulunmuştur ($F=9,579$; $p=0,000 < 0.05$). Farklılaşmanın kaynağının belirlenmesi amacıyla öncelikle varyanslar homojen olup olmadığını belirleyebilmek için Levene’s Testi yapılmış ve Levene testine ilişkin istatistiksel değerler tabloda verilmiştir.

Tablo 12. Yaş'a Göre Levene Testi Sonuçları

	Levene Statistic	S.D.1	S.D.2	P
Zihinsel İletişim Becerileri	0,284	2	297	0,753
Duygusal İletişim Becerileri	0,055	2	297	0,946
Davranışsal İletişim Becerileri	3,061	2	297	0,058
İletişim Becerileri	0,498	2	297	0,608

Tablo 12’de görüldüğü gibi yapılan Levene Testi sonucunda Zihinsel, Duygusal, Davranışsal ve İletişim Becerileri puanlarının varyansı ($p = 0,753, 0,946, 0,058$ ve $0,608 > 0,05$) olduğu için homojen ve homojen testlerden Tukey Testi uygulanmış ve sonuçlar aşağıdaki tabloda verilmiştir.

Tablo 13. Yaşa Göre Tukey Testi sonuçları

	(I)	(J)	(I-J)	Std. Hata	p
Zihinsel İletişim Becerileri	28-35 yaş	18-20 yaş	0,522	0,129	0,000
Duygusal İletişim Becerileri	28-35 yaş	18-20 yaş	0,558	0,135	0,000
Davranışsal İletişim Becerileri	28-35 yaş	18-20 yaş	0,520	0,124	0,000
İletişim Becerileri	28-35 yaş	18-20 yaş	0,533	0,122	0,000

Tablo 13’de görüldüğü gibi Levene testi sonrası yapılan post hoc testlerinden Zihinsel İletişim Becerileri puanları için yapılan Tukey Testi sonucunda 28-35 yaş öğrencilerin Zihinsel İletişim becerileri puanları ortalamaları 18-20 yaş arası öğrencilerden anlamlı bir şekilde daha yüksek olduğu görülmüştür.

Duygusal İletişim Becerileri puanları için yapılan Tukey Testi sonucunda 28-35 yaş öğrencilerin Duygusal İletişim becerileri puanları ortalamaları 18-20 yaş arası öğrencilerden anlamlı bir şekilde daha yüksek olduğu görülmüştür.

Davranışsal İletişim Becerileri puanları için yapılan Tukey Testi sonucunda 28-35 yaş öğrencilerin Davranışsal İletişim becerileri puanları ortalamaları 18-20 yaş arası öğrencilerden anlamlı bir şekilde daha yüksek olduğu görülmüştür.

İletişim Becerileri puanları için yapılan Tukey Testi sonucunda 28-35 yaş öğrencilerin İletişim becerileri puanları ortalamaları 18-20 yaş arası öğrencilerden anlamlı bir şekilde daha yüksek olduğu görülmüştür.

Tablo 14. Sınıfa Göre İletişim Becerileri Tutumlarının ve Alt Boyutlarına İlişkin Tutum Puanlarına İlişkin N, Ortalama Ve Standart Sapma Değerleri

		N	Ortalama	Std. Sapma
Zihinsel İletişim Becerileri	1.sınıf	31	3,16	0,93
	2.sınıf	57	3,57	0,85
	3.sınıf	55	2,82	0,79
	4.sınıf	157	3,21	0,97
	Toplam	300	3,22	0,92
Duygusal İletişim Becerileri	1.sınıf	31	3,04	1,00
	2.sınıf	57	3,58	0,88
	3.sınıf	55	2,72	0,81
	4.sınıf	157	3,09	0,98
	Toplam	300	3,14	0,97
Davranışsal İletişim Becerileri	1.sınıf	31	3,13	0,82
	2.sınıf	57	3,56	0,85
	3.sınıf	55	2,71	0,78
	4.sınıf	157	3,21	0,89
	Toplam	300	3,18	0,89
İletişim Becerileri	1.sınıf	31	3,11	0,88
	2.sınıf	57	3,57	0,81
	3.sınıf	55	2,75	0,74
	4.sınıf	157	3,17	0,89
	Toplam	300	3,18	0,88

Tablo 14’de görüldüğü üzere, İletişim Becerileri Ölçeğinin alt boyutu olan Zihinsel İletişim Becerileri düzeyinin sınıf değişkeni ortalamalarına bakıldığında, en yüksek puan ortalamasının 3,57 ile 2.sınıf olan öğrencilere ait olduğu, onları sırasıyla 3,21 ile 4.sınıf, 3,16 ile 1.sınıf ve 2,82 ile 3.sınıf olan öğrencilerin izlediği görülmektedir.

Duygusal İletişim Becerileri düzeyinin sınıf değişkeni ortalamalarına bakıldığında, en yüksek puan ortalamasının 3,58 ile 2.sınıf olan öğrencilere ait olduğu, onları sırasıyla 3,09 ile 4.sınıf, 3,04 ile 1.sınıf ve 2,72 ile 3.sınıf olan öğrencilerin izlediği görülmektedir.

Davranışsal İletişim Becerileri düzeyinin sınıf değişkeni ortalamalarına bakıldığında, en yüksek puan ortalamasının 3,56 ile 2.sınıf olan öğrencilere ait olduğu, onları sırasıyla 3,21 ile 4.sınıf, 3,13 ile 1.sınıf ve 2,71 ile 3.sınıf olan öğrencilerin izlediği görülmektedir.

İletişim Becerileri düzeyinin sınıf değişkeni ortalamalarına bakıldığında, en yüksek puan ortalamasının 3,57 ile 2.sınıf olan öğrencilere ait olduğu, onları sırasıyla 3,17 ile 4.sınıf, 3,11 ile 1.sınıf ve 2,75 ile 3.sınıf olan öğrencilerin izlediği görülmektedir.

Tablo 15. Sınıfa Göre İletişim Becerileri Tutumlarının ve Alt Boyutlarına İlişkin Tutum Puanlarına İlişkin Varyans Analizi Sonuçları

		Kareler Toplamı	S.D.	Kareler Ortalaması	F	P
Zihinsel İletişim Becerileri	Gruplar Arası	23,229	3	7,743	0,505	0,679
	Gruplar İçi	230,591	296	0,779		
	Toplam	253,819	299			
Duygusal İletişim Becerileri	Gruplar Arası	31,689	3	10,563	0,143	0,934
	Gruplar İçi	248,849	296	0,841		
	Toplam	280,538	299			
Davranışsal İletişim Becerileri	Gruplar Arası	29,194	3	9,731	0,369	0,775
	Gruplar İçi	208,629	296	0,705		
	Toplam	237,822	299			
İletişim Becerileri	Gruplar Arası	27,737	3	9,246	0,339	0,797
	Gruplar İçi	203,716	296	0,688		
	Toplam	231,452	299			

Tablo 15’de görüldüğü gibi İletişim Becerileri Ölçeği puanlarının sınıf değişkenine göre anlamlı bir farklılık gösterip göstermediğini belirlemek amacıyla F testi yapılmıştır.

Zihinsel İletişim Becerileri puanları sınıf değişkenine göre anlamlı bir farklılık gösterip göstermediğini belirlemek amacıyla gerçekleştirilen tek yönlü varyans analizi sonucunda sınıf grup ortalamaları arasındaki fark istatistiksel açıdan anlamlı bulunmamıştır ($F=0,505$; $p=0,679 > 0.05$).

Duygusal İletişim Becerileri puanları sınıf değişkenine göre anlamlı bir farklılık gösterip göstermediğini belirlemek amacıyla gerçekleştirilen tek yönlü varyans analizi sonucunda sınıf grup ortalamaları arasındaki fark istatistiksel açıdan anlamlı bulunmamıştır ($F=0,143$; $p=0,934 > 0.05$).

Davranışsal İletişim Becerileri puanları sınıf değişkenine göre anlamlı bir farklılık gösterip göstermediğini belirlemek amacıyla gerçekleştirilen tek yönlü varyans analizi sonucunda sınıf grup ortalamaları arasındaki fark istatistiksel açıdan anlamlı bulunmamıştır ($F=0,369$; $p=0,775 > 0.05$).

İletişim Becerileri puanları sınıf değişkenine göre anlamlı bir farklılık gösterip göstermediğini belirlemek amacıyla gerçekleştirilen tek yönlü varyans analizi sonucunda sınıf grup ortalamaları arasındaki fark istatistiksel açıdan anlamlı bulunmamıştır ($F=0,339$; $p=0,797 > 0.05$).

Tablo 16. İlişki Analizi

		Zihinsel İletişim Becerileri	Duygusal İletişim Becerileri	Davranışsal İletişim Becerileri	İletişim Becerileri
Zihinsel İletişim Becerileri	r	1			
	p				
	N	300			
Duygusal İletişim Becerileri	r	0,784**	1		
	p	0,000			
	N	300	300		
Davranışsal İletişim Becerileri	r	0,733**	0,732**	1	
	p	0,000	0,000		
	N	300	300	300	
İletişim Becerileri	r	0,855**	0,857**	0,834**	1
	p	0,000	0,000	0,000	
	N	300	300	300	300

** p < 0,01

Tablo 16’da görüldüğü üzere, İletişim Becerileri Envanteri ile alt boyutları arasındaki ilişkiyi belirlemek üzere yapılan Korelasyon analizi sonucunda Zihinsel İletişim Becerileri ile $r = 0,855$; $p=0,000 < 0.01$; Duygusal İletişim Becerileri $r = 0,857$; $p=0,000 < 0.01$, Davranışsal İletişim Becerileri arasında $r = 0,834$; $p=0,000 < 0.01$ düzeyinde pozitif yönde, yüksek düzeyde, istatistiksel açıdan anlamlı bir ilişki saptanmıştır.

Ayrıca Zihinsel İletişim Becerileri ile Duygusal İletişim Becerileri arasında $r = 0,784$; $p=0,000 < 0.01$, düzeyinde pozitif yönde, orta düzeyde, istatistiksel açıdan anlamlı bir ilişki saptanmıştır.

Zihinsel İletişim Becerileri ile Davranışsal İletişim Becerileri $r = 0,733$; $p=0,000 < 0.01$ ve Duygusal İletişim Becerileri ile Davranışsal İletişim Becerileri arasında $r = 0,732$; $p=0,000 < 0.01$ düzeyinde pozitif yönde, orta düzeyde, istatistiksel açıdan anlamlı bir ilişki saptanmıştır.

SONUÇ VE ÖNERİLER

Toplumsal hayatlarında başkaları ile iletişim halinde olan insanlar kaçınılmaz olarak bazı sorunlarla karşılaşabilirler. Etkili problem çözme becerileri, kişilerarası ilişkileri olumlu etkilerken, etkili problem çözme becerilerinin yetersizliği, kişiler arası ilişkilerde bazı sorunlara neden olabilir. Öte yandan, iletişim becerilerinin geliştirildiği veya geliştirilmemesi, kişilerarası sorunlarla baş etme olasılığında farklılıklara yol açabilir.

Problemlere karşı olumsuz bir tutuma sahip olan ve sorumlu olmayan ve kendine güvenmeyen kişiler, karşılaştıkları sorunlar bakımından benzer davranış stilleri sergileyebilirler, diğer taraftan empati kuramayacakları, Güven tesis etme konusunda zorlanırlar ve olumlu iletişim becerileri sergileme olasılığı düşüktür. Bununla birlikte, etkili problem çözme becerilerinin ve iletişim becerilerinin geliştirilmesi, kişilerarası ilişkilerde karşılaşılan sorunlarla başa çıkmada ve sosyal çevredeki diğer insanlarla olumlu iletişim kurmada önemli bir etkiye sahip olacaktır; Benlik saygısını kontrol etmek, öfkeyi kontrol etmek, saldırganlık yerine olumlu problem çözme becerilerini kullanarak sorunları çözmektir.

Bu araştırmada, çok boyutlu kişilerarası problem çözme ve iletişim becerileri sadece üniversite örneği üzerinde yürütülmekte ve ilişkilerin sadece belirli değişkenlerle incelenmesi sonuçların genelleştirilmesinde bir sınırlama oluşturmaktadır. Bu nedenle, kişiler arası problem çözme ve iletişim becerilerini etkileyebilecek çeşitli psikososyal

faktörleri göz önüne alarak araştırma farklı örneklerde yapılabilir. Öte yandan, araştırma bulgularının, problem çözme becerilerinin ve iletişim becerilerinin incelendiği oldukça sınırlı bir alanın yazılmasına katkıda bulunacağı düşünülmektedir. Araştırmanın bir başka katkısı, problem çözme becerileri ve iletişim becerilerinin yaş, cinsiyet açısından incelenmesidir. Aynı zamanda, araştırma bulguları, problem çözme becerilerinin geliştirilmesi ve iletişim için eğitim programlarının geliştirilmesine olan ihtiyacı da göstermektedir.

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İLETİŞİM FAKÜLTESİ ÖĞRENCİLERİNİN YABANCI DİZİ SEYRETME ALİŞKANLIKLARI: SAKARYA ÜNİVERSİTESİ ÖRNEĞİ

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ÖZET

Televizyon seyretmek, sanayileşme sonrası oluşan toplum yapılarına damgasını vuran boş zamanın değerlendirmesi anlamında kanıksanmış bir eğlence biçimidir. Diziler, televizyon yapımları arasında fazlasıyla öne çıkmaktadır. Televizyon seyretme oranının oldukça yüksek olduğu Türkiye’de, çok kanallı döneme geçtikten sonra ortaya çıkan dizi çeşitliliği sonucu, dizi seyirciliği günlük yaşamın bir parçası haline gelmiştir. Diğer yandan, yeni medya teknolojileri ile birlikte insanlar dizileri televizyonla beraber dijital platformlarda da seyrederek hale gelmiştir. Bunun sonucunda arka arkaya seyretme gibi yeni bir seyir biçimi ortaya çıkmıştır ve bu seyir biçimi genç insanlar arasında hızla yayılmaktadır.

Yabancı dizi seyirciliği de seyretme sitelerinin yabancı orijinli olmalarından ötürü yeni medya teknolojileriyle yakından ilişkilidir ve arka arkaya seyretme alışkanlığını kapsamaktadır. Bu nedenle, genç insanların yabancı dizileri seyretme alışkanlıklarını ortaya koymak adına, kullanımlar ve doyumlar yaklaşımı çerçevesinde bir analiz ihtiyacı doğmaktadır. Bu çalışmada, Sakarya Üniversitesi İletişim Fakültesi Lisans öğrencilerine yönelik anket tekniği uygulanarak, öğrencilerin yabancı dizi seyretme alışkanlıkları ortaya konulmaya çalışılmıştır.

Anahtar Kelimeler: Televizyon, Dizi, Kullanımlar ve Doyumlar, Yeni Medya, Arka Arkaya Seyretme.

GİRİŞ

Kitle iletişim araçlarının gelişimi incelendiğinde, televizyona dikkat çekici bir önem atfedildiğini görürüz. Yazının icadıyla başladığı kabul edilen kitle iletişiminin serüveninde, esasen görsel iletişimin daha etkili olduğu gerçeği, resim, fotoğraf, sinema ve televizyonu bir adım öne çıkarmıştır. Bu bağlamda, öncelikle iletişimin insanlığın varoluşundan bugüne kadar uzanan yolculuğunu kısaca hatırlamak yerinde olacaktır. İletişim, insanlığın varoluşu ile başlayan, insanla birlikte yaşayan bir edimdir (Güngör, 2013, s. 38). İletişimin pek çok farklı tanımı olmakla birlikte, Erdoğan'ın (2011) insanın varoluşunu temel alan tanımı yeterince açıklayıcıdır;

“İnsan biyolojik ve toplumsal bir varlıktır. Biyolojik yanı fiziksel varoluşuyla ve bu varoluşun sürdürülmesiyle ilgilidir. Toplumsal yanı ise, hem fiziksel varoluşunu hem de topluluktaki kendisinin ve ötekilerin örgütlü varoluşunu sürdürmesiyle ilgilidir. Toplumsal yanı, mikro seviyede insan psikolojisinden makro seviyede toplumsal üretim, dağıtım ve tüketime kadar çeşitlenir.

Dolayısıyla iletişim, insanın biyolojik, psikolojik ve toplumsal varlığını üretebilmesinin ve geliştirebilmesinin zorunlu koşulu olan düşünsel ve ilişkisel faaliyetler bütünüdür” (s. 37).

Buna göre, ilk insanın iletişiminin hayatta kalmak için zorunlu olduğu ve bu zorunluluk neticesinde geliştiği sonucuna varılabilir. İletişim tarihi bağlamında, insanın ilk varoluş çabalarına baktığımızda görsel iletişimin önemli bir yeri olduğunu görürüz. Görsel iletişim, “doğrudan göze, görsel algıya seslenen bir iletişim biçimidir” (Güngör, 2013, s. 43). İlkel çağlardaki mağara resimleri ya da ateşe ve dumanla kurulan iletişim görsel iletişimin en eski örnekleridir. Aslında görsel iletişim, ilk iletişim biçimi olarak kabul edilen beden dilinden yazılı iletişime kadar bütün iletişim biçimlerinin içinde yer almıştır/almaktadır.

Görsel iletişimin işlevselliği bu noktada önem kazanmaktadır. Yazının icadından önce, insanın kendini ifade etme biçimi olarak zorunlu olarak görsel iletişimi kullandığı yönünde masum bir yorum yapabiliriz. Ancak, görsel iletişim işlevselliğini yazının icadından sonra da güçlenerek sürdürmüştür. En önemli özelliği, insanlar arası güç ilişkilerinin belirlenmesinde önemli bir yer edinmiş olmasıdır. Toplamların ilkel üretim ilişkilerinden krallıklara, yani efendi-köle ilişkilerine evrildiği dönemlerde, iktidar sahipleri için inşa edilen görkemli yapılar, soyluların kıyafetleri, toplumsal alanlarda kullanılan armalar ve hatta renkler de görsel iletişime örnek gösterilebilir (Güngör, 2013, s. 43).

Sanayi devrimi sonrası, iletişim teknolojilerinin ilerlemesiyle birlikte, tıpkı görselliğin en fazla yaşatıldığı sinema gibi bir fantazmagorya olan televizyon da egemen güç tarafından şekillendirilen bir kitle iletişim aracı olarak iletişim tarihinde kendine yer bulmuştur. Fantazmagorya, Sanayi Devrimi sonrası kapitalist sistemin kitleler doğurduğu çağın düşünürlerinden olan Baudelaire'in kullandığı bir kavramdır. Ona göre; kitle üretimine geçilmesi sonucu yalnızlaşan kalabalıklar ortaya çıkmış ve daha çok üretim için çalışmaya zorlanan kitleler bir fantazmagorya ile kuşatılmıştır. Eğlence dünyası, bunun için doğmuştur. Sanat, çalışması gereken kitleleri eğlendiren bir araca dönüşmeye başlamıştır. Bu dönemde, “sanat sanat içindir” akımı ortaya çıktıysa da, bunu savunanlar bile hitap ettikleri belli gruplara eserlerini pazarlamak zorunda kalacaklardır (Oskay, 2014).

Oskay'ın (2014) kapitalist sistemin kitleleri uyuşturan bir aracı olarak ele aldığı eğlence dünyası esasen sinema sektörünün ortaya çıkmasıyla görünür hale gelmiştir. Ancak, televizyonun icadı, bu fantazmagorya fikrini, McLuhan'ın “Küresel Köy” de anlattığı gibi daha etkili bir boyuta taşıyacaktır. Bu anlamda televizyonun en önemli özelliği, hanelere girmiş olması ve dolayısıyla daha çok insana ulaşma yetkinliğidir (Canöz, 2011, s. 116). Çoğunlukla, boş zamanları hedef alan bir eğlence aracı olan televizyon yapımlarının en popülerlerinden biri ise, televizyon dizileridir (Geçer, 2015, s. 15).

Dizi seyretme alışkanlığı oluşturma bakımından diziler iki türe ayrılmaktadır. Bunlardan birisi dramalar, diğeri ise seriyallerdir. Dramalar, her bölümde farklı bir konuyu anlatan küçük bir film olma özelliği taşıırken, Seriyalde ise bölümler bir sonraki sahne hakkında merak oluşturacak şekilde bitmektedir. Günümüzde genellikle bu iki türün birleştirildiği bir format kullanılmaktadır. Yani, devam eden bir ana hikaye bulunmakla birlikte her bölüm ayrıca kısa bir hikaye anlatmaktadır (Kula, 2012, s. 515). Türkiye’de dizi seyretme alışkanlığı bir tür serial diyebileceğimiz soap operalarla başlamıştır. Tek kanallı dönemde ilk defa yabancı soap operalar ile karşılaşan Türk insanı, yepyeni bir kültürle de tanışmıştır.

“Soap Opera, bir hikâyenin bölümler halinde televizyon ya da radyoda yayınlanmasıdır. Soap operalar aslında sabun köpüğü olarak da nitelendirilir. Bu yayınlar, yeterince uzundur. Soap ifadesi, ilk zamanlarda bu türden yayınlara, Gamble, Palmolive gibi sabun markalarının sponsor olmasındandır. Bu diziler (hikâye) önceleri sadece ev kadınlarına yönelik olarak gün içerisinde yayınlanırken daha sonraları değişen mesai bağlamında farklı versiyonları ile akşamları da yayınlanmaya başlamıştır ki şimdilerde ülkemizde de erkek ya da kadın izleyiciye hitap eden, sıkça

seyredilen diziler akşam soap operalarıdır. Soap operaları diğer drama türlerinden ayıran en önemli özelliği açık uçlu hikâye bölümlerinden oluşmasıdır. Her bölüm hikâyenin bir dahaki bölümle bağlanarak devam edeceğini gösteren sözlerle biter” (Geçer, 2015, s. 15).

Tek kanallı dönemde soap opera türünde yerli diziler de yayınlanmakla beraber, drama türünde yerli dizilerin popülerleşmesi özel televizyon kanallarının kurulmasıyla başlamıştır. 1990’lardan 2000’li yıllara uzanan süreçte yerli diziler, dikkate değer bir çeşitlilikte seyircinin beğenisine sunulmuştur. Hatta, bu televizyon dizileri televizyon kanallarının reyting rekabetinde en önemli ürün haline gelmiştir (Geçer, 2015).

Televizyon dizilerinin Türk toplumu üzerindeki kültürel etkisi de yadsınamaz. Bu etki ise, tartışmalı bir konudur. Özkan (2013), yabancı ya da yerli soap operalardan popüler yerli dizilere, dizi seyretme kültürünün daha çok olumsuz etkilerinden söz etmektedir. Buna göre, “dizilerdeki temalar genellikle boşanma, yolsuzluk, evlilik dışı ilişkiler, iş hayatındaki entrikalar, çeşitli rüşvet ve hırsızlık olaylarıdır. Televizyon karakterleri ise normal insanlardan farklı olarak, genellikle boşanma, yolsuzluk, olaylar ve suç aktivitelerinin içindedirler.” (s. 1020). Evlere, oturma odalarına giren televizyonu, ailelerin doğal bir üyesi olarak tanımlayan Özkan (2013), toplumların yaşam tarzlarını ve hatta ilişkilerini televizyonun, özellikle dizilerin belirlediğini ifade etmekte, bu durumu olumsuz olarak ele almaktadır. Bu anlayışa göre, işledikleri konularla geleneksel Türk aile yapısını tehdit eden televizyon dizileri, çocukları ve gençleri de olumsuz etkilemektedir. “Çocuklar televizyonda gördükleri her şeyi gerçek olarak algılayabilmekte, (Çelikten ve Çelikten, 2006:370) günlük yaşamında oyunlardan giyimine, tavır ve davranışlarına kadar birçok noktada dizi karakterlerini taklit etmektedir” (Çelikten ve Çelikten 2006’dan aktaran Özkan, 2013, s. 1020).

Geçer (2015) ise, televizyon dizilerinin etkilerini başka bir açıdan ele almaktadır. Buna göre, diziler Türk izleyici ile buluştukları günden bu yana insanların kendilerini ifade etmelerini sağlayan bir alan olmuştur. Dizilerdeki karakterleri örnek almanın yarattığı olumsuz sonuçlardan çok, insanların dizi karakterleriyle kendilerini özdeşleştirmelerinden bahsetmekte, bu durumu halihazırda kendilerinde var olan duygu, düşünce ve davranışların yansıması olarak açıklamaktadır. Örneğin, yabancı soap operalarda da yerli dizilerde de ezilen, haksızlığa uğrayan insanların hikayeleri bu anlamda sempatik ve ilgi çekicidir. İnsanlar, duygusal olarak bağ kurdukları dizileri seyretmeyi tercih etmekte ve bu şekilde doyuma ulaşmaktadırlar. Diğer yandan, televizyon dizilerinin oluşturduğu fantazmagorya, öyle ya da böyle insanları etkilemekte ve dönüştürmektedir.

Türkiye’de tek kanallı dönemde, soap operalarla başlayıp özel televizyonların kurulmasıyla birlikte yerli popüler dizilerle devam eden dizi seyirciliği, bugün dikkate değer bir biçimde yabancı dizi seyretmeyi tercih eden genç insanların oluşturduğu yeni bir kültüre tanıklık etmektedir. Üstelik, internet teknolojilerinin gelişimi ve ortaya çıkan yeni medya platformları bu yeni tür yabancı dizi akımını güçlendirmektedir. Eurodata TV WorldWide’in 2013’de yayınladığı rapora göre, 2012 yılında tüm dünyada üretilen programların performansı en yüksek olanların üçte birini diziler oluşturmaktadır. Rapora göre, İngilizce yayınlanan diziler, dünya dizi piyasasında birinci sırada yer almaktadır. Yani, 2012 yılında Amerikan dizileri ile birlikte BBC ve ITV İngiliz kanallarının dizileri de dünyada en çok gösterilen diziler olarak kaydedilmiştir (Koloğlu, 2013). Television Business International dergisinin Şubat 2017’de Türkiye’de en çok izlenen dizileri yayınladığı listede ise, internetten izlenen diziler kategorisinde ilk beş diziden üçünü yabancı diziler oluşturmaktadır (Koloğlu, 2017).

Bu bağlamda, genç insanların hangi platformlarda yabancı dizileri izledikleri, hangi ihtiyaçlarını gidermek için hangi yabancı dizilere yöneldikleri, bu dizilerin onlara nasıl bir dünya ya da fantazmagorya yarattığı, bu dünyanın günlük yaşamlarını nasıl etkilediği sormaya değer sorulardır.

AMAC

Dizi seyretme alışkanlıklarına ilişkin çalışmalar incelendiğinde, konunun farklı bağlamlarda ele alındığını görürüz. Örneğin televizyon seyretme alışkanlıklarını ölçen çalışmalarda, dizi seyretme alışkanlığına yönelik bulgular da ortaya çıkmaktadır. Türkiye’de dikkate değer oranda televizyon seyretme alışkanlığı bulunmaktadır. Aile ve Sosyal Politikalar Bakanlığı’nın 2012’in ilk yarısında 12 bin aile üzerinde yaptığı “Türkiye’de Aile Yapısı Araştırması”nın sonuçlarına göre;

“Aile üyelerinin birlikte yaptıkları faaliyetlere bakıldığında birinci sırada 59.4 ile televizyon izlemek geliyor. Bunu 25.8 ile akraba, komşu, arkadaş ziyareti, 21.9 ile alışveriş, 7.2 ile tatil, 6.1 ile dışarıda yemek yemek, 3.2 ile sinema ya da tiyatroya gitmek izliyor. Araştırmaya göre Türkiye’deki evlerin yüzde 34.2’sinde internet bulunduğu belirlendi. Bunların yüzde 41,6’sı kentte, yüzde 14,8’i kırsal kesimde. Araştırmaya katılan erkeklerin yüzde 17,9’u, kadınların yüzde 9,6’sı her gün interneti kullandığını ifade ederken kadınların yüzde 73,7’si ve erkeklerin yüzde 56,9 interneti hiç kullanmadığını dile getiriyor. Diğer yandan TV yayınlarında rahatsız olunan içeriklerin ise yüzde 46.9 ile cinsel içerikli yayınlar olduğu belirtilirken, yüzde 15.5

şiddet, yüzde 14.1 kötü, kaba ve küfürli söz, yüzde 9.9 taraflı haber ve yorumlar, yüzde 9.6 da reklamlar olduğu ifade ediliyor” (İlhan ve Ulusoy, 2013, s. 1131).

Televizyon seyretmenin günlük yaşamı böylesine kapladığı bir gerçeklikte, insanları televizyona en fazla bağlayan yapımların arasında dizilerin yer aldığı açıkça görülmektedir. Toruk (2008), Üniversite öğrencileri üzerinde yaptığı çalışmasında, televizyonda en çok yüzde 29.3’le haber bülteni ve haber programları, yüzde 15.1’le spor, yüzde 12.7 ile sinema filmleri ve yüzde 12.2 ile yerli dizi filmlerin izlendiğini saptamıştır (s. 480).

Diğer yandan, Türkiye dizi kavramıyla yabancı soap operalarla tanışmış olsa da özel televizyon kanallarının açılması ile birlikte yerli diziler popüler olmuştur. Son yıllarda ise, özellikle genç insanlar nezdinde yabancı dizilere yönelik ilginin arttığını görmekteyiz. Fakat bu ilgi, tek kanallı dönemin alternatifi olmayan soap opera seyircisinin ilgisinden farklıdır. Zira, İnternet teknolojilerindeki gelişmeler, seyirciye daha fazla aktif olma imkanı tanımaktadır. Birincisi, seyirci televizyona bağımlı değildir. İstedığı, ilgi duyduğu, merak ettiği herhangi bir yayına internet aracılığı ile kişisel bilgisayarından ve hatta mobil telefonundan erişebilmektedir. İkincisi, seyirci seyretmek istediği programın televizyonda yayınlandığı saatlere bağlı değildir. İstedığı saatte ve istediği kadar seyretme özgürlüğüne sahiptir. Bu durum, yeni bir seyirci tipini ortaya çıkarmaktadır. İnternet teknolojisiyle dönüşen en belirgin seyretme alışkanlığı ise, arka arkaya seyretme alışkanlığıdır.

Bu yeni seyretme alışkanlığı, “bireylerin neyi, nerede, ne zaman ve hangi yöntemlerle izleyeceklerinin kontrolünün kendilerinde olması isteğine bağlı olarak ortaya çıkmaktadır. Amerika’da Netflix, Hulu ve Amazon Instant Video gibi sitelere kolay erişim ve Apple TV ve Amazon Fire TV gibi araçlar sayesinde dizi ve film izleyicileri ardı ardına izleyebildikleri bu programlar sayesinde dizi izleme alışkanlıkları değişmektedir” (Yengin, 2017, s. 8). Orijinali “Binge Watch” olan bu kavram “tıkınmalı izleme” olarak da tanımlanmaktadır. Bu çalışmada, insanların dizileri bölüm bölüm seyretmek yerine bir oturuşta birçok bölümü seyreteceklerini ifade etmek için “arka arkaya seyretme” tanımlaması kullanılacaktır.

Bu çalışmada, değişen dizi seyretme alışkanlıkları bağlamında, 17-25 yaş aralığındaki genç insanları temsil ettikleri varsayımından yola çıkarak İletişim Fakültesi öğrencilerinin yabancı dizi seyretme alışkanlıklarını ölçmek amaçlanmaktadır. Bu bağlamda, genç insanların hangi platformlarda yabancı dizileri seyretecekleri, nasıl ve ne kadar seyretecekleri, hangi ihtiyaçlarını gidermek için hangi yabancı dizilere yöneldikleri sorularına cevap aranacaktır.

ÖNEM

İletişim teknolojilerinde meydana gelen her yenilik, araştırmacılara iletişim çalışmaları anlamında yeni kapılar açmaktadır. Arka arkaya seyretme kavramı da yeni bir kavram olarak karşımızda durmaktadır. Arka arkaya seyretme, yeni medya ile doğrudan ilişkilidir. Yeni medyanın üç temel özelliğini hatırlamak gerekirse; etkileşim, kitlesizleştirme ve eşzamansızlık kavramları bu anlamda açıklayıcıdır. Ekileşim, medya araçları ile alıcının doğrudan ilişki halinde olmasını ifade eder. Bu anlamda, iletişim aracından istediği, ihtiyacı olan, tercih ettiği şeyi istediği anda alabilmekte ve rahatlıkla geribildirim yapabilmektedir. Kitlesizleştirme ise, yeni medyanın her bireye farklı mesajlarla ulaşabilmesini ifade eder. Geleneksel medya araçları belli bir kitleye hitap ederken, yeni medya kişilere tercihlerine göre seçenekler sunmaktadır. Eşzamansızlık, medya ile alıcı arasında tek yönlü iletişimin ortadan kaldırılmış olması anlamına gelmektedir (Yurdigül ve Zinderen, 2012).

Özellikle kitlesizleştirme ve eşzamansızlık, arka arkaya seyretme kavramını, boş zamanın değerlendirilmesinin yeni bir platformu olarak değerlendirilebilmemize olanak sağlar. Eleştirel kuram bağlamında, kapitalizmin bir projesi olarak yorumlanan boş zaman kavramı, Web 2.0 teknolojilerinin ortaya çıkmasıyla daha belirgin bir hale gelmiştir/gelmektedir. Yengin (2017), “anlık” ve “zamansız” sanal platformlarda gerçekleşen dijital boş zaman kavramından bahsetmektedir. Buna göre;

“Dijital boş zamanda; hızlanma, şeylerin kısa ve öz bir şekilde tadını çıkarma, geçicilik, insanı sınırların zayıflığı ve kesintisiz belirsizlik ön plana çıkmaktadır. Teknoloji, insanların bireysel olarak boş zamana erişimini dönüştürmüş ve boş zaman davranışlarıyla deneyimlerini değiştirmiştir. Bir yanda bilgisayarlar, akıllı telefonlar ve tabletler diğer teknolojik aygıtlarla birlikte boş zaman ortamının mükemmel birer ekranı haline gelmiştir. Boş zaman aktivitelerine kitap okumayı verebiliriz. Elektronik bir kitap okumak gelenekselin dijitalleşmesi olarak belirtilebilir. Sanal bir topluluğa katılmak ise ağda yaşanan bir aktivitedir. Dolayısıyla hem bir dönüşüm hem de yeni bir aktivite ortaya çıkabilmektedir” (s.6).

Ortaya çıkan bu yeni dijital boş zamanlar, daha önce televizyon başında yayın saatleri boyunca gerçekleştirilen dizi film izleyiciliğini de değiştirmiştir. Şüphesiz her yenilik gibi öncelikle genç insanlar tarafından kabul görmektedir. Günümüzde, hemen hemen her şeyi sanal platformlarda yapmaya alışmaktayız. Türkiye İstatistik Kurumu’nun Ağustos 2016 “Hanehalkı Bilişim Teknolojileri Kullanım Araştırması”na göre (Türkiye İstatistik Kurumu, 2016), Türkiye’de internet kullanan bireylerin oranını %61,2 olarak, hanelerin %39,5’inin

sabit genişbant bağlantı (ADSL, kablolu internet, fiber vb.) ile, %65,2'sinin mobil genişbant bağlantı ile internete erişim sağladığını belirtmiştir. Hanelerin 2016 yılı Nisan ayında %96,9'unda cep telefonu veya akıllı telefon bulunurken, sabit telefon bulunma oranı %25,6 olarak hesaplanmıştır.

Tıpkı televizyon gibi hanelere giren internet, bilgisayarlar ve akıllı telefonlar, evlerin salonlarında başköşede olan televizyonun etkinliğini azaltmış ve seyircinin kullanım alışkanlıklarını değiştirmiştir. Belki orta yaşın üzerindeki insanlar hala televizyon seyretmeyi tercih etmektedirler. Ancak, genç insanlar, internet nedeniyle televizyon seyretme alışkanlıklarını bırakmaktadır. Bu insanların doyum aldığı şeyler farklılaşmakta, örneğin bir televizyon dizisinin her gün ya da haftadan haftaya takipçisi olmak anlamını yitirmektedir.

Mevcut çalışmalar bağlamında, televizyon seyretme, yerli dizi ve diğer televizyon programlarını seyretme alışkanlıklarının yeterince problemleştirildiğini görmekteyiz. Ancak, yeni medya teknolojilerinin hayatlarımızı dönüştürdüğü yeni dünyada, yabancı dizi seyretme alışkanlıkları ve internet ilişkisi hala yeni bir çalışma konusu olma özelliğine sahiptir. Bu bağlamda, Türkiye'de yabancı dizi izleme alışkanlıklarının ölçülmesi iletişim çalışmaları açısından önem taşımaktadır. Bu çalışmanın önemi, alana bu anlamda mütevazı bir katkı sağlamaktır.

KURAMSAL TEMELLER

İletişim araştırmaları tarihinde, ana akım yaklaşımlar olarak bilinen ve pozitivist, davranışçı gelenekten gelen yaklaşımlar, iletişim biliminin temelini oluşturmaktadır. Başka bir ifadeyle, iletişim araştırmalarının başladığı dönemde, araştırmacıların konularını ele alış biçimi ana akımı oluşturmuştur. Bu süreç, genellikle Lasswell'in iletişim modeliyle birlikte ele alınmaktadır. Lasswell'in modeline göre, iletişim doğrusal, etki-tepki prensibine dayanan bir süreçtir (Güngör, 2013, s. 83). Modelde, mesajı gönderen, alıcıyı gönderdiği mesaj yoluyla istediği yönde etkilemektedir. Aslında bu anlayış, pozitivist, işlevselci Amerikan geleneğinin bir sonucudur. Tek yönlü iletişim modeli, 1930'lardan itibaren kitle iletişim araçlarının kullanımıyla bağlantılı olarak gelişim göstermiştir. Aynı dönemde, Lasswell sihirli mermi yaklaşımını ortaya atmıştır. Bu yaklaşım, kitle iletişim araçlarının kamuoyu oluşturmada güçlü bir etkisi olduğunu savunmaktadır. Buna göre, "elitlerin kitle iletişim araçlarını kullanarak kitlelere gönderdikleri mesajların onlar üzerinde deri altına enjeksiyon yapan bir şırınga ya da sihirli bir mermi gibi doğrudan ve anında bir etkide bulunduğu düşünülmektedir" (Yaylagül, 2014, s. 55).

Bu dönemde yapılan çalışmalar, kitle iletişim araçlarının etkileri üzerine yoğunlaşmışlardır ve “güçlü etki” fikri etrafında şekillenmişlerdir. Bu güçlü etki anlayışı, kitleleri akılsız, sorgulamayan sürüler olarak ele almakta, koşulları, egemen ideolojinin etkilerini ya da kitlelerin neden bu kadar etkiye açık olduklarını araştırmamaktadır. Ana akım yaklaşımların tarihsel süreç içinde gelişimine bakıldığında, Aktif İzleyici Tezi, Kullanımlar ve Doyumlar gibi, bireylerin seçme iradesini ortaya koyan liberal-çoğulcu yaklaşımlar geliştirilmiştir.

“Kullanımlar ve doyumlar yaklaşımı aktif izleyiciyle en fazla doğrudan ilgilenmeye yönelik tek kuramsal alandır” (Severin ve Tankard 1994’den aktaran Nisan ve Özarslan, 2011, s. 25). Seyircilerin kitle iletişim araçlarını kullanmada aktif olduklarını savunan Kullanımlar ve doyumlar yaklaşımı, kitle iletişim araçlarının tek yönlü etkisi olmadığını, seyircilerin neyi, ne kadar, ne zaman seyredeceklerine kendilerinin karar verdiğini ifade eder. “Bu yaklaşım kullanıcıların, medya içeriğini bazı doyumlara ulaşma ya da bazı ihtiyaçları gidermede kullanmaları üzerine yoğunlaşmaktadır” (Canöz, 2011, s. 115).

Kullanımlar ve doyumlar kuramını ortaya atan Psikolog Elihu Katz’a göre, “insanların toplumsal ve psikolojik kökenli ihtiyaçları vardır. Bu ihtiyaçlar sonucu insanlar, medyadan ve diğer kaynaklardan bu ihtiyaçlarını gidermek için beklentiye girerler” (Yaylagül, 2014, s. 71). Bu nedenle, medyayı kullanmakta ve bu kullanım sonucu belli bir doyuma ulaşmaktadırlar. Bu kurama göre, öncelikle izleyici aktiftir. Diğer yandan, kitle iletişim araçlarını kullanırken ihtiyaçlarını karşılamak üzere inisiyatif kullanmaktadırlar. Kullanımlar ve doyumlar kuramının bir diğer iddiası ise, bireylerin kendi ilgi ve motivasyonlarının farkında olmasıdır (Canöz, 2011, s.115). Bu noktada, dizi seyirciliği de günümüzde Kullanımlar ve doyumlar kuramı ile anlamlı hale gelmektedir. İnsanların dizileri hangi ihtiyaçlarını gidermek için kullandıkları iletişim çalışmaları bağlamında ilgi gören bir konudur. Canöz (2011) insanların ihtiyaçlarını aşağıdaki şekilde sınıflandırır;

“-Bilişsel İhtiyaçlar: Bilgi, kanaat ve anlayışı güçlendirme ile ilgili ihtiyaçlar

-Duyuşsal İhtiyaçlar: Estetik, zevk veren duygusal deneyimleri güçlendirme ile ilgili ihtiyaçlar

-Bilişsel-Duygusal İhtiyaçlar: Güvenilirliği, kendine güveni, istikrarı ve mevcut durumu güçlendirmeye ilgili ihtiyaçlar bu sınıftadır. Bu ihtiyaçlar bilişsel ve duyuşsal unsurların bir araya gelmesiyle oluşur ve bütünleştirici olarak nitelenebilir.

-Bütünleştirici İhtiyaçlar: Aileyle, arkadaşlarla ve dünya ile bağlantıyı güçlendirme ile ilgili ihtiyaçlar bütünleştirici ihtiyaçlar olarak nitelenmektedir. Bu ihtiyaçlar ayrıca bütünleştirici bir işlevin yerine getirilmesini sağlayabilir.

-Kaçış İhtiyacı: Gündelik hayatın sıkıntılarından kaçışla ya da gerilimden kurtulma isteği ile ilgili ihtiyaçlardır. Bu kaçış doğrudan bireyin kendisinden uzaklaşma şeklinde olabileceği gibi sosyal rollerinden uzaklaşma biçiminde de olabilir” (s. 116).

Toruk’un (2008), insanların medya kullanım motivasyonları ile ilgili yaptığı sıralama da bu çalışma bağlamında anlamlıdır;

“Eğlenmek; Yetkililerin övülüp yerildiğini görmek; Güzeli yaşamak (görmek); Başkalarıyla ortak deneyim yaşamak; Merakı tatmin etmek; Allah’la yakınlaşmak ve kader ile özdeşleşmek; Oyalanma ve meşguliyet sağlamak; Kendini başkalarının yerine koyabilmek (empati kurabilme); Suçluluk duymadan aşırı duyguları yaşayabilmek; Taklit edilecek modeller bulmak; Bir kimlik kazanmak; Dünya hakkında bilgi kazanmak; Adalet inancımızı güçlendirmek; Romantik aşka inanmak; Büyüye, tılsıma ve mucizeye inanmak; Başkalarını hata yaparken görmek; Dünyaya düzen verildiğini görmek; Tarihi öğrenmek ve tanımak; Hoşlanılmayan duyguları temizlemek, kurtulmak; Suçluluk duymadan cinsel dürtüleri boşaltmak; Tabu-yasak konuları cezasız keşfetmek; Çirkinliği yaşamak-izlemek; Ahlaki, ruhsal ve kültürel değerleri onaylamak; Kötüleri iş başında görmek (Kötü eylemleri yapılırken görmek” (s. 478).

Diğer yandan insanların medyayı kullanmalarının sebepleri dört grupta sınıflandırılabilir;

“İlk olarak, medyatik ürünlerin tüketicileri ilk olarak eğlence programlarını izleyerek duygusal rahatlık ve gündelik gerginliklerinden arınma hazzı elde etmektedirler. İkincisi, kendisine uygun programlar (genellikle drama) izleyerek kişisel ilişkilerini geliştirme, dost arkadaş edinme ve yalnızlıktan kurtulma yollarını medyadan öğrenmekte ya da bazı özdeşlikler kurarak, buna yönelik ihtiyaçlarını sanal olarak karşılamaktadırlar. Üçüncüsü, izleyiciler; başkalarını etkilemeyi ve onların görüş alanına girmeyi prestij elde etmeyi, taktir-itibar görmeyi, estetik ve edebi beceriler kazanmayı, başarıya kendini motive etmeyi medyayı kullanarak elde etmektedirler. Son olarak insanlar, inandıklarının teyit edildiğini görmek, doğru yolda olduklarından emin olmak, kendisinin ve başkalarının kişiliğini çözümleyerek, kendini ve başkalarını

konumlandırmak amaçlarıyla medya içeriklerine bağımlı kalmaktadırlar” (Akçay, 2011, s.142).

Buna göre, dizi seyirciliğinde insanlar sosyal davranışlarını nasıl belirleyeceklerini öğrenmek ya da dizi karakterleriyle özdeşleşme kurarak kimliklerini belirlemek ihtiyacı ile hareket etmektedirler. Bu doğrultuda, kullanımlar ve doyumlar yaklaşımının tam anlamıyla dizi seyretme alışkanlığının nedenlerinin anlaşılmasında son derece anlamlı bir zemine oturmuş olmaktadır.

LİTERATÜR TARAMASI

Literatür taraması yapıldığında, araştırma konusu ile ilgili çeşitli araştırmalar bulunmuştur. Bunlardan birincisi; Geçer (2015), Türkiye’de dizi seyretme alışkanlığını popüler kültür bağlamında ve sosyo-ekonomik olarak ele almaktadır. Ancak, popüler kültürün olumsuz etkilerinden çok Türk toplumundaki kültürel dönüşümün yansımalarına odaklanmaktadır. Buna göre, insanların seyrettiği diziler kendilerini ifade ettikleri diziler olarak değerlendirilmektedir. Geçer’in (2015, s. 22) iddiası, “Türk dizileri; hedef kitlesi, reytingleri ve televizyon kurguları da dikkate alınarak; içinden çıktığı toplumun öğelerini taşımaktadır” cümlesinden de anlaşılacağı gibi kullanımlar ve doyumlar yaklaşımı açısından tamamen anlamlıdır.

Ayrıca, Türkiye’de dizi seyirciliği serüvenini başlatan, tek kanallı döneme ait yabancı soap operaların da aynı bağlamda değerlendirilmesi gerektiğini bize göstermektedir. Soap operalardaki sınıf eşitsizliği, “zengin oğlan-fakir kız” hikayelerinin Türkiye’deki seyirci tarafından yine kendini bulma, kendini ifade etme anlamında kabul gördüğünü vurgulamaktadır. Dizi seyirciliğinin nasıl geliştiğini tarihsel olarak ele alırken, Türkiye’deki dizi sektöründe yaşanan gelişmeler bağlamında dizilerin senaryolarındaki değişimin Türkiye’de toplumsal yaşam biçimlerini ve toplumsal çeşitliliği daha iyi yansıttığını ifade etmektedir.

Bu çalışmadan, özellikle Türkiye’de dizi seyirciliğinin tarihsel gelişimi bağlamında yararlanılmıştır. Türkiye’de seyirciye hangi dizi türlerinin sunulduğu ve seyircinin hangi tür dizileri sevdiğini ortaya koyabilmek adına, bir dizi türü olarak soap operaların tanımı ve gelişimini açıklama ihtiyacı doğmuştur. Bu nedenle, Geçer’in (2015) soap opera açıklamalarına yer verilmiştir. Diğer yandan bu çalışma, mevcut çalışmaya tek kanallı dönemde soap opera türünde yerli dizilerin de yayınlandığını, 1990’lı yıllarda özel televizyon kanallarının açılmasıyla birlikte drama türünde yerli dizilerin popülerleşmesini ve 2000’li

yıllarda Türkiye’de dizi sektöründeki gelişmeler sonucu dizi kurgularında artan çeşitliliği ortaya koyma bağlamında önemli katkılar sunmuştur.

İkincisi; Özkan (2013), televizyon dizilerinin üniversite öğrencileri üzerindeki etkilerini araştırdığı çalışmasında, dizi seyretme alışkanlığının daha çok olumsuz etkilerinden söz etmektedir. Seyredilen dizilerin insanlar üzerinde farkında olmadan derin etkiler bıraktığını iddia etmektedir. Çalışmada, Niğde Üniversitesi Eğitim Fakültesi Sınıf Öğretmenliği, Sosyal Bilgiler Öğretmenliği, Türkçe Öğretmenliği, Fen Bilgisi Öğretmenliği programlarında okuyan toplam 499 öğrenciye anket uygulaması yapılmıştır.

Bu çalışmadan, dizi seyretme alışkanlığının olumsuz etkilerini ortaya koyarak geniş bir perspektif kazanabilmek amacıyla yararlanılmıştır. Özkan’a (2013) göre, televizyon toplumsal kültürün önemli bir etkileyicisidir. Sürekli televizyon yayınlarından etkilenen bireylerde zaman içinde izledikleri karakterleri model alma eğilimleri görülebilmektedir. Televizyon programları vesilesiyle algı yönlendirilebilmekte, iyi ve kötü ayırımı şekillendirilebilmektedir. Olumsuz roller sergileyen karakterlerin bile bireyler tarafından rol modeli olarak seçilmesi televizyonun bu karakterleri diziler aracılığı ile yansıtma biçiminin payı vardır. Zira, televizyon insanların düşüncelerini etkileyen imajlar oluşturmada büyük güce sahiptir.

Özkan (2013), dizilerin yapılmasındaki ana hedeflerden birisinin de dizilerde öne sürülen karakterler gibi bir seyirci kimliği yaratmak olduğunu iddia etmektedir. Bunun için istenilen kimliği oluşturmaya yönelik mesajlar birçok televizyon yayını aracılığı ile ya doğrudan ya da dolaylı olarak verilebilmektedir. Televizyon temel özelliklerini kendisinin belirlediği bireyler ve toplumlar oluşturma iktidarına sahip görülmektedir. Televizyon bu etkilerini diziler aracılığı ile en az diğer programlar kadar başarılı şekilde gerçekleştirebilmektedir. Televizyon, milyonlarca insanı boyutları daha önce saptanmış bir kalıplamadan geçirme aracı olarak görülmektedir. Dikkat çekici husus, dizilerdeki konuların ve karakterlerin seyirciler nazarında, özellikle de çocuklar üzerinde olumsuz örnek teşkil etmesidir. Televizyon ulus kültürleri ya da alt kültürleri bozabilmektedir.

Üçüncüsü; Kula (2012) ise, dizi seyirciliğini tüketim kültürü bağlamında ele almaktadır. Tüketim kültürünün tanımlamasını ayrıntılı bir şekilde yaptığı çalışmasında, dizi seyirciliği de tüketimin bir boyutu olarak incelemiştir. Çalışmanın örneklemini, “Zerda”, “Asmalı Konak”, Bir İstanbul Masalı”, “Aliye”, “Gümüş”, “Binbir Gece”, “Sıla”, “Hacı”, “Asi”, “Aşk-ı Memnu” gibi 2000’li yılların en popüler yerli dizileri oluşturmaktadır. Bu diziler üzerinde yaptığı değerlendirmesinde, diziler yoluyla yeni kimlikler üretildiğini savunmaktadır. Dizilerdeki karakterlerin kullandığı aksesuarların, eş zamanlı olarak popüler

hale geldiğini, böylelikle diziler yoluyla bir popüler kültür oluşturulduğunu söylemektedir. Ayrıca, söz konusu dizilerin olumsuz örnek oluşturabilecek kurgularının, tüketim kültürünün çarkında Türk toplumu tarafından yadırganmaz hale gelmiş olmasını eleştirmektedir.

Kula (2012), ele aldığı dizileri gece soap operası olarak tanımlamaktadır. Ve gece soap operalarını, Türkiye’deki Yeşilçam’a alışkın seyirci için bir hayal kurma biçimi olarak tanımlamıştır. Bu bağlamda, dizilerde sergilenen ihtişamlı hayatı yaşama ihtimali olmayan seyircinin, seyirci olarak arzularını tatmin ettiğini vurgular.

Diğer yandan Kula (2012), dizilerin iki türlü tanımını vermektedir. Buna göre diziler, dramalar ve seriyal olmak üzere ikiye ayrılmaktadır. “İki formatta aynı karakterlere ve aynı mekâna sahip bölümlerden oluşmakta, ancak; dizide, bir bölüm sona erdiğinde bütün olaylar çözümlenmiş halde kalmakta, yani her bölüm kendi içinde küçük bir film olma özelliği taşımaktadır. Seriyalde ise bölüm olayların en çarpıcı yerinde bitmekte, gelecek bölüme çözümlenmemiş olaylar sarmaktadır. İzleme alışkanlığı yaratmak dizilerin ve seriyallerin ana amacını oluşturmaktadır” (Kula, 2012, s. 515). Diğer yandan, yeni yerli dizi kurgularında bu iki türün birleştirildiği görülmektedir. Bu çalışmadan, seriyal ve drama türlerinin ortaya konulması bağlamında faydalanılmıştır. Böylelikle, Türkiye’de dizi seyircisinin karşılaştığı dizi kurguları, bunların tercih edilme sebepleri ve etkileri anlaşılmaya çalışılmıştır.

Dördüncüsü; İlhan ve Ulusoy (2013), Türkiye’deki seyircilerin televizyon bağımlılığından bahseder. Buna göre, günümüzde insanlar ciddi anlamda televizyon bağımlısı haline gelmişlerdir. Ve bu durum öyle normalleşmiştir ki, seyirci televizyon başında geçirdiği zamanı bağımlılık olarak görmemektedir. Ancak televizyon bağımlıları henüz bu durumun farkında bile değildir. İlhan ve Ulusoy (2013) çalışmalarında, insanların farkında olmadığı bu bağımlılığı problemleştirmişlerdir.

Öncelikle bağımlılık kavramının ele alındığı çalışmada, televizyon bağımlılığı ile ilgili nicel bir literatüre başvurulmuştur. En önemlisi, televizyon bağımlılığının neden olduğu olumsuz sonuçlar üzerinde durulmuştur. Böylelikle, televizyon bağımlılığı konusunda bir farkındalık yaratmak amaçlanmıştır. Televizyon seyretme alışkanlığının nasıl bağımlılığa dönüştüğü ise, aşağıdaki maddeler ışığında açıklanmaktadır;

“TV, izleyicilerin zamanlarının büyük kısmını kaplar,

İzleyiciler amaçlanandan daha fazla TV izler,

İzleyicilerin TV izlemeyi bırakma girişimleri başarısızlıkla sonuçlanmaktadır,

İzleyiciler, TV izleyebilmek için sosyal aktivitelerden feragat eder ve ailevi ilişkilerini aksatır ve de mesleki faaliyetleri zedeler,

İzleyiciler, televizyon izlemedikleri vakitlerde içine kapanma gibi davranışlar sergiler” (İlhan ve Ulusoy, 2013, s. 1137).

Bu tanımlamalara göre, Türkiye’deki televizyon seyretme oranlarını değerlendirildiği çalışmada, Türkiye’de gerçek anlamda bir televizyon bağımlılığı olduğu sonucuna varılmaktadır. Bu çalışmadan, Türkiye’de seyircinin ne kadar zamanını televizyon başında geçirdiğini ortaya koyabilmek adına istatistiksel veriler bağlamında faydalanılmıştır. Buna göre, aile üyelerinin birlikte yaptıkları faaliyetlerin başında televizyon seyretmek yer almaktadır. Akriba, tatil, dışarıda yemek yemek, sinema ya da tiyatroya gitmek gibi faaliyetler televizyon başında geçirilen zamana göre düşük oranlardadır.

Beşincisi; Canöz (2011), televizyon seyretme alışkanlıklarını yerel düzeyde ele aldığı çalışmasında, Türkiye’deki yerel televizyonların sayısı ve seyircilerindeki artıştan yola çıkarak, Konya ilindeki yerel televizyonların seyredilme alışkanlık ve motivasyonlarını kullanımlar ve doyumlar yaklaşımı çerçevesinde araştırmıştır. Bu araştırmaya göre, Konya merkez ilçeler ve mahallelerden seçilen örnekleme yerel televizyon seyircisi 553 katılımcıdan elde edilen verilere göre; insanların televizyon izlemelerinde 3 motivasyon belirlenmiştir. Bunlar önem sırasıyla; boş zamanları değerlendirme-rahatlama ve eğlence, rehberlik ve sosyal etkileşim ile bilgi arama olarak belirlenmiştir.

Çalışmanın giriş kısmında öncelikle televizyonun hayatımızdaki yeri açıklanmaktadır. Kitle iletişim araçlarının günümüz toplumunda, haber ve bilgi verme, eğitim, eğlendirme, toplumsallaştırma, güdüleme, tartışma ortamı hazırlama, kültür geliştirme ve bütünleştirme işlevlerinden hareketle, televizyonun etkinliği vurgulanmıştır. Bu nedenle, insanların neden televizyon seyrettikleri problemi kullanımlar ve doyumlar yaklaşımı çerçevesinde araştırılmıştır.

Çalışmada kullanımlar ve doyumlar yaklaşımı kavramsal olarak ayrıntılı olarak açıklanmıştır. Böylelikle, üniversite öğrencilerinin yabancı dizi izleme alışkanlıklarını ölçtüğümüz çalışma için kuramsal çerçeve çizmede, ağırlıklı olarak Canöz’ün (2011) kullanımlar ve doyumlar yaklaşımı hakkında verdiği bilgilerden faydalanılmıştır. Buna göre, kullanımlar ve doyumlar yaklaşımının özellikleri açıklanmıştır. Seyircilerin kitle iletişim araçlarını etkin bir şekilde kullandığını savunan kullanımlar ve doyumlar yaklaşımının önceki geleneksel, insanları pasif kabul eden iletişim araştırmalarından ayıran yönleri ortaya konulmaya çalışılmıştır. Ayrıca, insanın hangi ihtiyaçlara göre davranışlar sergilediği, ihtiyaçların, bilişsel, duyuşsal, bilişsel ve duygusal, bütünleştirici ve kaçış ihtiyacı şeklinde sınıflandırıldığı bilgisine ulaşılmıştır.

Altıncısı; Akçay'ın (2011) çalışması, kullanımlar ve doyumlar yaklaşımı bakımından diğer bir anlamlı çalışmadır. Bu çalışmanın amacının günlük hayatımızın içine sızmış ve kendine özgü bir yaşam tarzı yaratmış olan sosyal medya kullanımının arka planında yer alan doyumların neler olduğunu bulmak olduğu görülmektedir. Bu bağlamda, Gümüşhane Üniversitesi'nin akademik, idari personel ve öğrencilerine yönelik anket tekniği uygulanmıştır. Yeni iletişim teknolojilerini hayatımızın bir parçası haline getirenin ne olduğu sorusuna cevap arayan Akçay (2011), bu teknolojilerin çok ciddi ticari ilişkilerin yaşandığı ağlara dönüştüğünü ifade eder. İnternet ile bilgi emtiaya dönüşmüşken birey de özne konumundan nesneye yer değiştirmiştir.

Katılımcılara yöneltilen sorular “sosyal çevre edinme/sosyalleşme, eğlence/boş vakit geçirme, rahatlama/stresten uzaklaşma, bilgi edinme/hayatı tanıma” olmak üzere dört faktöre ayrılmıştır. Araştırma bu dört sorudan “sosyal çevre edinme/sosyalleşme”nin öne çıkan doyum faktörü olduğunu belirtmektedir. Yoğun birliktelik olan üniversite ortamında bile bireylerin sosyal medyayı tercih ediyor olması günümüzde sosyal medyanın iyi bir sosyal çevre edinme ve sosyalleşme aracı olmasına dayandırılmaktadır. Kişilerin kendi aralarında iletişime hazır ve kolay bir ortam bulmasının yanı sıra özellikle karşı cins ile etkileşimde de rahatlık sağlıyor olması ve bireylerin kendilerini daha rahat ifade edebiliyor olması sosyal medyanın bir başka doyum kaynağı olarak ortaya konulmaktadır. Bulgularda diğer bir öne çıkan unsur olarak bireylerin aidiyet duygusudur. Sosyal medya kişilerin günlük yaşamda üyesi olamayacağı gruplara üye olma ihtiyacının da tatmin edildiği bir ortamdır denilmektedir. Sosyal medya kullanımını açıklayan ikinci bir faktör olarak “eğlence/boş vakit geçirme” faktörü de öne çıkmaktadır. Kişilerin sosyal medya aracılığı ile ilgi duydukları alanlarda (resim, müzik vs.) paylaşımlar yaparak zaman geçirdikleri belirtilmektedir. Bu, çalışmadan, kullanımlar ve doyumlar yaklaşımı bağlamında dizi seyirciliğinin bulunduğu yeri anlamak amacıyla yararlanılmıştır.

Yedincisi; Toruk (2008) ise, medyanın kullanımı konusunu genç nüfus bağlamında ele almıştır. Türkiye’de üniversite öğrencilerinin gazete, televizyon ve interneti kullanma biçimlerini, 205 üniversite öğrencisine anket tekniği uygulayarak araştırmıştır. Kullanımlar ve doyumlar yaklaşımı çalışmanın kuramsal çerçevesini oluşturmaktadır. Yapılan analizde, cinsiyet ve gelir farklılıklarının medya kullanımını önemli ölçüde etkilediği sonucuna varılmaktadır. Özellikle, gelir ve eğitim seviyesinin medya kullanım alışkanlıklarını doğrudan etkilediği görülmektedir. Buna göre, ebeveynin gelir ve eğitim seviyesi arttıkça televizyon seyretme oranının azaldığı tespit edilmiştir. Televizyon seyretme alışkanlığı ise, bilgilenme ve

eğlenme doyumları ekseninde toplanmaktadır. Bu çalışmadan, öncelikle üniversite öğrencilerinin televizyon seyretme yüzdelikleri alınmıştır. Diğer yandan, Toruk'un (2008), insanların medya kullanım motivasyonları ile ilgili yaptığı sıralama ile mevcut çalışmanın kullanımlar ve doyumlar yaklaşımı bağlamındaki kuramsal çerçevesi sağlam bir zemine oturtulmuştur.

“Eğlenmek; Yetkililerin övülüp yerildiğini görmek; Güzeli yaşamak (görmek); Başkalarıyla ortak deneyim yaşamak; Merakı tatmin etmek; Allah’la yakınlaşmak ve kader ile özdeşleşmek; Oyalanma ve meşguliyet sağlamak; Kendini başkalarının yerine koyabilmek (empati kurabilme); Suçluluk duymadan aşırı duyguları yaşayabilmek; Taklit edilecek modeller bulmak; Bir kimlik kazanmak; Dünya hakkında bilgi kazanmak; Adaletle inancımızı güçlendirmek; Romantik aşka inanmak; Büyüye, tılsıma ve mucizeye inanmak; Başkalarını hata yaparken görmek; Dünyaya düzen verildiğini görmek; Tarihi öğrenmek ve tanımak; Hoşlanılmayan duyguları temizlemek, kurtulmak; Suçluluk duymadan cinsel dürtüleri boşaltmak; Tabu-yasak konuları cezasız keşfetmek; Çirkinliği yaşamak-izlemek; Ahlaki, ruhsal ve kültürel değerleri onaylamak; Kötüleri iş başında görmek” (s.478).

mevcut çalışma bağlamında fikir veren bir sınıflandırma oluşturmaktadır.

Sekizincisi; Nisan ve Özarlan'da (2011), televizyon seyretme alışkanlıklarını kullanımlar ve doyumlar yaklaşımı çerçevesinde araştırmışlardır. Çalışmada, Gümüşhanelilerin televizyon seyretme alışkanlıkları ölçülmüştür. Yapılan analizde kullanımlar ve doyumlar yaklaşımı perspektifinden ulaşılan faktörler, “eğlence, ruhsal destek- rahatlatma ve sosyal paylaşım, boş zamanı değerlendirme, sosyal kaçış ve enformasyon motivasyonlarıdır. Çalışmanın sonuçlarına göre, televizyon kullanma motivasyonları faktörleri arasında ilk sırada eğlence motivasyonu gelirken son sıradaysa enformasyon motivasyonu yer almaktadır” (Nisan ve Özarlan, 2011, s. 23)

Çalışmada, televizyon kavramı detaylı olarak ele alınmıştır. Televizyonun tanımı, televizyona yönelik eleştiriler ve çeşitli yaklaşımlar ortaya konmaktadır. Nisan ve Özarlan'a (2011) göre televizyon,

“hemen hemen bütün toplumlarda olumlu ya da olumsuz etkileri bakımından en çok tartışılan kitle iletişim aracı olmuştur. Kimilerine göre televizyon bugüne kadar gerçekleştirilememiş pek çok güzel rüyanın cisimleşmiş hali; kimilerine göre de çağdaş bir karabasadır. İster olumlu, ister olumsuz olsun bütün bu tartışmaların ortak

noktası, televizyonun mutlak, karşı konulamaz bir etkileme gücüne sahip olduğu varsayımdır.” (s. 25)

Diğer yandan televizyonun kullanımlar ve doyumlar yaklaşımı ile ilişkisi anlamlı bir biçimde ortaya konulmuştur. Buna göre, seyircinin televizyonu kumanda denilen bir aletle kontrol edebilmesi ve isteğini seçebilmesi seyirciyi aktif hale getirmektedir. Ayrıca, bu çalışmada ulaşılan sonuçlara göre, televizyonun eğlence amacıyla seyerediliyor olması, televizyonun asıl amacına ulaştığı biçiminde değerlendirilmektedir. Çünkü televizyon gerçek hayatta bir gösteri, eğlence aracı olarak kabul edilmektedir. Diğer bir vurgulanan sonuç ise, televizyonun önemli bir kaçış aracı olma özelliğidir. Bu çalışmadan kullanımlar ve doyumlar yaklaşımının anlaşılabilmesi anlamında yararlanılmıştır.

Dokuzuncusu; Yengin (2017) ise, gelişen internet teknolojileri neticesinde, dizi seyretme alışkanlıklarındaki değişimini ele almıştır. Yeni medya ile birlikte ortaya çıkan yeni bir dizi seyretme alışkanlığını incelemektedir. Tıkınmalı izleme (binge watch)" olarak ele aldığı, dizileri bölüm bölüm değil de bir oturusta arka arkaya seyretme alışkanlığını kullanımlar ve doyumlar yaklaşımı bağlamında değerlendirmiştir. Buna göre, öncelikle arka arkaya seyretme kavramının nasıl geliştiği açıklanmaktadır.

İnsanların internete kolay ulaşabilir hale gelmesi, Netflix, Hulu ve Amazon Instant Video gibi dizi seyretme sitelerinin ve Apple TV ve Amazon Fire TV gibi yeni medya araçlarının ortaya çıkmasını arka arkaya seyretme alışkanlığına zemin hazırlayan nedenler olarak ele almaktadır. Diğer yandan, bu alışkanlığın gelişmesinde insanların kontrolün kendilerinde olduğunu hissetmelerinin ana neden olarak öne sürmektedir. Çalışmada yöntem olarak, arka arkaya seyretme alışkanlığının hangi nedenlerle tercih edildiğini ölçen bir anket uygulanmıştır.

Çalışmanın bulgularına bakıldığında, katılımcıların çoğunun arka arkaya seyretme alışkanlığına sahip oldukları görülmektedir. rahatlama, enformasyon, tamamlayıcı hizmet, pekiştirme ve toplumsal deneyimin paylaşımı gibi medyanın sağladığı nitelikler araştırma bulgularında da görülmektedir. Gündelik yaşamdan uzaklaşma, genel kültür aktarımı, kişisel gelişim gibi özellikler için medya kullanılmaktadır. Toplumla olan paylaşımın devamlılığı açısından popüler kültürün parçası olan diziler takip edilmektedir. Dizileri bölüm bölüm bekleyerek takip etme yerine biriktirmek ve belirlenen zaman diliminde arka arkaya izlemek popüler olmaktadır. Tıkınmalı izleme alışkanlığıyla birlikte konuya kolaylıkla odaklanma, kontrolün seyircide olması ve tek seferde dizileri bitirme özellikleri ön plana çıkmaktadır. Bu çalışmadan, öncelikle dizi seyirciliği bağlamında arka arkaya seyretme kavramının

açıklanması bakımından faydalanılmıştır. Daha sonra, metodolojik olarak Yengin'in (2017) uyguladığı anket soruları kullanılmıştır.

Son olarak; Yurdigül ve Zinderen (2012), yeni medyanın haber dili dilini nasıl dönüştürdüğünü araştırdıkları çalışmalarında, yeni medyayı habercilik bağlamında ele almışlardır. Geleneksel medya ve yeni medya araçları arasındaki farkların ortaya konulması amaçlanan çalışmada, örnek bir olay üzerinden, televizyon, gazete ve internet haberleri içerik analizi yöntemiyle analiz edilmiştir.

Buna göre, yeni medya ve geleneksel medya ayrımını yapabilmek adına, yeni medya ile ilgili kapsamlı bir literatür taraması yapıldığı görülmektedir. Yurdigül ve Zinderen'in (2012), yeni medyanın özellikleri ile ilgili açıklamalarından, yeni medyanın mevcut çalışma ilgili olan özellikleri bağlamında faydalanılmıştır. Bunlar, etkileşim, kitlesizleştirme ve eşzamansızlık kavramlarıdır. Etkileşim, medya araçları ile alıcının doğrudan ilişki halinde olmasını ifade eder. Bu anlamda, iletişim aracından istediği, ihtiyacı olan, tercih ettiği şeyi istediği anda alabilmekte ve rahatlıkla geribildirim yapabilmektedir. Kitlesizleştirme ise, yeni medyanın her bireye farklı mesajlarla ulaşabilmesini ifade eder. Geleneksel medya araçları belli bir kitleye hitap ederken, yeni medya kişilere tercihlerine göre seçenekler sunmaktadır. Eşzamansızlık, medya ile alıcı arasında tek yönlü iletişimin ortadan kaldırılmış olması anlamına gelmektedir.

Yurdigül ve Zinderen (2012), yeni medya ve geleneksel medyanın karşılaştırmasını yapar. Buna göre, geleneksel medya yatırım gerektirdiği için masraflıdır. Yeni medyada ise, masraflı yatırımlara ihtiyaç duyulmadığı görülmektedir. Diğer yandan, geleneksel medya, kurumsal bir yapılanmaya sahip olmak ve uzmanlaşmış kişilerle çalışmak durumundadır. Ayrıca geleneksel medya, belli bir kitleye ulaşırken, yeni medya geniş kesimlere erişebilmektedir. Bu açıklamalar doğrultusunda, yeni medyanın yayılım kolaylığı ve insanlar tarafından kolayca benimsenmesi mevcut çalışma bakımından anlam kazanmaktadır. Kaldı ki, yeni medya dizilerin yayınlanması açısından hem medya şirketleri hem de seyirciler tarafından tercih edilmektedir.

YÖNTEM

Problem Cümlesi

İletişim Fakültesi öğrencilerinin yabancı dizi seyretme alışkanlıkları: Sakarya Üniversitesi Örneği.

Alt Problemler

1. Öğrencilerin kullanım dizi seyretme alışkanlıklarını ölçen sorulara verdikleri cevaplarda cinsiyete göre anlamlı bir farklılık var mıdır?
2. Öğrencilerin kullanım dizi seyretme alışkanlıklarını ölçen sorulara verdikleri cevaplarda dizi seyredip seyretmediklerine göre anlamlı bir farklılık var mıdır?
3. Öğrencilerin kullanım dizi seyretme alışkanlıklarını ölçen sorulara verdikleri cevaplarda hangi tür dizi seyrettiklerine göre anlamlı bir farklılık var mıdır?
4. Öğrencilerin kullanım dizi seyretme alışkanlıklarını ölçen sorulara verdikleri cevaplarda dizi seyretme sıklığına göre anlamlı bir farklılık var mıdır?
5. Öğrencilerin kullanım dizi seyretme alışkanlıklarını ölçen sorulara verdikleri cevaplarda dizi seyretme yöntemine göre anlamlı bir farklılık var mıdır?
6. Öğrencilerin kullanım dizi seyretme alışkanlıklarını ölçen sorulara verdikleri cevaplarda dizi seyretme ortamına göre anlamlı bir farklılık var mıdır?
7. Öğrencilerin kullanım dizi seyretme alışkanlıklarını ölçen sorulara verdikleri cevaplarda haftada kaç farklı diziyi seyrettiklerine göre anlamlı bir farklılık var mıdır?
8. Öğrencilerin kullanım dizi seyretme alışkanlıklarını ölçen sorulara verdikleri cevaplarda dizileri bittikten sonra tekrar seyredip seyretmediklerine göre anlamlı bir farklılık var mıdır?
9. Öğrencilerin kullanım dizi seyretme alışkanlıklarını ölçen sorulara verdikleri cevaplarda bir diziyi seyretme etkenlerine göre anlamlı bir farklılık var mıdır?
10. Öğrencilerin kullanım dizi seyretme alışkanlıklarını ölçen sorulara verdikleri cevaplarda dizileri arka arkaya seyretme alışkanlığına göre anlamlı bir farklılık var mıdır?

Araştırma Modeli

Bu çalışmada yöntem olarak, öğrencilerin yabancı dizi seyretme alışkanlıklarını ölçmeye yönelik sorulardan oluşan anket tekniğinin kullanıldığı nicel yöntem seçilmiştir. Nicel araştırmalar, sayısal verilere dayanan görgül araştırmalardır. Pozitivist bilim anlayışına dayanır ve “nedir?” sorusuna cevap arar. Nicel araştırma yapan bir araştırmacı, olayların

dışında kalmalı, yalnızca fiziksel gerçekliği araştırmalı, elde ettiği bulguları sayısal, yani ölçülebilir verilerle analiz etmelidir. Nicel araştırma yapılırken izlenmesi gereken belirli aşamalar vardır. Bunlar; araştırma sorununun tanımlanması; literatür taraması; araştırma yönteminin belirlenmesi; evrendeki belli bir örneklemden verilerin toplanması; toplanan verilerin uygun istatistiksel tekniklerle çözümlenmesi ve elde edilen sonuçların raporlaştırılmasıdır. Veri toplama araçları anketler, performans testleri, ölçekler ve denetim listeleri olabilmektedir (Robson, 2015, s. 22-30).

Bu çalışmada, öncelikle kuramsal çatının oluşturulabilmesi için literatür taraması yapılmış ve mevcut literatür içerisinde araştırma ile ilgili olanlar elde edilerek araştırma içeriği desenlenmiştir. Başka bir ifadeyle, çalışmada sabit desen kullanılmıştır. Sabit araştırma desenleri, nicel veri toplama tekniklerini içeren, çalışmanın belirgin bir biçimde bir kurama bağlandığı, araştırma stratejisinin önceden belli olduğu ve araştırma süresince değiştirilemeyeceği araştırma yöntemidir. Sabit desenlerin en önemli özelliklerinden biri ise, araştırmacı ile çalışma arasında keskin bir biçimde duygusal ve fiziksel mesafe bulunmasıdır. Bu özellik, çalışmanın nesnelliği açısından önemlidir. Betimleyici, kestirimci, açımlayıcı olmak üzere üç tür desenleme yöntemi vardır (Robson, 2015, s. 97-101). Bu çalışmada betimleyici sabit desen kullanılmıştır.

Araştırmada uygulama olarak, Sakarya Üniversitesi İletişim Fakültesi öğrencilerinin yabancı dizi seyretme alışkanlıklarını ölçmeye yönelik olarak 100 öğrenciye anket uygulaması yapılmıştır.

Evren

Bu çalışmanın evreni, 17-25 yaş aralığındaki genç insanları temsil ettikleri varsayımından yola çıkarak ve İletişim alanında eğitim almalarının çalışmaya katkıları göz önünde bulundurularak Sakarya Üniversitesi İletişim Fakültesi 677 Lisans öğrencisi olarak belirlenmiştir.

Örneklem

Bu çalışmanın örneklemini Sakarya Üniversitesi İletişim Fakültesi öğrencilerinden “uygun örnekleme yöntemi” ile oluşturulacak olan 100 kişi olarak belirlenmiştir. “Uygun örnekleme yöntemi”, anketi cevaplayacak kişi olarak en araştırmacının en yakınındaki ve en uygun kişilerin seçildiği bir yöntemdir. İstenilen örneklem büyüklüğüne ulaşıncaya kadar, seçme işlemine devam edilir (Robson, 2015, s. 340).

Veri Toplama Aracı

Veri toplama aracı, Yengin'in (2017), "Yeni medyada boş zamanın dönüşümü: tıknmalı izleme" isimli çalışması için geliştirdiği anket formudur.

"Anket, 26 kapalı uçlu sorulardan oluşmaktadır. Bu soruların dördü demografik özellikleri, diğer 22'si ise dizi izleme alışkanlıklarının değişimi üzerine hazırlanmış sorulardan oluşmaktadır. Tıknmalı izleme alışkanlığı üzerine hazırlanmış sorularda sıralı ölçek kullanılmaktadır. Bu anketle birlikte yeni medyayla birlikte bireylerin dizi izleme alışkanlıklarının değişimini incelemek amacıyla hazırlanmıştır. Ankette yer alan demografik sorularla bireyin cinsiyeti, yaş aralığı, eğitim durumu ve meslek durumları ile ilgili sorularla veriler toplanmaktadır. Dizi izleme alışkanlıklarıyla ilgili sorularla bireyin kullanım bilgisi ölçülmektedir. Diğer sorular ise dizi izleme alışkanlıklarının dönüşümünü öğrenmeye yöneliktir. Bu bölümde hazırlanan sorularda beşli Likert ölçeği kullanılmaktadır" (Yengin 2017, s. 8-9).

Diğer yandan, anketin faktör analizi ve güvenirlik analizi yapılmıştır.

"Araştırma sorularından oluşan ölçeğin alt boyutlarını tespit etmek amacıyla faktör analizi yapılmıştır. Faktör yapısını belirlemek amacıyla, 441 kişinin ölçeğe verdiği tepkilerden elde edilen puanlara, temel bileşenler faktör analizi uygulanmıştır. Veri setinin faktör analizine uygunluğunun test edilmesi için, Kaiser – Meyer – Olkin (KMO) örneklem yeterliliği testi ve Bartlett küresellik testi uygulanmıştır. KMO değeri kabul edilebilir sınır olan 0.70'in üzerinde 0.78 olarak tespit edilmiş, Bartlett küresellik testi de 0,50'nin üzerinde olduğu ve 0,05 önem derecesinde anlamlı olduğundan veri seti faktör analizine uygun bulunmuştur. Bulunan KMO katsayısı verilerin analize uygun olduğunu göstermektedir. Varyansı açıklama oranının 0.50 ve üzerinde olması ölçütü esas alınmıştır. Temel bileşenler yöntemi ve Varimax döndürme yöntemi kullanılarak sorular analiz edilmiştir. Faktör altında tek kalan "Dizi bölümlerinin sürelerinin uzun olması beni rahatsız eder." ifade analizden çıkarılarak yapılan faktör analizinde özdeğerleri 1 ve üzerinde olan 3 faktör elde edilmiştir. Toplam açıklanan varyans %56.651 olarak bulunmuştur.

...

Araştırma değişkenlerine ait tanımlayıcı değerlere, değişkenlerin birbirleriyle ilişkilerine yönelik analizlere ve hipotez testlerine geçmeden önce; faktör analizi neticesinde gruplandırılma biçimleri kesinleşen sorular elde edilen sonuçlara göre birleştirilerek güvenirlik analizine tabi tutulmuştur. Faktörlerin içsel tutarlılıklarının

hesaplanmasında Cronbach Alpha değeri kullanılmıştır. Güvenilirlik katsayısının 0,75 olduğu görülmektedir. Bu değer literatürde öngörülen 0,70 alt limit kriterini sağlamaktadırlar” (Yengin 2017, s. 9).

Kullanılan ankette, çalışmanın evreni belli bir yaş aralığı ve öğrenciler ile sınırlandırıldığından yaş aralığı, eğitim durumu ve meslek durumunu ölçen üç demografik soru çıkarılmıştır.

Veri Analizi

Anket sonuçları niceliksel veri analizi ile değerlendirilmiştir. Bunun nedenle, çalışmada nesnelliği ve kesinliği sağlamak adına, nicel değerler SPSS 20 sürümü ile çözümlenmiştir. Analizde, yüzdelikler hesaplandıktan sonra, t-testi ve Anova analizleri uygulanarak dizi izleme alışkanlıklarını ölçen sorular ile diğer sorular arasında anlamlı bir farklılık olup olmadığı ölçülmüştür.

Varsayımlar

Varsayım 1:

Diziler, gündelik yaşamdan uzaklaşma, eğlence, genel kültür aktarımı, kişisel gelişim gibi özellikler için seyredilmektedir.

Varsayım 2:

Yabancı diziler yabancı dilin geliştirilmesi isteği nedeniyle seyredilmektedir.

Varsayım 3:

Popüler kültürün parçası olan yabancı diziler takip edilmektedir.

Varsayım 4:

Yeni medyanın teknolojilerinin yaygınlaşmasıyla birlikte dizi seyretme alışkanlıkları dönüşmekte ve toplumda arka arkaya seyretme alışkanlığı gelişmektedir.

Varsayım 5:

Arka arkaya seyretme alışkanlığının motivasyonları, konuya kolaylıkla odaklanma, kontrolün seyircide olması ve tek seferde dizileri bitirme özellikleridir.

Varsayım 6:

Üniversite öğrencileri 18-25 yaş arasındaki genç insanları temsil etmektedir.

Varsayım 7:

Öğrenciler, anket sorularına içtenlikle cevap vermiştir.

Sınırlılıklar

Bu çalışma, Sakarya Üniversitesi İletişim Fakültesi öğrencileri ile sınırlandırılmıştır. Öncelikle, Türkiye’deki tüm genç insanlara ulaşmanın imkansızlığı nedeniyle üniversite

öğrencilerinin 17-25 yaş arası genç insanları temsil ettiği varsayımından yola çıkılmış ve çalışmanın evreni Sakarya Üniversitesi İletişim Fakültesi öğrencileri ile sınırlandırılmıştır. Anket, 2016-2017 Eğitim ve Öğretim Yılı Bahar Yarıyılında Lisans öğrencilerine uygulanmıştır. Diğer yandan, çalışmanın örnekleme de anket uygulaması için uygun örnekleme yöntemiyle seçilen olan 100 kişi ile sınırlıdır.

Tanımlar

Televizyon: Görüntü ve sesin bir arada kullanıldığı bir seyir nesnesi olarak televizyon, iletişim bilimi bağlamında bir kitle iletişim aracıdır.

Dizi: Televizyonlarda yayınlanmak üzere yapılan, anlamlı bölümler halinde kurgulanarak bir hikayenin anlatıldığı bir medya yapım türüdür.

Kullanımlar ve Doyumlar: İnsanların medyayı bazı ihtiyaçlarını gidermek için kendi istekleri doğrultusunda kullandıklarını savunan aktif izleyici yaklaşımıdır.

Yeni Medya: Web 2.0 teknolojileriyle birlikte ortaya çıkan, etkileşimsiz, eşzamansız ve kitlesiz medya alanıdır.

Arka Arkaya Seyretme: Dizi bölümlerini yayınlandıkları tarih ve saati beklemeden bir oturuşta seyretme biçimidir.

BULGULAR

Ankete verilen cevapların yüzdelikleri hesaplanmıştır. Bu hesaplamalar aşağıdaki gibidir.

Tablo 1-Katılımcı Cinsiyeti

	Frequency	Percent	Valid Percent	Cumulative Percent
kadın	56	56,0	56,0	56,0
Valid erkek	44	44,0	44,0	100,0
Total	100	100,0	100,0	

Cinsiyet ile ilgili olan Tablo 1'e bakıldığında ankete cevap veren katılımcıların %56'sı (56 kişi) kadın ve %44'ü ise (44 kişi) erkektir.

Tablo 2-Dizi seyreders misiniz?

	Frequency	Percent	Valid Percent	Cumulative Percent
evet, seyredirim	99	99,0	99,0	99,0
Valid hayır, seyretmem	1	1,0	1,0	100,0
Total	100	100,0	100,0	

Dizi seyrederek misiniz sorusu ile ilgili olan Tablo 2'ye bakıldığında ankete cevap veren katılımcıların %99'u (99 kişi) evet, seyredirim ve %1'i ise (1 kişi) hayır, seyretmem cevabını vermiştir.

Tablo 3- Ne tür dizi yapımlarını seyredersiniz?

	Frequency	Percent	Valid Percent	Cumulative Percent
yerli	37	37,0	37,0	37,0
Valid yabancı	63	63,0	63,0	100,0
Total	100	100,0	100,0	

Ne tür dizi yapımlarını seyredersiniz sorusu ile ilgili olan Tablo 3'e bakıldığında ankete cevap veren katılımcıların %37'si (37 kişi) yerli ve %63'ü ise (63 kişi) yabancı dizi seyretmektedir.

Tablo 4- Haftada kaç gün dizi seyrediyorsunuz?

	Frequency	Percent	Valid Percent	Cumulative Percent
1-2	62	62,0	62,0	62,0
3-4	28	28,0	28,0	90,0
5-6	3	3,0	3,0	93,0
hergün	7	7,0	7,0	100,0
Total	100	100,0	100,0	

Dizi seyretme sıklığı ile ilgili olan Tablo 4'e bakıldığında ankete cevap veren katılımcıların %62'si (62 kişi) haftada 1-2 gün, %28'i (28 kişi) haftada 3-4 gün, %3'ü (3 kişi) haftada 5-6 gün yerli ve %7'si (7 kişi) hergün dizi seyretmektedir.

Tablo 5- Dizi seyretme yönteminiz nedir?

	Frequency	Percent	Valid Percent	Cumulative Percent
televizyondaki yayın gününü beklerim	14	14,0	14,0	14,0
televizyon tekrarını seyredirim	4	4,0	4,0	18,0
dizi seyretme platformlarından seyredirim (Apple Tv, Amazon Fitetv, tivibu,...)	11	11,0	11,0	29,0
Valid çevrimiçi web dizi seyretme portallarından seyredirim	54	54,0	54,0	83,0
internette dizileri indirerek seyredirim	17	17,0	17,0	100,0
Total	100	100,0	100,0	

Dizi seyretme yöntemini ile ilgili olan Tablo 5'e bakıldığında ankete cevap veren katılımcıların %14'ü (14 kişi) televizyondaki yayın gününü beklediklerini, % 4'ü (4 kişi) televizyon tekrarını seyrettiklerini, %11'i (11 kişi) dizileri dizi seyretme platformlarından, %54'ü (54 kişi) çevrimiçi web portallarından, %17'si (17 kişi) ise internetten dizileri indirerek seyrettiklerini belirtmişlerdir.

Tablo 6-Dizi seyretme ortamı olarak hangisini çoğunlukla tercih edersiniz?

	Frequency	Percent	Valid Percent	Cumulative Percent
televizyon	15	15,0	15,0	15,0
pc	9	9,0	9,0	24,0
laptop	49	49,0	49,0	73,0
tablet	17	17,0	17,0	90,0
mobil/smart telefonlar	10	10,0	10,0	100,0
Total	100	100,0	100,0	

Dizi seyretme ortamı ile ilgili olan Tablo 6'ya bakıldığında ankete cevap veren katılımcıların %15'i (15 kişi) televizyon, % 9'u (9 kişi) pc, %49'u (49 kişi) laptop, %17'si (17 kişi) tablet, %10'u (10 kişi) ise mobil/smart telefonları tercih etmektedirler.

Tablo 7- Haftada kaç farklı diziyi takip ediyorsunuz?

	Frequency	Percent	Valid Percent	Cumulative Percent
1-2	68	68,0	68,0	68,0
3-4	27	27,0	27,0	95,0
5-6	5	5,0	5,0	100,0
Total	100	100,0	100,0	

Dizi seyretme sıklığı ile ilgili olan Tablo 7'ye bakıldığında ankete cevap veren katılımcıların %68'i (68 kişi) haftada 1-2 gün, %27'si (27 kişi) haftada 3-4 gün, %5'i (5 kişi) ise haftada 5-6 gün dizi seyretmektedirler.

Tablo 8- Dizileri bittikten sonra tekrar yayınlanınca da seyreder misiniz?

	Frequency	Percent	Valid Percent	Cumulative Percent
evet	33	33,0	33,0	33,0
hayır	67	67,0	67,0	100,0
Total	100	100,0	100,0	

Dizilerin tekrarını seyretme alışkanlığı ile ilgili olan Tablo 8'e bakıldığında ankete cevap veren katılımcıların %33'ünün (33 kişi) evet, %67'sinin (67 kişi) hayır cevabı verdikleri görülmektedir.

9- Bir diziyi seyretmenizdeki en önemli etken nedir?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid konu	72	72,0	72,0	72,0
oyuncular	20	20,0	20,0	92,0
ülke, arkadaş tavsiyesi, popüler olması, ödüller, haberler, diğer	8	8,0	8,0	100,0
Total	100	100,0	100,0	

Dizi seyretmeyi hangi etkenlerin belirlediği ile ilgili Tablo 9'e bakıldığında ankete cevap veren katılımcıların %72'si (72 kişi) konuya göre, %20'si (20 kişi) oyunculara göre, %8'i (8 kişi) ülke, arkadaş tavsiyesi, popüler olması, ödüller, haberler ve diğer etkenlerle dizi seyretdiklerini ifade etmişlerdir.

Tablo 10- Dizi bölümlerini arka arkaya seyretme alışkanlığınız var mıdır?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid evet	68	68,0	68,0	68,0
hayır	32	32,0	32,0	100,0
Total	100	100,0	100,0	

Dizileri arka arkaya seyretme alışkanlığı ile ilgili olan Tablo 10'a bakıldığında ankete cevap veren katılımcıların %68'inin (68 kişi) evet, %32'sinin (32 kişi) hayır cevabı verdikleri görülmektedir.

Tablo 11. Dizi seyretdikçe oyuncuların zaman içindeki karakter gelişimini görürüm.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Kesinlikle Katılıyorum	27	27,0	27,0	27,0
Katılıyorum	38	38,0	38,0	65,0
Kararsızım	21	21,0	21,0	86,0
Katılmıyorum	9	9,0	9,0	95,0
Kesinlikle Katılmıyorum	5	5,0	5,0	100,0
Total	100	100,0	100,0	

Dizileri seyrettikçe oyuncuların karakter gelişimini görürüm sorusu ile ilgili olan Tablo 11'e bakıldığında ankete cevap verenlerin %27'si (27 kişi) kesinlikle katılıyorum, %38'i (38 kişi) katılıyorum, %21'i (21 kişi) kararsızım, %9'i (9 kişi) katılmıyorum ve %5'i (5 kişi) ise kesinlikle katılmıyorum cevabını vermişlerdir. Sonuç olarak, katılımcıların %65'i (65 kişi) dizi seyrettikçe karakter gelişimini takip etmektedirler.

Tablo 12. Diziler sayesinde genel kültür bilgim artar.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılıyorum	16	16,0	16,0	16,0
Katılıyorum	25	25,0	25,0	41,0
Kararsızım	31	31,0	31,0	72,0
Katılmıyorum	20	20,0	20,0	92,0
Kesinlikle Katılmıyorum	8	8,0	8,0	100,0
Total	100	100,0	100,0	

Diziler sayesinde genel kültür bilgim artar sorusu ile ilgili olan Tablo 12'ye bakıldığında ankete cevap verenlerin %16'sı (16 kişi) kesinlikle katılıyorum, %25'i (25 kişi) katılıyorum, %31'i (31 kişi) kararsızım, %20'si (20 kişi) katılmıyorum ve %8'i (8 kişi) ise kesinlikle katılmıyorum cevabını vermişlerdir. Sonuç olarak, katılımcıların % 59'u (59 kişi) dizilerin genel kültür bilgilerini arttıracaklarını düşünmemektedirler.

Tablo 13. Yabancı diziler, yabancı dilimin gelişimini destekler.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılıyorum	31	31,0	31,0	31,0
Katılıyorum	30	30,0	30,0	61,0
Kararsızım	15	15,0	15,0	76,0
Katılmıyorum	12	12,0	12,0	88,0
Kesinlikle Katılmıyorum	12	12,0	12,0	100,0
Total	100	100,0	100,0	

Yabancı diziler yabancı dilimi destekler sorusu ile ilgili olan Tablo 13'e bakıldığında ankete cevap verenlerin %31'i (31 kişi) kesinlikle katılıyorum, %30'u (30 kişi) katılıyorum, %15'i (15 kişi) kararsızım, %12'si (12 kişi) katılmıyorum ve %12'i (12 kişi) ise kesinlikle katılmıyorum cevabını vermişlerdir. Sonuç olarak, katılımcıların %61'i (61 kişi) yabancı dizilerin yabancı dillerini destekleyeceğini düşünmektedirler.

Tablo 14. Dizileri bölüm bölüm takip ederim.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılıyorum	25	25,0	25,0	25,0
Katılıyorum	39	39,0	39,0	64,0
Kararsızım	14	14,0	14,0	78,0
Katılmıyorum	15	15,0	15,0	93,0
Kesinlikle Katılmıyorum	7	7,0	7,0	100,0
Total	100	100,0	100,0	

Dizileri bölüm bölüm takip ederim sorusu ile ilgili olan Tablo 14'e bakıldığında ankete cevap verenlerin %25'i (25 kişi) kesinlikle katılıyorum, %39'u (39 kişi) katılıyorum, %14'ü (14 kişi) kararsızım, %15'i (15) kişi katılmıyorum ve %7'si (7 kişi) ise kesinlikle katılmıyorum cevabını vermişlerdir. Sonuç olarak, katılımcıların %64'ü (64 kişi) dizileri bölüm bölüm takip etmektedirler.

Tablo 15. Başladığım diziyi sezon finaline kadar seyrederim.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılıyorum	28	28,0	28,0	28,0
Katılıyorum	30	30,0	30,0	58,0
Kararsızım	15	15,0	15,0	73,0
Katılmıyorum	18	18,0	18,0	91,0
Kesinlikle Katılmıyorum	9	9,0	9,0	100,0
Total	100	100,0	100,0	

Başladığım diziyi sezon finaline kadar izlerim sorusu ile ilgili olan Tablo 15'e bakıldığında ankete cevap verenlerin %28'i (28 kişi) kesinlikle katılıyorum, %30'u (30 kişi) katılıyorum, %15'i (15 kişi) kararsızım, %18'i (18 kişi) katılmıyorum ve %9'si (9 kişi) ise kesinlikle katılmıyorum cevabını vermişlerdir. Sonuç olarak, katılımcıların %58'i (58 kişi) başladıkları diziyi sezon finaline kadar takip etmektedirler.

Tablo 16. Dizi bölümlerinin sürelerinin uzun olması beni rahatsız eder.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılıyorum	30	30,0	30,0	30,0
Katılıyorum	17	17,0	17,0	47,0
Kararsızım	16	16,0	16,0	63,0
Katılmıyorum	24	24,0	24,0	87,0
Kesinlikle Katılmıyorum	13	13,0	13,0	100,0
Total	100	100,0	100,0	

Dizi bölümlerinin sürelerinin uzun olması beni rahatsız eder sorusu ile ilgili olan Tablo 16'ya bakıldığında ankete cevap verenlerin %30'u (30 kişi) kesinlikle katılıyorum, %17'si (17 kişi) katılıyorum, %16'ü (16 kişi) kararsızım, %24'ü (24 kişi) katılmıyorum ve %13'ü (13 kişi) ise kesinlikle katılmıyorum cevabını vermişlerdir. Sonuç olarak, katılımcıların %53'ü (53 kişi) dizi bölümlerinin uzun olmasından rahatsızlık duymamaktadır.

Tablo 17. Dizileri sezon bittiği zaman arka arkaya seyrederim.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılıyorum	17	17,0	17,0	17,0
Katılıyorum	34	34,0	34,0	51,0
Kararsızım	21	21,0	21,0	72,0
Katılmıyorum	13	13,0	13,0	85,0
Kesinlikle Katılmıyorum	15	15,0	15,0	100,0
Total	100	100,0	100,0	

Dizileri sezon bittiği zaman arka arkaya seyrederim sorusu ile ilgili olan Tablo 17'ye bakıldığında ankete cevap verenlerin %17'si (17 kişi) kesinlikle katılıyorum, %34'ü (34 kişi) katılıyorum, %21'i (21 kişi) kararsızım, %13'ü (13 kişi) katılmıyorum ve %15'i (15 kişi) ise kesinlikle katılmıyorum cevabını vermişlerdir. Sonuç olarak, katılımcıların % 51'i (51 kişi) dizileri sezon bittiği zaman arka arkaya seyretmektedirler.

Tablo 18. Dizileri arka arkaya seyrettiğimde konuya kolaylıkla odaklanabilirim.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılıyorum	28	28,0	28,0	28,0
Katılıyorum	44	44,0	44,0	72,0
Kararsızım	9	9,0	9,0	81,0
Katılmıyorum	12	12,0	12,0	93,0
Kesinlikle Katılmıyorum	7	7,0	7,0	100,0
Total	100	100,0	100,0	

Dizileri arka arkaya seyrettiğimde konuya kolaylıkla odaklanabilirim sorusu ile ilgili olan Tablo 18'e bakıldığında ankete cevap verenlerin %28'i (28 kişi) kesinlikle katılıyorum, %44'ü (44 kişi) katılıyorum, %9'u (9 kişi) kararsızım, %12'si (12 kişi) katılmıyorum ve %7'si (7 kişi) ise kesinlikle katılmıyorum cevabını vermişlerdir. Sonuç olarak, katılımcıların %72'si (72 kişi) dizileri arka arkaya seyrettiklerinde konuya kolaylıkla odaklanabilmektedirler.

Tablo 19. Arka arkaya seyretme ile kontrolün bende olması beni mutlu eder.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılıyorum	37	37,0	37,0	37,0
Katılıyorum	33	33,0	33,0	70,0
Kararsızım	12	12,0	12,0	82,0
Katılmıyorum	9	9,0	9,0	91,0
Kesinlikle Katılmıyorum	9	9,0	9,0	100,0
Total	100	100,0	100,0	

Arka arkaya seyretme ile kontrolün bende olması beni mutlu eder sorusu ile ilgili olan Tablo 19'a bakıldığında ankete cevap verenlerin %37'si (37 kişi) kesinlikle katılıyorum, %33'ü (33 kişi) katılıyorum, %12'si (12 kişi) kararsızım, %9'u (9 kişi) katılmıyorum ve %9'u (9 kişi) ise kesinlikle katılmıyorum cevabını vermişlerdir. Sonuç olarak, katılımcıların %70'i (70 kişi) arka arkaya seyretme yönteminde kontrolün kendilerinde olmasından mutluluk duymaktadırlar.

Tablo 20. Arka arkaya seyretme sayesinde dizilerin konularını daha rahat algıladım.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılıyorum	33	33,0	33,0	33,0
Katılıyorum	35	35,0	35,0	68,0
Kararsızım	17	17,0	17,0	85,0
Katılmıyorum	5	5,0	5,0	90,0
Kesinlikle Katılmıyorum	10	10,0	10,0	100,0
Total	100	100,0	100,0	

Arka arkaya seyretme sayesinde dizilerin konularını daha rahat algıladım sorusu ile ilgili olan Tablo 20'ye bakıldığında ankete cevap verenlerin %33'ü (33 kişi) kesinlikle katılıyorum, %35'i (35 kişi) katılıyorum, %17'si (17 kişi) kararsızım, %5'i (5 kişi) katılmıyorum ve %10'u (10 kişi) ise kesinlikle katılmıyorum cevabını vermişlerdir. Sonuç olarak, katılımcıların %68'i (68 kişi) arka arkaya seyretme yönteminde dizilerin konularını daha rahat algılamaktadırlar.

Tablo 21. Dizilerin yeni bölümünü haftada bir beklemek yerine, tek seferde biriktirip seyretmeyi tercih ederim.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılıyorum	17	17,0	17,0	17,0
Katılıyorum	25	25,0	25,0	42,0
Kararsızım	26	26,0	26,0	68,0
Katılmıyorum	20	20,0	20,0	88,0
Kesinlikle Katılmıyorum	12	12,0	12,0	100,0
Total	100	100,0	100,0	

Dizileri biriktirerek seyretme sorusu ile ilgili olan Tablo 21'ee bakıldığında ankete cevap verenlerin %17'si (17 kişi) kesinlikle katılıyorum, %25'i (25 kişi) katılıyorum, %26'sı (26 kişi) kararsızım, %20'si (20 kişi) katılmıyorum ve %12'si (12 kişi) ise kesinlikle katılmıyorum cevabını vermişlerdir. Sonuç olarak, katılımcıların %58'i (58 kişi) dizileri biriktirerek tek seferde seyretmeyi tercih etmemektedirler.

Tablo 22. Arka arkaya seyretme yöntemi bazen yorucu olabilmektedir.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılıyorum	24	24,0	24,0	24,0
Katılıyorum	40	40,0	40,0	64,0
Kararsızım	13	13,0	13,0	77,0
Katılmıyorum	12	12,0	12,0	89,0
Kesinlikle Katılmıyorum	11	11,0	11,0	100,0
Total	100	100,0	100,0	

Arka arkaya seyretme yöntemi bazen yorucu olabilmektedir sorusu ile ilgili olan Tablo 22'ye bakıldığında ankete cevap verenlerin %24'ü (24 kişi) kesinlikle katılıyorum, %40'ı (40 kişi) katılıyorum, %13'ü (13 kişi) kararsızım, %12'si (12 kişi) katılmıyorum ve %11'i (11 kişi) ise kesinlikle katılmıyorum cevabını vermişlerdir. Sonuç olarak, katılımcıların %64'ü (64 kişi) arka arkaya seyretme yöntemini yorucu bulmaktadırlar.

Yüzdelik hesaplamalarından sonra, ankete verilen cevaplarda alt problemlere göre anlamlı bir farklılıkların olup olmadığını ortaya çıkarmak için t-testi ya da Anova ile karşılaştırılmıştır.

Tablo 23. Independent Samples Test-Cinsiyet

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
13. Yabancı diziler, yabancı dilimin gelişimini destekler.	Equal variances assumed	,149	,700	-2,056	98	,042	-,554	,269	-1,088	-,019
	Equal variances not assumed			-2,052	91,766	,043	-,554	,270	-1,089	-,018

Tablo 23'e bakıldığında hesaplanan $\alpha:0,042$ normal $\alpha:0,05$ ten küçük olduğu yabancı diziler yabancı dilimi destekler sorusuna cevap veren katılımcılar arasında cinsiyete göre

anamlı bir farklılık bulunmuştur. Diğer anket sorularında ise hesaplanan α değeri normal $\alpha:0,05$ değerinden büyük olduğu için cinsiyete göre anlamlı bir farklılık bulunmamıştır.

Diğer yandan, öğrencilerin dizi seyretme alışkanlıklarını ölçen sorulara verdikleri cevaplarda dizi seyredip seyretmediklerine göre, yalnızca 1 kişi dizi seyretmediğini ifade ettiğinden ölçüm yapılamamıştır.

Tablo 24- Independent Samples Test- Ne tür dizi yapımlarını seyredersiniz?

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
13. Yabancı diziler, yabancı dilimin gelişimini destekler.	Equal variances assumed	2,340	,129	3,315	98	,001	,889	,268	,357	1,421
	Equal variances not assumed			3,210	68,281	,002	,889	,277	,336	1,441
15. Başladığım diziyi sezon finaline kadar seyrederim.	Equal variances assumed	,068	,794	2,336	98	,022	,622	,266	,094	1,150
	Equal variances not assumed			2,319	73,906	,023	,622	,268	,088	1,156
17. Dizileri sezon bittiği zaman arka arkaya seyrederim.	Equal variances assumed	5,342	,023	2,832	98	,006	,740	,261	,221	1,259
	Equal variances not assumed			2,690	64,238	,009	,740	,275	,190	1,290

18. Dizileri arka arkaya seyrettiğimde konuya kolaylıkla odaklanabilirim.	Equal variances assumed	7,721	,007	2,374	98	,020	,574	,242	,094	1,054
19. Arka arkaya seyretme ile kontrolün bende olması beni mutlu eder.	Equal variances not assumed			2,248	63,607	,028	,574	,255	,064	1,084
	Equal variances assumed	8,939	,004	2,959	98	,004	,755	,255	,249	1,261
	Equal variances not assumed			2,762	60,799	,008	,755	,273	,208	1,302

Tablo 24'e bakıldığında hesaplanan $\alpha:0,001$ normal $\alpha:0,05$ ten küçük olduğu için yabancı diziler yabancı dilimi destekler sorusuna cevap veren katılımcılar arasında dizi türlerine göre anlamlı bir farklılık bulunmuştur. Hesaplanan $\alpha:0,022$ normal $\alpha:0,05$ ten küçük olduğu için başladığım diziyi sezon finaline kadar seyrederim sorusuna cevap veren katılımcılar arasında dizi türlerine göre anlamlı bir farklılık bulunmuştur. Hesaplanan $\alpha:0,006$ normal $\alpha:0,05$ ten küçük olduğu için Dizileri sezon bittiği zaman arka arkaya seyrederim sorusuna cevap veren katılımcılar arasında dizi türlerine göre anlamlı bir farklılık bulunmuştur. Hesaplanan $\alpha:0,020$ normal $\alpha:0,05$ ten küçük olduğu için dizileri arka arkaya seyrettiğimde konuya kolaylıkla odaklanabilirim sorusuna cevap veren katılımcılar arasında dizi türlerine göre anlamlı bir farklılık bulunmuştur. Hesaplanan $\alpha:0,004$ normal $\alpha:0,05$ ten küçük olduğu için arka arkaya seyretme ile kontrolün bende olması beni mutlu eder sorusuna cevap veren katılımcılar arasında dizi türlerine göre anlamlı bir farklılık bulunmuştur. Diğer anket sorularında ise hesaplanan α değeri normal $\alpha:0,05$ değerinden büyük olduğu için cinsiyete göre anlamlı bir farklılık bulunmamıştır.

Tablo 25-ANOVA- Haftada kaç gün dizi seyredersiniz?

		Sum of Squares	df	Mean Square	F	Sig.
11. Dizi seyrettikçe oyuncuların zaman içindeki karakter gelişimini görürüm	Between Groups	13,501	3	4,500	3,992	,010
	Within Groups	108,209	96	1,127		
	Total	121,710	99			
13. Yabancı diziler, yabancı dilimin gelişimini destekler.	Between Groups	15,580	3	5,193	2,984	,035
	Within Groups	167,060	96	1,740		
	Total	182,640	99			
14. Dizileri bölüm bölüm takip ederim	Between Groups	15,108	3	5,036	3,694	,014
	Within Groups	130,892	96	1,363		
	Total	146,000	99			
15. Başladığım diziyi sezon finaline kadar seyrederim.	Between Groups	14,340	3	4,780	2,929	,038
	Within Groups	156,660	96	1,632		
	Total	171,000	99			
16. Dizi bölümlerinin sürelerinin uzun olması beni rahatsız eder.	Between Groups	19,215	3	6,405	3,297	,024
	Within Groups	186,495	96	1,943		
	Total	205,710	99			

Tablo 25'e bakıldığında hesaplanan $\alpha:0,01$ normal $\alpha:0,05$ değerinden küçük olduğu için dizi seyrettikçe oyuncuların zaman içindeki karakter gelişimini görürüm sorusuna cevap veren katılımcılar arasında dizi seyretme sıklığına göre anlamlı bir farklılık vardır. Anlamlı farklılık daha çok 1-2 ve 3-4 grupları arasında bulunmuştur. Hesaplanan $\alpha: 0,035$ normal $\alpha: 0,05$ değerinden küçük olduğu için yabancı diziler yabancı dilimin gelişimini destekler sorusuna cevap veren katılımcılar arasında dizi seyretme sıklığına göre anlamlı bir farklılık vardır. Anlamlı farklılık daha çok 1-2 ve 3-4 grupları arasında bulunmuştur. Hesaplanan $\alpha:0,014$ normal $\alpha:0,05$ değerinden küçük olduğu için dizileri bölüm bölüm takip ederim sorusuna cevap veren katılımcılar arasında dizi seyretme sıklığına göre anlamlı bir farklılık vardır. Anlamlı farklılık daha çok 1-2 ve 3-4 ile 1-2 ve her gün grupları arasında bulunmuştur. Hesaplanan $\alpha:0,038$ normal $\alpha:0,05$ değerinden küçük olduğu için başladığım diziyi sezon finaline kadar seyrederim sorusuna cevap veren katılımcılar arasında dizi seyretme sıklığına göre anlamlı bir farklılık vardır. Anlamlı farklılık daha çok 1-2 ve 3-4 grupları ile 1-2 ve her gün grupları arasında bulunmuştur. Hesaplanan $\alpha:0,024$ normal $\alpha:0,05$ değerinden küçük olduğu için dizi bölümlerinin sürelerinin uzun olması beni rahatsız eder sorusuna cevap veren katılımcılar arasında dizi seyretme sıklığına göre anlamlı bir farklılık vardır. Anlamlı farklılık daha çok 1-2 ve 5-6 ile 3-4 ve 5-6 grupları arasında bulunmuştur. Diğer anket sorularında ise

hesaplanan α değeri normal $\alpha:0,05$ değerinden büyük olduğu için dizi seyretme sıklığına göre anlamlı bir farklılık bulunmamıştır.

Tablo 26-ANOVA- Dizi seyretme yönteminiz nedir?

		Sum of Squares	df	Mean Square	F	Sig.
12. Diziler sayesinde genel kültür bilgim artar.	Between Groups	14,146	4	3,537	2,744	,033
	Within Groups	122,444	95	1,289		
	Total	136,590	99			
15. Başladığım diziyi sezon finaline kadar seyrederim.	Between Groups	18,561	4	4,640	2,892	,026
	Within Groups	152,439	95	1,605		
	Total	171,000	99			
17. Dizileri sezon bittiği zaman arka arkaya seyrederim.	Between Groups	26,214	4	6,554	4,368	,003
	Within Groups	142,536	95	1,500		
	Total	168,750	99			
18. Dizileri arka arkaya seyrettiğimde konuya kolaylıkla odaklanabilirim.	Between Groups	21,645	4	5,411	4,298	,003
	Within Groups	119,595	95	1,259		
	Total	141,240	99			
19. Arka arkaya seyretme ile kontrolün bende olması beni mutlu eder.	Between Groups	20,262	4	5,066	3,395	,012
	Within Groups	141,738	95	1,492		
	Total	162,000	99			
20. Arka arkaya seyretme sayesinde dizilerin konularını daha rahat algılarım.	Between Groups	28,894	4	7,224	5,475	,001
	Within Groups	125,346	95	1,319		
	Total	154,240	99			
21. Dizilerin yeni bölümünü haftada bir beklemek yerine, tek seferde biriktirip seyretmeyi tercih ederim.	Between Groups	21,330	4	5,333	3,686	,008
	Within Groups	137,420	95	1,447		
	Total	158,750	99			
	Total	162,840	99			

Tablo 26'ya bakıldığında hesaplanan $\alpha:0,033$ normal $\alpha:0,05$ değerinden küçük olduğu için diziler sayesinde genel kültür bilgim artar sorusuna cevap veren katılımcılar arasında dizi seyretme yöntemine göre anlamlı bir farklılık vardır. Anlamlı farklılık daha çok yayın gününü bekleme ve dizi seyretme platformlarından seyretme grupları arasında bulunmuştur. Hesaplanan $\alpha:0,026$ normal $\alpha:0,05$ değerinden küçük olduğu için başladığım diziyi sezon finaline kadar seyrederim sorusuna cevap veren katılımcılar arasında dizi seyretme yöntemine göre anlamlı bir farklılık vardır. Anlamlı farklılık daha çok yayın gününü bekleme ve çevrimiçi web dizi seyretme portallarından seyretme grupları arasında bulunmuştur. Hesaplanan $\alpha:0,003$ normal $\alpha:0,05$ değerinden küçük olduğu için dizileri sezon bittiği zaman arka arkaya seyrederim sorusuna cevap veren katılımcılar arasında dizi seyretme yöntemine

göre anlamlı bir farklılık vardır. Anlamlı farklılık daha çok yayın gününü bekleme ve çevrimiçi web dizi seyretme portallarından seyretme grupları arasında bulunmuştur. Hesaplanan $\alpha:0,003$ normal $\alpha:0,05$ değerinden küçük olduğu için dizileri arka arkaya seyrettiğinde konuya kolaylıkla odaklanabilirim sorusuna cevap veren katılımcılar arasında dizi seyretme yöntemine göre anlamlı bir farklılık vardır. Anlamlı farklılık daha çok yayın gününü bekleme ve çevrimiçi web dizi seyretme portallarından seyretme grupları ile dizi seyretme platformlarından seyretme grupları ve çevrimiçi web dizi seyretme portallarından seyretme grupları arasında bulunmuştur. Hesaplanan $\alpha:0,012$ normal $\alpha:0,05$ değerinden küçük olduğu için arka arkaya seyretme ile kontrolün bende olması beni mutlu eder sorusuna cevap veren katılımcılar arasında dizi seyretme yöntemine göre anlamlı bir farklılık vardır. Anlamlı farklılık daha çok yayın gününü bekleme ve çevrimiçi web dizi seyretme portallarından seyretme grupları arasında bulunmuştur. Hesaplanan $\alpha:0,001$ normal $\alpha:0,05$ değerinden küçük olduğu için arka arkaya seyretme sayesinde dizilerin konularını daha rahat algılayım sorusuna cevap veren katılımcılar arasında dizi seyretme yöntemine göre anlamlı bir farklılık vardır. Anlamlı farklılık daha çok yayın gününü bekleme ve çevrimiçi web dizi seyretme portallarından seyretme grupları ile yayın gününü bekleme ve internetten indirerek seyretme grupları arasında bulunmuştur. Hesaplanan $\alpha:0,008$ normal $\alpha:0,05$ değerinden küçük olduğu için dizilerin yeni bölümünü haftada bir beklemek yerine, tek seferde biriktirip seyretmeyi tercih ederim sorusuna cevap veren katılımcılar arasında dizi seyretme yöntemine göre anlamlı bir farklılık vardır. Anlamlı farklılık daha çok yayın gününü bekleme ve çevrimiçi web dizi seyretme portallarından seyretme grupları, yayın gününü bekleme ve internetten indirerek seyretme grupları ile çevrimiçi web dizi seyretme portallarından seyretme ve dizi seyretme platformlarından seyretme grupları arasında bulunmuştur. Diğer anket sorularında ise hesaplanan α değeri normal $\alpha:0,05$ değerinden büyük olduğu için dizi seyretme yöntemine göre anlamlı bir farklılık bulunmamıştır.

Tablo 27-ANOVA- Dizi seyretme ortamı olarak hangisini tercih edersiniz?

		Sum of Squares	df	Mean Square	F	Sig.
12. Diziler sayesinde genel kültür bilgim artar.	Between Groups	16,051	4	4,013	3,163	,017
	Within Groups	120,539	95	1,269		
	Total	136,590	99			
19. Arka arkaya seyretme ile kontrolün bende olması beni mutlu eder.	Between Groups	31,585	4	7,896	5,752	,000
	Within Groups	130,415	95	1,373		
	Total	162,000	99			
20. Arka arkaya seyretme sayesinde dizilerin konularını daha rahat algılayım.	Between Groups	25,174	4	6,293	4,632	,002
	Within Groups	129,066	95	1,359		
	Total	154,240	99			
	Total	162,840	99			

Tablo 27'ye bakıldığında hesaplanan $\alpha:0,017$ normal $\alpha:0,05$ değerinden küçük olduğu için diziler sayesinde genel kültür bilgim artar sorusuna cevap veren katılımcılar arasında dizi seyretme ortamına göre anlamlı bir farklılık vardır. Anlamlı farklılık daha çok tablet ve pc, mobil/smart telefon ve pc ile tablet ve pc grupları arasında bulunmuştur. Hesaplanan $\alpha:0,000$ normal $\alpha:0,05$ değerinden küçük olduğu için arka arkaya seyretme ile kontrolün bende olması beni mutlu eder sorusuna cevap veren katılımcılar arasında dizi seyretme ortamına göre anlamlı bir farklılık vardır. Anlamlı farklılık daha çok laptop ve pc grupları arasında bulunmuştur. Hesaplanan $\alpha:0,002$ normal $\alpha:0,05$ değerinden küçük olduğu arka arkaya seyretme sayesinde dizilerin konularını daha rahat algılayım sorusuna cevap veren katılımcılar arasında dizi seyretme ortamına göre anlamlı bir farklılık vardır. Anlamlı farklılık daha çok televizyon ve pc, laptop ve televizyon, tablet ve televizyon ile akıllı/smart telefonlar ve televizyon grupları arasında bulunmuştur. Diğer anket sorularında ise hesaplanan α değeri normal $\alpha:0,05$ değerinden büyük olduğu için dizi seyretme platformuna o göre anlamlı bir farklılık bulunmamıştır.

Tablo 28-ANOVA- Haftada kaç farklı diziyi takip ediyorsunuz?

		Sum of Squares	df	Mean Square	F	Sig.
15. Başladığım diziyi sezon finaline kadar seyrederim.	Between Groups	15,028	2	7,514	4,673	,012
	Within Groups	155,972	97	1,608		
	Total	171,000	99			
19. Arka arkaya seyretme ile kontrolün bende olması beni mutlu eder.	Between Groups	9,898	2	4,949	3,156	,047
	Within Groups	152,102	97	1,568		
	Total	162,000	99			

Tablo 28'e bakıldığında hesaplanan $\alpha:0,012$ normal $\alpha:0,05$ değerinden küçük olduğu için başladığım diziyi sezon finaline kadar seyrederim sorusuna cevap veren katılımcılar arasında haftada kaç farklı diziyi seyrettiklerine göre anlamlı bir farklılık vardır. Anlamlı farklılık daha çok 3-4 ve 5-6, 1-2 ve 5-6 ile 1-2 ve 3-4 grupları arasında bulunmuştur. Hesaplanan $\alpha:0,047$ normal $\alpha:0,05$ değerinden küçük olduğu için arka arkaya seyretme ile kontrolün bende olması beni mutlu eder sorusuna cevap veren katılımcılar arasında haftada kaç farklı diziyi seyrettiklerine göre anlamlı bir farklılık vardır. Anlamlı farklılık daha çok 1-2 ve 5-6 ile 3-4 ve 5-6 grupları arasında bulunmuştur. Diğer anket sorularında ise hesaplanan α değeri normal $\alpha:0,05$ değerinden büyük olduğu için katılımcıların haftada kaç farklı diziyi seyrettiklerine göre anlamlı bir farklılık bulunmamıştır.

Tablo 29- Independent Samples-Dizileri bittikten sonra tekrar yayınlanınca da seyredersiniz?

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
12. Diziler sayesinde genel kültür bilgin artar.	Equal variances assumed	,068	,794	-2,036	98	,044	-,501	,246	-,989	-,013
	Equal variances not assumed			-2,149	73,619	,035	-,501	,233	-,965	-,036

Tablo 29'e bakıldığında hesaplanan $\alpha:0,044$ normal $\alpha:0,05$ ten küçük olduğu için diziler sayesinde genel kültür bilgin artar sorusuna cevap veren katılımcılar arasında dizileri bittikten sonra tekrar yayınlanınca seyretme alışkanlığına göre anlamlı bir farklılık bulunmuştur. Diğer anket sorularında ise hesaplanan α değeri normal $\alpha:0,05$ değerinden büyük olduğu için dizileri bittikten sonra tekrar yayınlanınca seyretme alışkanlığına göre anlamlı bir farklılık bulunmamıştır.

Tablo 30-ANOVA- Bir diziyi seyretmenizdeki en önemli etken nedir?

		Sum of Squares	df	Mean Square	F	Sig.
16. Dizi bölümlerinin sürelerinin uzun olması beni rahatsız eder.	Between Groups	19,035	2	9,517	4,945	,009
	Within Groups	186,675	97	1,924		
	Total	205,710	99			

Tablo 30'a bakıldığında hesaplanan $\alpha:0,009$ normal $\alpha:0,05$ değerinden küçük olduğu için dizi bölümlerinin sürelerinin uzun olması beni rahatsız eder sorusuna cevap veren katılımcılar arasında bir diziyi seyretme etkenlerine göre anlamlı bir farklılık vardır. Anlamlı farklılık, daha çok konu ve oyuncular grupları arasındadır. Diğer anket sorularında ise hesaplanan α değeri normal $\alpha:0,05$ değerinden büyük olduğu için bir diziyi seyretme etkenlerine göre anlamlı bir farklılık bulunmamıştır.

Tablo 31- Independent Samples Test-Dizi bölümlerini arka arkaya seyretme alışkanlığınız var mıdır?

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
14. Dizileri bölüm bölüm takip ederim	Equal variances assumed	3,436	,067	-2,971	98	,004	-,744	,251	-1,242	-,247
	Equal variances not assumed			-2,764						
15. Başladığım diziyi sezon finaline kadar seyrederim.	Equal variances assumed	,074	,786	-4,448	98	,000	-1,149	,258	-1,661	-,636
	Equal variances not assumed			-4,410						
21. Dizilerin yeni bölümünü haftada bir beklemek yerine, tek seferde biriktirip seyretmeyi tercih ederim.	Equal variances assumed	,535	,466	-2,029	98	,045	-,542	,267	-1,073	-,012
	Equal variances not assumed			-1,952						

Tablo 31'e bakıldığında hesaplanan $\alpha:0,004$ normal $\alpha:0,05$ ten küçük olduğu için dizileri bölüm bölüm takip ederim sorusuna cevap veren katılımcılar arasında dizileri arka arkaya seyretme alışkanlığına göre anlamlı bir farklılık bulunmuştur. Hesaplanan $\alpha:0,000$ normal $\alpha:0,05$ ten küçük olduğu için başladığım diziyi sezon finaline kadar seyrederim sorusuna cevap veren katılımcılar arasında dizileri arka arkaya seyretme alışkanlığına göre

anamlı bir farklılık bulunmuştur. Hesaplanan $\alpha:0,045$ normal $\alpha:0,05$ ten küçük olduđu için dizilerin yeni bölümünü haftada bir beklemek yerine, tek seferde biriktirip seyretmeyi tercih ederim sorusuna cevap veren katılımcılar arasında dizileri arka arkaya seyretme alışkanlığına göre anlamlı bir farklılık bulunmuştur. Diğer anket sorularında ise hesaplanan α değeri normal $\alpha:0,05$ değerinden büyük olduđu için dizileri arka arkaya seyretme alışkanlığına göre anlamlı bir farklılık bulunmamıştır.

SONUÇ VE DEĞERLENDİRME

Bulgular değerlendirildiğinde, kadın katılımcıların erkek katılımcılardan fazla olduđu görülmektedir. Katılımcılar %99'u (99 kişi) dizi seyrettiklerini belirtmişlerdir. Buna göre, dizi seyretmenin ne kadar normal bir eylem olduğunu görmekteyiz. Katılımcıların %63'ünün (63 kişi) yabancı dizi seyretmeyi tercih ettikleri sonucuna ulaşılmıştır. Buna göre, öğrencilerin önemli ölçüde yabancı dizi seyretme alışkanlığı bulunmaktadır. Dizi seyretme sıklığı ise, haftada 1-2 gün ve 3-4 gün seçeneklerinde yoğunlaşmaktadır. Dizi seyretme yöntemi olarak, çevrimiçi web portallarının % 54 (54 kişi) gibi bir oranla açıkça öne çıktığı görülmektedir. Buna göre, öğrencilerin çoğunluğu dizi seyrederken yeni medya teknolojilerini kullanmaktadır. Benzer şekilde dizi seyretme platformlarında da laptop cevabının ağırlıklı olduđu görülmektedir. Laptopa dizi seyretme %49 (49 kişi) iken, televizyon %17'de (17 kişi) kalmıştır.

Diğer yandan, bir diziyi seyretmekteki en önemli etkenin dizinin konusu olduđu %72 (72 kişi) gibi bir oranla açıkça görülmektedir. Öğrencilerin değişen dizi seyretme alışkanlıkları bağlamında, arka arkaya seyretme yöntemini benimsedikleri de bulgulardan çıkan sonuçlardan biridir. Öğrencilerin %68'i (68 kişi) dizileri arka arkaya seyrettiklerini ifade etmişlerdir. Aynı zamanda, öğrencilerin dizileri bölüm bölüm takip etme alışkanlıkları da devam etmektedir. Ayrıca arka arkaya seyretme yönteminde, dizilerin konusuna daha rahat odaklanabilme ve kontrolün kendilerinde olması hissinin ağırlıkta olduđu görülmektedir. Yabancı dizi seyretme alışkanlığı bağlamında ise, öğrencilerin çoğu yabancı dizi seyretmenin yabancı dillerini destekleyeceklerini düşünmektedirler.

Öğrenciler dizi seyretmenin genel kültürlerine olumlu bir katkısı olduğunu genellikle düşünmemektedirler. Bu noktada, dizi seyretmenin eğlenmeye ya da vakit geçirmeye yönelik bir etkinlik olduđu sonucuna ulaşılabilir. Bulgulara göre, dizi bölüm sürelerinin uzun olması öğrencileri rahatsız etmemektedir. Bu durum, dizi seyretmenin genç insanların hayatının nasıl bir parçası haline geldiğini göstermektedir.

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IMAGINATION, EMOTION AND PEDAGOGY IN VYGOTSKY'S THEORY

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The Purpose of this article is to examine 'What is educational imagination?' by drawing upon the views of Lev Vygotsky. Imagination had been understood as a secondary function that interferes with reason but has begun to attract attention through with emphasizing on creativity from 21st century in education. Vygotsky, Soviet developmental psychologist, who discovered the interaction between human development and social/cultural context, argued that imagination is not special fantasy but general mental function bringing some image to mind with social interaction. Human emotion plays an important roll in mediating this mechanism. Based on Vygotsky's theory of imagination, we discuss the concept of imagination in relation to personal emotion and social influence.

IMPACT OF THE INDIVIDUAL INNOVATIVENESS CHARACTERISTICS ON SUCCESS AND CONTENTMENT AT THE COMPUTER PROGRAMMING COURSE: A WEB-BASED BLENDED LEARNING EXPERIENCE

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The computer programming knowledge requires high level problem solving skills. Complexity of programming language and the learning attributes, control focus, thought processes and individual differences like individual innovativeness characteristics (IIC), have an influence on the success of the students in programming. One of the methods in which information and communication technologies are utilized to secure student participation and retain learning is the blended learning method. The purpose of this study is to examine the impact of the introduction to programming course which is designed by web-based blended learning method on the academic successes and contentment of the students with different individual innovative characteristics. The results of the research have indicated that the execution of the course with web-based online learning instruments, has positively impacted the academic success and motivation of the students. One other finding is that there are meaningful deviations between the pretest- posttest success scores within each group whose individual innovative characteristics are being pioneering, questioning and skeptical. Furthermore the analysis results have indicated that there is no meaningful difference between the three individual innovative with regards to achievement test.

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IMPACTS OF DIFFERENTIATION OF SELF ON INTERPERSONAL RELATIONSHIP IN EARLY ADULTHOOD: MEDIATING ROLES OF ADULT ATTACHMENT AND EMPATHY

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ABSTRACT

This study investigated not only the relationship between differentiation of self and interpersonal relationship but also the mediation effect of adult attachment and empathy in the relationship between differentiation of self and interpersonal relationship. Structural equation modeling was performed with a sample of 386 Korean males and females in early adulthood. The results indicated that differentiation of self, adult attachment, and empathy were associated with interpersonal relationship. In terms of mediation effects, anxiety attachment, avoidant attachment, and empathy partially mediated between differentiation of self and problematic behaviors in interpersonal relationship. Avoidant attachment partially mediated between differentiation of self and satisfaction with interpersonal relationship. Based on these findings, it is expected that an intervention fostering level of empathy among early adulthood would have a positive impact on Interpersonal relationship. Moreover, knowing the client's attachment helps counselor build rapport with a client and plan a strategy. Also, the implications of the findings were discussed in the context of counseling and counseling programs. Suggestions for future research and practice are discussed with the limitation of this study.

INTRODUCTION

Interpersonal relationship is important through whole life, but the most important period is early adulthood. According to many psychologists, development task during early adulthood is to have an intimate relationship. The quality of the relationship has a decisive effect on individual life(Dreyfus, 1972; Erickson, 1963; Havighurst, 1972). To have an intimate relationship is the development task in early adulthood, but it is hard to adapt in rapidly extended relationship situation, so it cause anxiety of interpersonal relationships and problems about building relationship by themselves(Seokman Kwon, Jiyoung Kim, 2002). Hoffman & Weiss(1987) reported that psychological separation of an adolescent from his parents is important. If He isn't separated from his parents, he will have a lot of interpersonal relationship problems.

Bowen insists that differentiation of self is an important concept for relationship. First, Differentiation of Self is the ability to separate feelings and thoughts(Bowen, 1976). Undifferentiated people cannot separate feelings and thoughts. When they are asked to think, they are flooded with feelings, and have difficulty thinking logically and basing their responses on that. Further, they have difficulty separating their own from other's feelings. They look to family to define how they think about issues, feel about people, and interpret their experiences. Second concept of Differentiation of Self is the process of freeing yourself from your family's processes to define yourself(Bowen, 1976). This means being able to have different opinions and values than your family members, but being able to stay emotionally connected to them. It means being able to calmly reflect on a conflicted interaction afterward, realizing your own role in it, and then choosing a different response for the future.

Hoffman & Weiss(1987) reported that a person who has low level of differentiation of self couldn't build a good relationship because the person is so sensitive from outside reaction and lacks relationship ability.

According to previous study, when a person has high level of differentiation of self, the person also has a great empathy ability(Minsoo Lee, 2000). Bowen(1978) insists that a person who is low level of differentiation of self has problems about adult attachment development. Meanwhile, insecure attachment causes problems in interpersonal relationship(Jisun Park, Namhee Kim, Seongmoon Cheon, 2002). When the level of empathy decreases, it may happens problems in interpersonal relationship(Yeonhee Nam, 2008). Through these studies, this research supposes that the mediation effect of adult attachment and empathy in the relationship between differentiation of self and interpersonal relationship.

The research questions of this study were as follows

1. Does Differentiation of self impacts on Interpersonal relationship?
2. What are the roles of Adult Attachment and Empathy in the relationship between differentiation of self and interpersonal relationship in early adulthood?

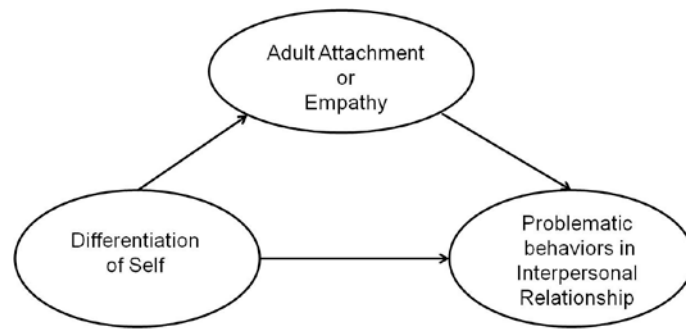


Figure 1. research model 1

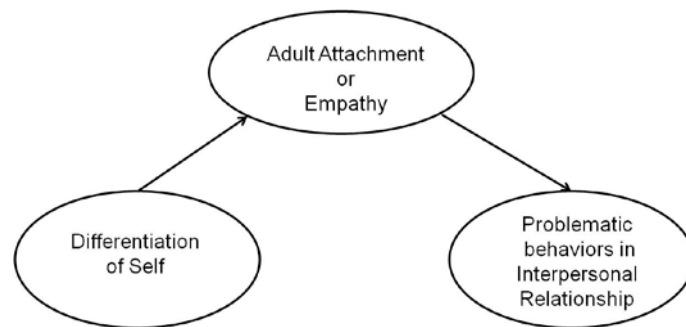


Figure 2. competitive model 1

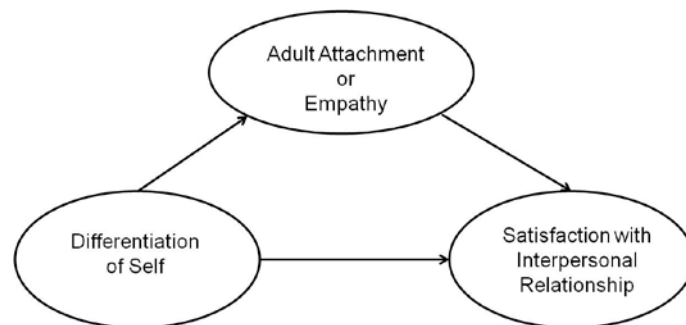


Figure 3. research model 2

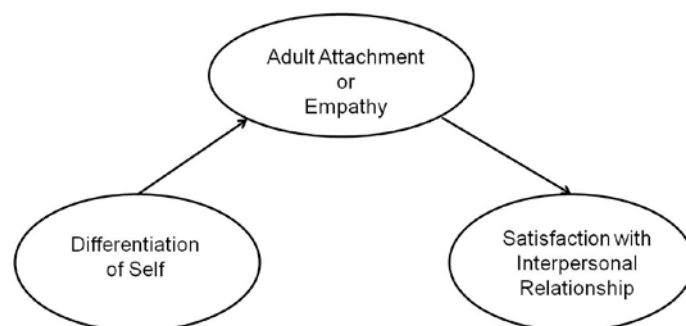


Figure 4. competitive model 2

THE STUDY

1. Participants

Participants were 386 Korean males and females in early adulthood. According to Levinson, Darrow, Klein, Levinson and Mckee(1978), the range of early adulthood is from 17 years old to 40 years old.

2. Measure

2. 1. Self-Differentiation Scale for University Students(Seo, 2014)

It was measured with 36 items of 4 sub-factors(self-assertiveness, emotional regulation, others emotional consistency and emotional distance). Participants indicated how much they were like each statement on 5 point Likert scale.

2. 2. Korean version of Experiences in Close Relationships-Revised(ECR-R) Scales(Seong-Hyeon Kim, 2004)

It is Korean version of Experiences in Close Relationships-Revised(Fraley, Waller & Brennan, 2000). It was measured with 36 items of 2 sub-factors(anxiety attachment, avoidant attachment). Participants indicated how much they were like each statement on 7 point Likert scale.

2. 3. Korean Version of the Empathy Quotient-short Form(Yeo, 2012)

It is Korean version of short forms of the Empathy Quotient(Wakabayashi, Baron-Cohen, Wheelwright, Goldenfeld, Delaney, Fine, Richard & Weil, 2006). It was measured with 11 items. Participants indicated how much they were like each statement on 4 point Likert scale.

2. 4. Interpersonal Satisfaction Scales(Eun, 1999)

It reconstituted of Korean version of Relationship change scale(Lee & Mun, 1980). It was measured with 5 items. Participants indicated how much they were like each statement on 5 point Likert scale.

2. 5. Short form of the Korean Inventory of Interpersonal Problems Circumplex Scales(KIIP-SC)(Hong, Park, Kim, Kwon, Cho & Kim, 2002)

It is short version of Korean Inventory of Interpersonal Problems Circumplex Scales(KIIP-C). It was measured with 40 items of 8 sub-factors(domineering, vindictive, cold, socially avoidant, nonassertive, exploitable, overly nurturant, intrusive). Participants indicated how much they were like each statement on 5 point Likert scale.

FINDINGS

1. Correlations, Means, Standard Deviations

Table1 presents the correlations, Means, Standard Deviations. Most correlations are significant.

Table 1. Correlations, Means, Standard Deviations						
	1	2	3	4	5	6
1. Differentiation						
of self	-					
2. Anxiety						
attachment	-.605**	-				
3. Avoidant						
attachment	-.468**	.264**	-			
4. Empathy						
	.273**	-.072	-.278**	-		
5. Satisfaction						
	.531**	-.368**	-.459**	.221**	-	

with interpersonal
relationship

6. Problematic

behaviors in

interpersonal

relationship

-.703** .632** .488** -.324** -.494** -

M	3.2527	3.0226	3.5310	3.0467	3.6085	2.2378
SD	.46178	.99507	.84527	.53013	.57069	.53128

** $p < .01$

2. Structural Equation Model

The structural model proposed was estimated through AMOS 18. Table 2 contains fit indices of research model and competitive model. These results indicate a good fit of the research model.

Table 2. Structural Equation Model

	Partial mediation research model					Full mediation competitive model				
	χ^2	df	TLI	CFI	RMSEA	χ^2	df	TLI	CFI	RMSEA
1. DS→AXA→PB	90.230	30	.975	.983	.073	203.764	33	.934	.952	.117
2. DS→AVA→PB	105.086	30	.965	.976	.082	289.234	33	.890	.919	.144
3. DS→E→PB	52.644	30	.988	.992	.047	307.855	33	.880	.912	.149
4. DS→AXA→S	51.526	24	.981	.987	.055	118.503	25	.939	.957	.100
5. DS→AVA→S	90.025	24	.947	.964	.086	148.882	25	.904	.933	.115
6. DS→E→S	42.438	24	.985	.990	.045	157.733	25	.894	.927	.119

3. Standardized Regression Weights

All paths is significant. As you see the β , you can know relative influence. According to Kline(2010), most β absolute value bigger than .10, so most model is effective except research model 4 and 6(anxiety attachment→satisfaction, empathy→satisfaction).

Table 3. Standardized Regression Weights

	B	β	S.E.	C.R.
1) DS \rightarrow AXA	-.658	-.672	.049	-13.286***
2) DS \rightarrow AVA	-.470	-.579	.049	-9.578***
3) DS \rightarrow E	.085	.277	.018	4.821***
4) DS \rightarrow AXA	-.653	-.673	.049	-13.414***
5) DS \rightarrow AVA	-.375	-.523	.043	-8.719***
6) DS \rightarrow E	.078	.269	.016	4.728***
1) DS \rightarrow PB	-.549	-.599	.053	-10.399***
2) DS \rightarrow PB	-.661	-.666	.054	-12.142***
3) DS \rightarrow PB	-.714	-.739	.047	-15.168***
4) DS \rightarrow S	.107	.635	.013	8.032***
5) DS \rightarrow S	.082	.499	.011	7.686***
6) DS \rightarrow S	.106	.626	.010	10.447***
1) AXA \rightarrow PB	.237	.254	.051	4.681***
2) AVA \rightarrow PB	.221	.181	.062	3.579***
3) E \rightarrow PB	-.501	-.158	.129	-3.886***
4) AXA \rightarrow S	-.003	-.015	.013	-.197***
5) AVA \rightarrow S	-.064	-.282	.014	-4.559***
6) E \rightarrow S	.044	.075	.032	1.387***

4. Indirect effect

According to the bootstrapping, it is analyzed in 95% confidence interval. As the result, model 4 and model 6 are included in 0, so mediation effect is insignificant. However, other models are significant.

Table 4. Bootstrapping

	Direct effect	Indirect effect (95% confidence interval)	Total effect
1) DS \rightarrow PB	-.599	-.170*(-.243, -.101)	-.770
2) DS \rightarrow PB	-.666	-.105*(-.164, -.050)	-.771
3) DS \rightarrow PB	-.739	-.044*(-.076, -.021)	-.783
4) DS \rightarrow S	.635	.010*(-.099, .122)	.645
5) DS \rightarrow S	.499	.148*(-.093, .207)	.646
6) DS \rightarrow S	.626	.020*(-.004, .058)	.646
1) DS \rightarrow AXA	-.672	.000(.000, .000)	-.672
2) DS \rightarrow AVA	.181	.000(.000, .000)	.181
3) DS \rightarrow E	.277	.000(.000, .000)	.277
4) DS \rightarrow AXA	-.673	.000(.000, .000)	-.673
5) DS \rightarrow AVA	-.523	.000(.000, .000)	-.523

6) DS→E	.269	.000(.000, .000)	.269
1) AXA→PB	.254	.000(.000, .000)	.254
2) AVA→PB	.181	.000(.000, .000)	.181
3) E→PB	-.158	.000(.000, .000)	-.158
4) AXA→S	-.015	.000(.000, .000)	-.015
5) AVA→S	-.282	.000(.000, .000)	-.282
6) E→S	.075	.000(.000, .000)	.075

$N=376$, * $p<.05$, ** $p<.01$, *** $p<.001$

In terms of mediation effects, anxiety attachment, avoidant attachment, and empathy partially mediated between differentiation of self and problematic behaviors in interpersonal relationship. Avoidant attachment partially mediated between differentiation of self and satisfaction with interpersonal relationship.

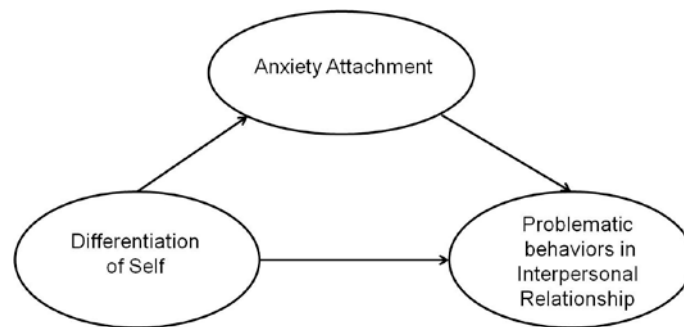


Figure 5. Final model 1

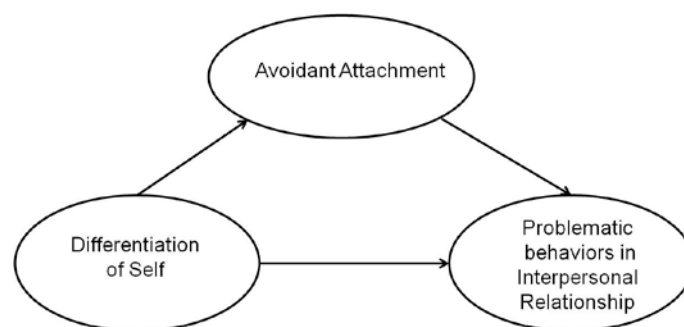


Figure 6. Final model 2

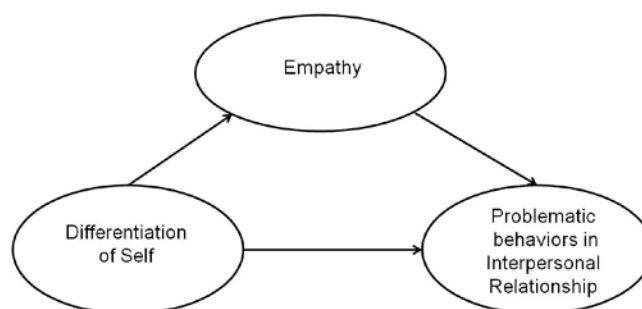


Figure 7. Final model 3

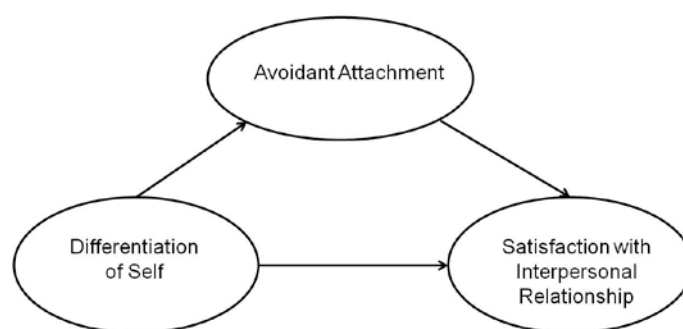


Figure 8. Final model 4

CONCLUSIONS

Based on these findings, it is expected that an intervention fostering level of empathy among early adulthood would have a positive impact on Interpersonal relationship. Moreover, knowing the client's attachment helps counselor build rapport with a client and plan a strategy. Also, the implications of the findings were discussed in the context of counseling and counseling programs.

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IMPLEMENTATION EFFECTS OF BOYER'S DIALECTICAL RECONSTRUCTION OF KNOWLEDGE MODEL IN A CULTURAL APPROACH ON THE CONCEPTUAL UNDERSTANDING OF THE CARTESIAN COORDINATE SYSTEM OF GRADE ONE STUDENTS

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A problem-solving teaching approach centered on Boyer's Dialectical Reconstruction of Knowledge Model was implemented in two grade one classes to teach the Cartesian coordinate system (Boyer & Mailloux 2014). The four phases approach creates a collaborative learning environment where students meld experiential knowledge with new mathematical knowledge in order to create an integrated knowledge base. Sixteen interdisciplinary activities organized around the mathematics of the Cartesian coordinate system were developed by the teachers and researcher. The book "The Fly on the Ceiling" by J. Glass (1998) served as a catalyst. According to Roegiers (2011) the main difficulty for students is progressing from locating a region to locating a point on a coordinate grid. Students often count lines rather than spaces. Many students mix up the order of the Cartesian coordinates when writing and plotting points (Small, 2013). Students' solutions to the problem-solving situations shows that they conceptually appropriated the Cartesian coordinate system. Students understood the idea of locating a point by the x and y coordinates when identifying its position relative to the origin and showed no signs of misconceptions. These results suggest that implementation of the approach to the study of geometrical transformations could be beneficial to students.

IMPLEMENTATION MANAGING STRATEGIC FOR INNOVATION IN HIGH VOCATIONAL EDUCATION SYSTEMS (HVES): FROM MALCOLM BALDRIGE NATIONAL QUALITY AWARD (MBNQA) FOR IMPROVING COMPETITIVENESS OF GRADUATES

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ABSTRACT

High Vocational Education (HVE) systems increasingly must rely on innovation as they seek creative approaches for improving the competitiveness of graduates while simultaneously dealing with regulatory and cost constraints. The management of innovation is an integral component of HVE systems that are recognized for their excellence by the Malcolm Baldrige National Quality Award (MBNQA). This paper identifies how does the implementation of program standards, objectives, programs, and targets to achieve competitiveness of graduates. The results indicate that HVE systems engage in Innovation Leadership by incorporating innovation into their vision, mission, and values statements and explicitly stating support from senior leadership; strategic planning for innovation by including innovation initiatives in strategic goals and action plans and soliciting stakeholder involvement in innovation; and management of innovation processes by integrating innovation with performance improvement efforts and harnessing human resources. Best practices are summarized to guide leaders in other HVE systems in bringing innovation to the forefront of their initiatives.

INTRODUCTION

The impact of the low quality of Higher Education management contributes to the performance of Higher Education in Indonesia, it can be seen in macro from the human resources product it produces, according to the International Labor Organization (ILO) data, in 2009 Indonesian Human Resources Productivity is ranked 83 out of 124 countries. Meanwhile, based on the research of International Management Development (IMD), which only researches for the Asian region, the position of Indonesia is still above the Philippines. IMD said, Indonesia occupies the position 35 of 57 countries. However, based on the calculation of national productivity in 2010, there is a nominal increase in productivity Rp21, 4 million. The amount increased from the year 2009 in the position of Rp20, 8 million per manpower. Other impacts due to the low quality of Indonesian education can be seen from the Indonesian Human Development Index (HDI) as reported in UNDP 2013, HDI in 2012 from 187 countries published by HDI, Indonesia is ranked 121st, including countries with HDI medium (index 0.629, Is ranked 5th out of ten ASEAN countries under Thailand (103) and Philippines (114) and above Cambodia (138) and Myanmar (149).

Education as a means to educate the life of a nation that is represented in qualified human resources as output products becomes a very important sector to be considered more focused. Recognizing the importance of education for the excellence of a nation, a qualified and competitive education system is required as a mandate from the 1945 Constitution resulting from the amendment of Article 31 paragraph (3) The Government shall undertake and organize a national education system, which enhances faith and piety and morals Noble in order to educate the life of the nation, which is regulated by law. Higher education management in Indonesia is based on the governance of the government-run Higher Education administered by PP. 60 of 2010 article 58F (2) states that in the field of organizational management, the Rector or Director shall determine 1) Strategic and operational plan 2) Organizational structure and work procedures 3) Internal control and supervision system 4) Internal quality assurance system.

The discrepancy between rhetoric and the reality of the quality of education has become an unpleasant experience and story. It is undeniable that the quality of the higher education system „ tends to favor the institutional aspect rather than the quality student aspect, and tends to lean more on the view of accountability led instead of the improved view of quality assurance ledge (Chung Sea Law, 2010).

The main practice of Total Quality Management (TQM) and Supply Chain Management (SCM) of 50 TQM practices and 40 SCM practices find that management support and commitment from education management, and partnerships have a strong impact on TQM and SCM integration across the organization F Talib, Rahman, and Qureshi, 2011). Quality Management (QM) correlates with the quality performance of management of educational institutions. It was also found that a culture of quality is regarded as a dominant QM practice in performance quality. Other practices such as system quality, training and education, teamwork, and benchmarking show a positive relationship with performance quality (Faisal Talib, Rahman, and Qureshi, 2013).

Identifying and using key performance measures consistent with the mission and core values of institutions and seeking continuous improvement offers an opportunity to create value education in higher education (Beard, 2009). The concept of quality and strategy maps is tools that can be used to describe a conceptual framework for describing the quality assurance system and institutional performance (Kettunen, 2008).

Improving authentic quality is more likely to result from an approach to systemic intervention that encourages the exploration of questions of purpose and meaning from enhancement of the educational context (Houston, 2008). Stakeholder conceptual frameworks are defined quality dimensions. In addition, the results indicate a discrepancy in students and faculty perceptions of the importance of factors in what constitutes a higher quality of educational provision. The main difference is that students consider courses and courses offered by higher education institutions and teaching and learning that take place in the institution as the most important dimension of higher quality education provisions. The teaching staff, though, consider student support services, teaching and learning Facilities and student checks and assessment as the most important dimension (Iacovidou, Gibbs, and Zopiatis, 2009).

Thus, sustainable development begins with growing academic research and has the potential to influence government policy in the future (Linton, Klassen, and Jayaraman, 2007). Integrity and effectiveness through job requirements analysis, model workload and findings from case studies of university education implementation there are aspects of policies and procedures that need to be modified where processes and outcomes of institutional change (Paewai, Meyer, and Houston, 2007).

Expectations for better performance, in terms of teaching and producing competent graduates of higher education are increasing. Beginning with planners so that education either at university level, faculty or department should pay attention to quality. Faculty must constantly update their knowledge and skills and use various and appropriate methods in teaching and assessment activities. The department should provide the context for further communication with other universities and professors in the same string together and the establishment of meetings on departmental issues. It is necessary that the educational program and strategy be prepared appropriately with the community and the needs of the students. It should be emphasized on improving academic quality rather than from quantitative aspects. It is clear that in order to obtain the ideal level, the necessary reforms and changes needed to improve quality and empower their strong points (Yarmohammadian, Mozaffary, and Esfahani, 2011).

The importance of relational and ethical intelligence and may also have significance for university leaders in matching academic teaching activities. This has the potential to get student feedback to make learning better (Scott, 2015). The faculty is increasingly pursuing research grants resulting in decreasing job satisfaction, better understanding of benefits and limitations, hierarchical approaches to better managing management at faculty and university level (Anderson and Slade, 2016). An effective working model is based on principles of equality and transparency in the distribution of academic work consisting of three major domains of teaching, research, and service-administration (Robertson and Germov, 2015).

Several researchers have considered quality models as operational frameworks for TQM (e.g., Bohoris, 1995; Ghobadian and Woo, 1996; Curkovic et al., 2000; Van der Wiele et al., 2000; Yong and Wilkinson, 2001; Lee et al., 2003). These authors consider that quality award models reproduce TQM by capturing its main constituent parts and by replicating its core ideas in clear and accessible language. Nevertheless, the empirical validation of the extent to which these models reproduce TQM is scarce, partial, and limited to some empirical studies such as Curkovic et al. (2000), who conclude that MBNQA and its criteria do capture TQM core concepts. In the context of the EFQM Excellence Model, this question remains unanswered and, therefore, more research is needed (Carlos, 2008).

From this evidence it would seem to follow that Baldrige-based self-assessment would be a useful step toward organizational excellence. Baldrige-based assessment can be helpful in attaining a variety of organizational development goals, including: (1) fostering organizational self-reflection; (2) educating participants about dimensions of organizational excellence; (3) team-building; (4) increasing and enhancing communication; (5) professional development; (6) promoting comparisons and benchmarking; (7) identifying improvement needs; providing a model of organizational excellence; (8) benchmarking; (9) performance measurement; and leadership development (Ruben, 2007).

In such a context then the management of universities must be a basic foundation for the arrangement and improvement aimed at producing qualified graduates of universities with academic qualifications that can be accountable to the public. Ted Wall, a professor of management education from McGill University (Tony Bush

and Coleman, Marianne, 2012), said that university management should start from awareness of all academic community, especially for university leaders. That is, every policy is taken solely to improve academic quality. Problems faced in managing universities, as one of the main causes or factors that affect the quality of college graduates, can be included if all elements both stakeholders and all academic community have commitment, consensus, and completion in the form of a supportive situation to make changes. Commitment will create a managerial awareness that managing universities tends to be based on a concept that is first, activation, both verification-investigation and inclusion. This managerial concept is important to be developed into a formal juridical commitment by higher education institutions in order to have a standardized standard in every process of managing an organization whose term is intellectual product.

However, Changes in technological progress are in line with changes in human needs. The human desire to always create something never stops. To evaluate challenges that are fraught with precision, the educational process must be able to anticipate, Understand and accept the situation overcoming, accommodating, reorientation of learners for improving competitiveness of graduate's high vocational education systems.

Polytechnic of Road Transportation Safety (PKTJ), which is one of the educational institutions to print graduates of midwives in the field of transportation under the Ministry of Transportation should also have to anticipate the development. PKTJ consisting of 3 study programs: Road Transportation Safety Management (DIV), Automotive Safety Engineering (DIV), and Vehicle Testing (D3) has been established since 1971.

The root of other problems is that local governments and communities have not utilized optimally the existence of special study programs - the field of transportation as a regional human resources development tools that are competitive and have special competencies needed by stakeholders in Tegal area in particular and pantura in general, so do not become Challenges in implementation strategy of study program by PKTJ Tegal. Based on the above explanation, PKTJ Tegal must prepare themselves to be a college that is not only qualified but also must be able to compete and excel towards other universities. In order to improve the quality of graduates and job opportunities from the Transportation Polytechnic, it is necessary to conduct a research Implementation Managing Strategic for Innovation in High Vocational Education Systems (HVES): From Malcolm Baldrige National Quality Award (MBNQA) for Improving Competitiveness of Graduates?

THE STUDY

In this study used the natural paradigm (naturalistic paradigm) with qualitative research methods. In the use of the naturalistic paradigm and qualitative approaches and research strategies of case study types, this study is intended to look at the symptoms of the actor's own frame of reference, i.e. to interpret the activity or event from the perspective of the perpetrator called the "emic perspective". Qualitative research should be "emic perspective" means in obtaining data not "as it should", not based on what the researcher thinks, but based on what is happening in the field, experienced, felt and thought by the participant or source data. Researchers conducted data collection through interviews, observations, questionnaires and document review. As observers (observatory), researchers trying to free themselves from any bias that can affect the results of research.

The research was conducted at Polytechnic of Road Transportation Safety (PKTJ) of Tegal City, Central Java Province. The time of the research is planned for 3 months and it is hoped that the research can be started in 2016, covering the preliminary stage, data collection, data analysis and the preparation of research result. In this study, various events, information, answers in the form of words and actions of people observed or interviewed, are the main types of data. The main data types are written sources, while the second data is recorded through written records or through recorders. Data The main in qualitative research is the "words and actions of sources of written data, photographs, and statistics."

The main data in this study are all managers, responsible and implementer of environmental study program PKTJ Tegal, which is a special study program to meet the demand of engineers and expert personnel in supporting transportation safety. While secondary data can be classified based on source, which is internal data and external data. Internal data obtained from within organization of educational institution itself, which relevant with research topic, while external data is data obtained from outside organization but still relevant to be used as research data.

METHOD

In this study used the natural paradigm (*naturalistic paradigm*) with qualitative research methods. In the use of the naturalistic paradigm and qualitative approaches and research strategies of case study types, this study is intended to look at the symptoms of the actors' own frame of reference, ie to interpret the activities or events from the standpoint of the perpetrator called the "emic perspective". According to Cress well (2008) qualitative research should be "emic perspective" means in obtaining data not "as it should", not based on what the

researcher thinks, but based on what is happening in the field, experienced, felt and thought by the participant or source data.

FINDINGS

The study results showed that HVE systems engage in Innovation Leadership by incorporating innovation into their vision, mission, and values statements and explicitly stating support from senior leadership; strategic planning for innovation by including innovation initiatives in strategic goals and action plans and soliciting stakeholder involvement in innovation; and management of innovation processes by integrating innovation with performance improvement efforts and harnessing human resources. Best practices are summarized to guide leaders in other HVE systems in bringing innovation to the forefront of their initiatives in PKTJ.

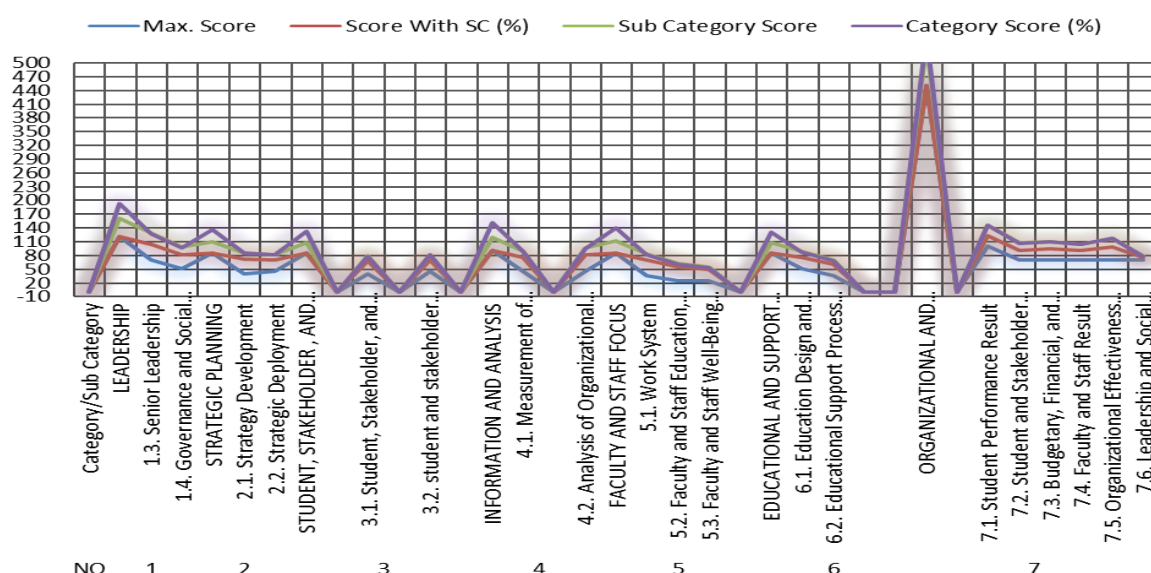


Figure 1. Leadership performance in PKTJ

Based on table 1. The total Value of 168,4208, With the lowest Category Value in Category 7 of 11% so that recommendation given related to Organizational and Performance Result, especially on Sub Category Faculty and Staff Result and Leadership and Social Responsibility Result.

The Baldrige category education implementation in PKTJ are designed to assist organizations in applying an integrated approach to managing organizational performance that results in continuous value enhancement to students and stakeholders, directly contributing to improving the quality of education while enhancing the effectiveness, organizational capacity and individual learning.

Category 1 Leadership conducts an assessment of the individual behavior of senior PKTJ leaders in guiding and sustaining organizational sustainability, including how to guide organizational governance, and its adherence to the rule of law, ethics, responsibility to the community and support to Relevant communities of importance.

Category 2 Strategic Planning assesses the way universities' organizations develop strategic objectives and workplans. Assessment of deployment of selected strategic objectives and work plans, including adjustment and measurement of progress, is also carried out.

Category 3 Students, stakeholders and market focus will assess the way in which the organization of Higher Education handles the role and commitment of students and stakeholders in achieving successful study programs in higher education for longer periods. This handling strategy also includes how to build a Higher Education culture that focuses on students, stakeholders and the job market / industry. How the University's organizations hear complaints, and use that information to refine and identify opportunities for innovation.

Category 4 Measurement, Analysis and Knowledge Management assesses the way PKTJ organizations select, collect, analyze, manage and improve data, information and knowledge assets and how to manage information technology. This category also assesses how the organization reviews its performance and uses the review data to improve the performance of higher education organizations.

Category 5 Focus on faculty and faculty assesses the way in which the organization of the College puts, manages, and develops its lecturers and education personnel to fully utilize its potential in alignment with the

organization's overall mission, strategy, and work plan. Also assess the need for capability and capacity of lecturers and educational staff to build an environment conducive to achievement of superior performance.

Category 6 Process Management assesses how the organization of PKTJ makes the design of the work system and how the design, management, and improvement of key processes for implementing a work system to value students and stakeholders, and achieve organizational success and sustainability.

Category 7 Organizational Work Results assesses organizational performance and improvement across key areas as outcomes of PKTJ graduates, focuses on students and stakeholders, financial and market outcomes, focuses on labor, results of process effectiveness, and outcomes of leadership. The performance level of higher education is assessed and compared with other similar universities, or competitors in the implementation of Higher Education. The result assessment process with these educational is excellent, each category has different assessment weight, and each criterion also has a key item that has different rating scale. This indicates the existence of the criteria of compliance (requirement criteria) that must exist at a higher education.

The total value of leadership of 168,4208., With the lowest Category Value in Category 7 of 11% so that recommendation given related to organizational and Performance Result, especially on Sub Category Faculty and Staff Result and Leadership and Social Responsibility Result. Experiment in Civil Engineering Faculty get the total value of 252.225, with the lowest Category Value in Category 7 of 20% so that the recommendations given relating to organizational and Performance Result, especially on Sub Category Leadership and Social Responsibility Result

CONCLUSIONS

The results indicate that HVE systems engage in innovation leadership by incorporating innovation into their vision, mission, and values statements and explicitly stating support from senior leadership; strategic planning for innovation by including innovation initiatives in strategic goals and action plans and soliciting stakeholder involvement in innovation; and management of innovation processes by integrating innovation with performance improvement efforts and harnessing human resources. Recognized for their excellence by the Malcolm Baldrige National Quality Award (MBNQA) in PKTJ best practices are summarized to guide leaders in other HVE systems in bringing innovation to the forefront of their initiatives and for improving competitiveness of graduates.

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IMPLEMENTING NUMBERED HEADS TOGETHER STRATEGY TO YEAR 5 STUDENTS: AN ALTERNATIVE APPROACH TO TEACHING WRITING

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ABSTRACT

This quasi experimental study aimed to explore the effect of Numbered Heads Together strategy on performance in picture essay writing among Year Five students at a primary school in the district of Belait, Brunei Darussalam. A total of 20 students were samples in the treatment group while 19 were in the controlled group. The treatment group was taught using the Numbered Heads Together strategy while the controlled group was taught as usual. The instruments employed were pre and post-tests. Data were analyzed using the Statistical Package for Sosial Sciences (SPSS) and presented in descriptive analysis of t-test and ANCOVA. Findings show a significant difference in the overall mean score for achievement in picture essay writing for the experimental group as shown by the pre and post-tests ($t = -12.867$, $p = 0.000$). Meanwhile the ANCOVA test shows a significant difference for achievement in picture essay writing between the treatment and controlled groups ($p = 0.000$, $p < 0.05$).

Keywords: writing, Numbered Heads Together, quasi-experimental study, Malay language, Brunei

INTRODUCTION

Writing is in fact a challenging task, not only for students but also for teachers. It is very important that teachers have good knowledge on writing strategies to enable them to provide effective writing skills for students. Teacher must be able to choose wisely from the numerous teaching and learning method, technique or strategy in order to improve student's achievement. According to Yahya (2005), diversity in writing strategy is needed to improve student's writing quality.

One of the aims of writing at primary schools in Brunei Darussalam (BD) is to equip students with the skill to produce educational and creative essays (Curriculum Development Department, 2009). The percentage of marks distribution in the national primary school essay writing examination is for language, content and technique. The content aspect constitutes the biggest percentage in comparison to other aspects. This means that failure to present content and ideas in essay writing will affect one's overall marks or grades.

In the process of writing, teachers are encouraged to relate students' life experiences to help them generate ideas. According to Roselan (2003), students' personal experience or other people's experience are the most basic source of idea. Apart from experience, visual aids may also be used to stimulate ideas in developing a good essay. Visual aids such as pictures, videos and charts can increase achievement in essay writing. This is in line with studies by Sri Kartika, Mesra Adikasuma, Suraya, Abu Bakar & Noradinah (2014) who stated that visual aids such as pictures help students generate or brainstorm ideas for factual essays and this helps increase their achievement in essay writing. Meanwhile, a study by Yahya and Azmey (2012) shows that visual aids not only help in generating ideas but also in elaborating the ideas. In addition, the study by Noradinah, Yusri, Suraya dan Sri Kartika (2014) shows that an ICT material that is iMindMap shows positive effect in increasing students' achievement in essay writing. Currently, several studies related to the use of techniques or approaches in the teaching and learning of essay writing in BD have been carried out. This is in line with the Ministry of Education in encouraging teachers to use various teaching and learning resources and techniques in teaching Malay language that suit the students' ability in order to increase

students' interest towards the Malay language subject; including writing in the language (Curriculum Development Department, 2009).

To maximise mastery of the writing skill, teaching and learning needs to be arranged carefully so that students can be involved actively. Hence, the use of cooperative learning in teaching and learning leads to active participation among students. This is supported by Christmas (2009) who said that active participation in group activities will help students generate several questions and explore various perspectives of answers from their friends. This can increase students' skills from generating ideas to producing creative writing.

Hence, this study explored the effect of the use of Numbered Heads Together; a cooperative learning strategy. This strategy is introduced by Kagan in 1989 as an alternative approach to actively engaged students in question and answer sessions (Kagan, 1994). In this study, the class was divided into five groups and each member within the group was assigned a number (1 to 4). Teacher presented a problem to solve, and each member were given few minutes to think the answer individually before they share their answers with the group. Later as a group, they have to agree with just one answer. Next the teacher called a number and the person with the corresponding number had to answer the problem. This strategy would therefore encourage student to think, interact, cooperate and support intermediate and low level students.

OBJECTIVES AND RESEARCH QUESTIONS

This study was carried out to explore the effect of Numbered Heads Together on achievement in picture essay writing among Year Five students. The research questions of the study were:

1. Is there a significant difference in the mean score for overall achievement in picture essay writing between the treatment and control groups in the pre-test?
2. Is there a significant difference in the mean score for overall achievement in mastery of content for picture essay writing between the treatment and control groups in the post-test?
3. Is there a significant difference in the mean score for overall achievement in picture essay writing between the students in the treatment and control groups in the post-test?
4. Is there an effect of the significant difference in the mean score for overall achievement in picture essay writing between the students in the treatment and control groups in the pre-test and post-test?

METHODOLOGY

This quantitative study employed a quasi-experimental research design involving students in two existing classroom who were placed into two groups – treatment and control groups. Sidek (2002) and Akhiar and Shamsina (2011) believe that a quasi-experimental study involves samples who are not randomly selected and aims to teach new skills or new approaches in solving problems by applying the approach in the classroom.

Table 1: Pre and post- test research design

Group	Pre-test	Treatment	Post-test
Experimental	T ₁	X	T ₂
Control	T ₁		T ₂

Source: Sidek (2002)

X : Treatment class using the NHT strategy to be taught in the experimental group

T₁ : Achievement in the pre-test for the experimental and control groups

T₂ : Achievement in the post-test for the experimental and control groups.

RESEARCH SAMPLE AND SETTING

A total of 39 students were involved in this study. They were put into two groups; 20 students in the experimental group that received the treatment and 19 in the control group. Each group consisted of students who were of mixed abilities, gender, background and different levels of achievement.

According to Jorgensen (1989), the decision to choose the research site should be related to the research problem. Thus, one public (government) primary school in the Belait district chosen based on the following criteria as outlined by Marshall dan Rossman (2011):

- 1) There is no objection to carrying out the research. It was possible to conduct the research at the school as the Headteacher, Malay language teacher and the students were cooperative.

- 2) Good opportunity in the data collection process. This was because good response and cooperation were given by the school and the research samples.
- 3) Capable in building a relationship based on trust between the researcher and the samples. The researcher was the trust and permission by the school to teach two Year Five classes.
- 4) Confident in getting quality and credible data for research purpose.
There were 10 male and 10 female students in the experimental group. Meanwhile there were 10 male and 9 female students in the control group.

DATA ANALYSIS

Data in this study was gathered from the students' scores in the pre and post-tests. Data was gathered and analysed using the Statistical Package for Social Sciences (SPSS) version 20. T-test was employed to compare the means for the pre and post-tests for both the experimental and control groups. Meanwhile, the ANCOVA covariant analysis was employed to see the effect of Numbered Heads Together strategy on achievement in writing.

FINDINGS AND DISCUSSION

The findings were presented on the basis of the research question formulated the study:

Research question 1: Is there a significant difference in the mean score for overall achievement in picture essay writing between the treatment and control groups in the pre-test?

Based on the following Table 2, the mean score for overall achievement in picture essay writing for the experimental group is 24.35 (SD= 6.72) while the mean score for the control group is 25.11 (SD= 6.08).

Table 2: T-test sample scores for overall achievement in picture essay writing between the treatment and control groups in the pre-test

Group	N	Mean	Standard deviation (SD)	T-value (t)	Significance level (p)
Experimental	20	24.35	6.72	-.37	.715
Control	19	25.11	6.08		

This finding shows no significant difference between the mean scores in achievement between the experimental and control groups in the pre-test; $t(39) = -.37$, $p > 0.05$ ($p = 0.715$). This shows that the students' achievement from both groups is similar in the pre-test.

Research question 2: Is there a significant difference in the mean score for overall achievement in mastery of content for picture essay writing between the treatment and control groups in the post-test?

The following Table 3 shows a difference in mean score of 6.26 in the post-test achievement for content in picture essay writing between the experimental (mean = 22.00, SD = 4.413) and the control group (mean = 15.74, SD = 4.593).

Table 3: T-test sample scores of achievement in mastery of content for picture essay writing between the treatment and control groups in the post-test

Group	N	Mean	Standard deviation (SD)	T-value (t)	Significance level (p)
Experimental	20	22.00	4.413	4.343	.000
Control	19	15.74	4.593		

This finding shows there is a significant difference in scores for content in picture essay writing between both groups in the post-test $t(39) = 4.343$, $p < 0.05$ ($p = 0.000$). This significant difference proves an increase in achievement in mastery of the content for picture essay writing after the treatment given on the use of Numbered Heads Together strategy. This shows that the students in the experimental group were able to master the content for picture essay writing in comparison to the control group. The learning activities in the Numbered Heads Together enabled the students in the experimental group to increase their thinking skills and work together in brainstorming ideas, until they were able to produce a concise, organised and creative essay. This findings is similar to studies by Vass, Littleton, Miel dan Jones (2008), Salem (2011), Rao (2007), Mohammad Fawzi and Ali (2013) that show learning in groups is able to increase thinking skills and make students focus in discussion as well as organise ideas to produce a creative writing.

Research question 3: Is there a significant difference in the mean score for overall achievement in picture essay writing between the students in the treatment and control groups in the post-test?

The following Table 4 shows the mean score of overall achievement in picture essay writing for both groups in the post-test. The mean score for the experimental group is 36.05, SD=7.911 and for the control group is 26.05, SD=6.671. This shows a difference of 10.00 in the mean score for overall achievement in picture essay writing among students in both groups.

Table 4: T-test sample scores for overall achievement in picture essay writing between the students in the treatment and control groups in the post-test

Group	N	Mean	Standard deviation (SD)	T-value (t)	Significance level (p)
Experimental	20	36.05	7.911	4.255	0.000
Control	19	26.05	6.671		

Finding shows a significant difference in overall achievement in picture essay writing between the experimental and control groups in the post-test, $t(39) = 4.255$, $p < 0.05$ ($p = 0.000$). This shows that the use of Numbered Heads Together has increased students' achievement in picture essay writing. This is congruent with studies by Dotson (2001), Maheady *et. al* (2006), Christina (2009), Ivy (2009), Ong and Tan (2010) as well as Gintings and Ramini (2012) which showed students' achievement increased in the post-test.

Research question 4: Is there an effect of the significant difference in the mean score for overall achievement in picture essay writing between the students in the treatment and control groups in the pre-test and post-test?

To answer this research question, the ANCOVA covariant analysis was used to see the effect of student achievement in the pre and post-tests. The following Table 5 shows a significant difference in mean score for the pre and post-tests ($F = 101.731$, $p = 0.000$). This shows that the treatment given to the students in the experimental group that used the *Numbered Heads Together* was able to increase the students' achievement in the post-test.

Table 5: Ancova test for overall achievement in picture essay writing for experimental and control groups in the pre and post-tests

Source	Type III Sum of Square	Df	Mean Square
Corrected Model	2565.320 ^a	2	115.896
Intercept	78.415	1	7.085
Pre-test	1591.473	1	143.799
Group	1125.890	1	101.731
Error	398.424	36	
Total	40878.000	39	
Corrected Total	2963.744	38	

$R\text{ Squared} = .866$ ($Adjusted\ R\text{ Squared} = .858$)

The following Table 6 shows that the achievement for the experimental group which the students were taught using the *Numbered Heads Together* (mean = 36.05; mean consistent = 36.426) was better than the control group where the students were not taught using the *Numbered Heads Together* (mean = 26.05, mean consistent = 25.657). Based on the ANCOVA test, it shows that the *Numbered Heads Together* was able to increase the students' achievement in picture essay writing. Thus, there is a significant difference effect on mean score for overall achievement in picture essay writing between students in the experimental and control groups in the pre and post-tests.

Table 6: Mean, Standard deviation, consistent mean and Standard Error for picture essay writing for experimental and control groups in the pre and post-tests

Group	N	Mean	Standard deviation (SD)	Mean	Standard Error
Experimental	20	36.05	7.911	36.426 ^a	.745
Control	19	26.05	6.671	25.657 ^a	.764

Note: a. Calculation for the covariant value for pre-test is 24.72

Hence, findings shown in Tables 5 and 6 indicate the relationship between Numbered Heads Together with picture essay writing which result in a significant difference between the experimental and control groups in the post-test.

CONCLUSION

This study was conducted to explore the effect of using Numbered Heads Together on achievement in picture essay writing among Year Five students in a school in the Belait district, NBD. The Numbered Heads Together used is one of the cooperative learning strategy. According to Ali, Seyed Hossein, Manijeh and Hassan (2007), cooperative learning has a significant effect on students' academic progress. Findings from this study shows positive achievement in the xeperimental group in comparison to the control group. Numbered Heads Together is also useful in increasing students' overall achievement in picture essay writing for students in the experimental group. Apart from that, the Numbered Heads Together also have a positive effect on students wit low or intermediate proficiency level.

The observations taken during the implementation of the strategy showed that the students were actively participating and were brave to contribute their creative and rationale ideas or thoughts. The students showed they were having fun working together. Richards (1990), Rao (2007) and Gintings and Ramini (2012) stresses that communication among school children is an important aspect that help students actively participate to generate ideas in the writing process as well as making learning process more interesting and fun. Thus, teachers should give the opportunity to students to interact and discuss with their friends as a group during writing process.

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IMPLICATION OF MODEL OF ACCEPTANCE AND BEHAVIOR USAGE OF MOBILE LEARNING IN HIGHER EDUCATION OF INDONESIA

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Abstract: This paper discussed the result of modeling the acceptance and usage behavior of mobile learning (M-AUBmL) and the implications for student learning. M-AUBmL explains the factors which influenced the acceptance and use of m-learning behavior. M-AUBmL consisted of 6 variables that are adopted from the Technology Acceptance Model (TAM) and the Theory of Planned Behavior (TPB), moreover 4 variables are added, such as: the lecturers perceived readiness, perceived peer student readiness, and perceived facilitating conditions. The samples are taken from 294 students who have used the m-learning in their following the course of learning activities of online learning portal- ITS SHARE whereas the students fill out an online questionnaire. The students come from various universities in Indonesia, such as: ITS Surabaya, U-Telkom Bandung, ITN Malang, and the University of Sriwijaya Palembang. The AUBmL model analyzed its model suitability using confirmatory factor analysis (CFA) with maximum likelihood estimation (MLE) approaches. The result shows that AUBmL models has good fit and has implications to be determined by students and designers of m-learning implementations in order to be more effective.

Key words: mobile learning (m-learning), goodness of fit, acceptance, usage behavior, ITS, Indonesia

INTRODUCTION

M-learning began to be developed widely and used in the world of education, both in national and international levels. Several studies have been conducted and published in several international journals. Publications of study results generally explain the findings related to the characteristics of m-learning and acceptance by learners in learning activities (Šumak, Heric, & Pušnik, 2011). The development of phenomena from web 1.0, web 2.0 and web 3.0 that has been popularized by Tim O'Reilly and John Batelle is able to push the changing of learning paradigm (Tim O'Reilly, 2012). Students learn not only based on face-to-face in the classroom, but they spend more time in outside the classroom using web-based information and communication technology (ICT).

Learning in 2011 entered the era of massive and open learning, and is known as a massive open online course (MOOC) that is by utilizing the development of web technology. MOOC is an online learning resource where people learn in massive amounts through open network knowledge connectivity. They interact in real-time within the learning community and with contextual lesson-oriented of learning achievements. The MOOC has grown as an open university that is fully implemented online. Some of the MOOC's organizers are Udacity, Coursera, edX, which provides more than 1000 subjects by reaching of 190 countries (Pomerol, Epelboin, & Thoury, 2015).

The Indonesia government through the Directorate of Higher Education (DHE) in Ministry Research, Technology, and Higher Education has initiated an online learning as MOOC. The online learning is called Open and Integrated Indonesian Open Learning (*Pembelajaran Daring Indonesia Terbuka dan Terpadu* - PDITT). PDITT is an ICT-based distance learning. The goal of PDITT is to equalize learning quality over the archipelago area in Indonesia, and affordability of unreached areas in conventional learning models. PDITT in 2014 has held 30 subjects from ITS, ITB, University of Indonesia, Gajah Mada University, Bina Nusantara University and APTIKOM. Each course is followed by a minimum of 100 students. In 2017 number of subjects is 3000 organized by universities in Indonesia.

Learning in Indonesia has begun to shift from classroom-based to ICT-based learning. The usage of mobile devices cannot be avoided in student learning activities. The learning problems are shift from paper and pen-based learning to the issues of acceptance and behavioral use of m-learning. This paper describes the factors that influence to students in willing to use m-learning and what are the implications of learning. The study was conducted by taking samples of ITS and Sriwijaya University students after they followed the lessons through share.its.ac.id. M-Learning activities in 16 weeks. After completed lessons, the student fills in the questionnaire by online at <http://share.its.ac.id>. The number of data is 294 of a free outlier. The data will confirm the feasibility of AUBmL model by using Structure Equation Modelling (SEM).

The results of this research are: (1) to explain the factors that influence the acceptability of usage of m-Learning in student learning, (2) to know the implication of AUBmL model on the use of a mobile device in the learning process. This information for the welcome of massive open online course (MOOC) in Indonesia.

LITERATURE REVIEW

Mobile Learning

The term of mobile learning or abbreviated "m-learning" involves the use of mobile welfare, either alone or combination of utilizing information and communication technologies. The use of m-learning allows students to learn anytime, anywhere, about anything and anyone. Students can use m-learning tools to access learning resources, communicate with peer learning, and access or store content, collaborate both inside and outside of the classroom.

Mobile technology is currently growing rapidly in the form of mobile devices, smartphones, phablets, tablet computers, e-readers, portable audio and video players, etc. Mobile devices are widely used in everyday activities, such as for learning activities. Mobile devices used for learning are termed m-learning. M-learning is learning to cross multi-context through interaction of content and social interaction by using personal electronics device (Crompton, 2013, p. 48). UNESCO defines m-learning as learning by utilizing mobile devices connected to the network to communicate, access and store data, play audio and video synchronously or asynchronously. M-Learning by using the online social networking software (SNS) that is Facebook, Twitter, and MySpace, has been used regularly by millions of people. Most of the SNS user communities are students. In fact, a survey conducted in 2011 of 3,000 students from across the US revealed that 90% of students use Facebook and 37% uses Twitter (Dahlstrom, de Boor, Grunwald, & Vockley, 2011).

The proportion of those SNS in Indonesia are as follow: Facebook of 51.5 million people (23.4%), Twitter of 19.7 million people (8.9%) and mobile users almost the same as Indonesian people that are 248 million (Kominfo, 2013). This condition is a great opportunity and potential if it can be used to support online learning in formal education units as well as learning in the wider community. Nevertheless, SNS Facebook that has been widely used by students to interact socially is still a lot of entertainment purposes and not for serious things (Lin, Hou, Wang, & Chang, 2013). While the use of m-Learning in blended learning mode using SHARE-ITS learning management system (LMS) has been able to assist students in subjects of Modern Control System from different study program, ie Electrical Engineering Department-ITS, ITN-Malang and U-Telkom- Bandung, and also in Electrical Engineering UNSRI Palembang in Sumatra island to achieve the established competencies. (Arifin, Aisjah, Faqih, & Gamayanti, 2012).

Research Development on Model Acceptance of M-learning Usage

Research on the acceptability and usage of new technology are based on theories or concepts of social psychology, such Theory of Reasoned Action (TRA). The TRA is first proposed by Fishbein and Ajzen (1975). (Fishbein & Ajzen, 1975). TRA has been developed first by Icek Ajzen (1991) to the Theory of Planned Behavior (TPB). The main variables of TRA and TPB are intentions of performance in certain behaviors. (Ajzen, 1991, p. 181). Fred D. Davis (1989) constructs an acceptance models of usage new technologies, especially in information systems. This model is known as Technology Acceptance Model (TAM).

The TAM model was adopted from the Theory of Reasoned Action (TRA). TAM predicts that the acceptability of usage new information technology is influenced by three factors: (1) perceived usefulness, (2) perceived ease of use, and (3) behavioral intentions. Another study has been done by Devis et al. (1989) found that TAM as a predictor of acceptance of new information technology devices is better than TRA (Davis, Bagozzi, & Warshaw, 1989). Taylor and Todd (1995) built a combination model of TPB and TAM. The combined model of TAM and TPB abbreviated as C-TAM-TPB. The C-TAM-TPB model adopts the TAM model by adding two variables, namely subjective norms and behavior controls (perceived behavior control) derived from TPB theory. The C-TAM-TPB model has used in predict the intentions research of someone who is inexperienced or experienced in the usage of new technology.

Venkatesh, Morris, Davis, & Davis (2003) reviewed some new models of information technology acceptance. The elements of each model were united and become a new model is Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh, Morris, Davis, & Davis, 2003). The three latent variables (construct) in UTAUT models that influence behavioral intention of usage new technology, ie performance expectancy, effort expectancy, and social influence. Two latent variables that directly affect usage behavior, ie behavioral intention and perceptions of the condition of the facility (perceived facilitating conditions). The UTAUT model is also accompanied by four moderator variables: gender, age, experience, and voluntariness (Venkatesh, Morris, Davis, & Davis, 2003).

Theory of Reasoned Action (TRA) is a concept of social psychology used for research on acceptance usage of m-learning in student learning activities (Fishbein & Ajzen, 1975). The model of acceptance new technology in information systems fields is Technology Acceptance Model (TAM) (D. Davis, 1989). TAM is a joint model of Theory Reasoned Action (TRA) and the Theory of Planned Behavior (TPB) (Ajzen, 1991). Another model of acceptance and behavior usage m-learning is the Model of the Acceptance and Usage Behavior of m-Learning (M-AUBmL). M-AUBmL consists of 6 variables adopted from TAM and TPB and 4 additional variables. The additional other variables are perceived lecturers readiness, percieved of peer student readiness, percieved of self-efficacy, and perceived facilitating conditions.

RESEARCH METHODS

Hypothesis of AUBmL

The proposed study is named of AUBmL. The hypotheses on variable models are based on 2 variables proposed of theory TPB (Ajzen, 1991) and TAM theory (Davis F. D., 1989), and 4 external variables are chosen in accordance with the usage of m-learning in college (Davis F. D., 1989). The four variables as the latent variables are adopted from TPB, namely: (1) usage behavior of m-learning, (2) behavior intention to use, (3) perceived behavioral control, and (4) subjective norms or other terms as also referred to the social environment (Dembo & Seli, 2013). In addition to the previously mentioned variables, we add hypotheses to other latent variables. This variable is adopted from the Technology Acceptance Model (TAM) (Davis F. D., 1989), namely: behavior intention to use, perceived ease of use, perceived usefulness, and usage behavior of m-learning.

Factors influence between variables, are as follows: (1) Subjective norms directly influence of intention to use behavior, (2) perceived behavioral control the direct influence of behavior intention to use and usage behavior of m-learning, (3) behavior intention to use directly influence of perceived ease of use and perceived usefulness. The effect of perceived usefulness is greater than the effect the perceived ease of use on behavior intention to use (Arifin, Setyosari, Ardhana, & Kamdi, 2014). Perceived ease of use has a direct effect on perceived usefulness (Davis, Bagozzi, & Warshaw, User acceptance Of computer technology: A comparison Of two, 1989; Cheon, Lee, Crooks, & Song, 2012). Behavior intention to use directly affect the behavior of usage behavior of m-learning (Davis, Bagozzi, & Warshaw, 1989; Ajzen, 1991).

The four external variables added in research, are; (1) perceived lecture readiness), (2) perceived peer student readiness, (3) perceived self-efficacy, and (4) perceived facilitating conditions. The first two variables are predicted to affect directly of subjective norms, namely the influence of lecturers and other colleagues on the perception of usage m-learning. The influence of these two variables to assess the online implementation in education in Indonesia. The last two variables: perceived self-efficacy and perceived facilitating conditions are predicted to directly affect perceived behavior control.

Problem of Research

The problems in the research are: (1) whether the perception on self-ability using m-learning influences the perceived behavior control of usage m-learning, (2) to determine how significant the influence of perception of facility condition to behavior usage m-learning in Indonesia. The results of this study can be used to design the implementation of m-learning in universities and higher education institutions in Indonesia.

Hypothesis

The 11 hypotheses proposed in this study are:

- H₁: Intentions behavior in using m-learning affect the usage behavior of m-learning.
- H₂: Perceptions of the usefulness of m-learning that students believed will influence their behavior intention in using m-learning.
- H₃: Perception of ease in use of m-learning is believed by the students will affect their behavior intention in using m-learning.
- H₄: Perception of ease in the use of m-learning is believed by the students will affect the perception of the usefulness of m-learning.
- H₅: Student subjective norms on m-learning will affect their behavior intention in using m-learning.
- H₆: Perceptions of the lecturer readiness in using m-learning will affect the subjective norms of students in using m-learning.
- H₇: Perceptions of colleagues readiness in using m-learning will affect the subjective norms of students in using m-learning.
- H₈: Perceptions of student control behavior in using m-learning will affect their behavior intention in using m-learning.
- H₉: Perceptions of student control behavior in using m-learning will affect the usage behavior m-learning.
- H₁₀: Perceptions of students' self-abilities in using m-learning will effect on their perceptions of behavioral control in using m-learning.
- H₁₁: Perceptions of the condition of facilities in using m-learning will affect the perception of student control behavior in using m-learning.

Structural Model and Measurement Model of M-AUBmL

The structural model and AUBmL measurement model are constructed based on questions in research, and the theory. Hypotheses of influence between constructs on the AUBmL model are tested for truth.

The AUBmL model explains that any influence of exogeneous constructs (ξ) on endogeneous constructs (η) is expressed in one-way arrows with regression coefficients of γ . Any influence of exogeneous constructs (ξ) on endogeneous constructs (η) is expressed by one-way arrows with regression coefficients of β . Each endogenous construct (η) has a measurement error or residual regression value of ζ . The Equation of measurement which states the relationship between indicator (manifest) the X and Y with the latent construct is ξ dan η . The relationship

of X and Y is expressed by the factor loading value (λ). Each measurement has an error, ie: measurement error indicator of X is expressed in δ , and error measurement indicator of Y is expressed in ϵ .

Data Collection

Respondent in this research is the student as participants using m-learning which entered in SHARE-ITS online learning network. The students are from Engineering Physics Department of ITS and Computer System Department of Sriwijaya University in the even semester of 2013/2014 and 2014/2015. The two universities are separated in different islands. ITS in east Java islands and Sriwijaya University in Sumatra Island. Students after completing the activity in the online lecturing, they fill out the online questionnaire through the link <http://share.its.ac.id>. There are two choices of the questionnaire sheets, the first is a questionnaire sheet for those who use m-learning with the Moodle SHARE-ITS platform and the second of those who use m-learning with Facebook's social networking platform. Students who have completed the question in the questionnaire is 294. Respondents consisted of 57% male and 43% female. The mobile device used consists of 34% of smartphone users, 7% of the user table-PC, and 59% of notebook users.

Data Analysis

Cleaning of outlier data is done by using the distance of Mahalanobis value that is greater than χ^2 (36; 0.001) = 67,99. Data that has been outlier-free of 294. Furthermore, the data is normality tested in each of ten constructs. Normality test data by using Kolmogorov-Smirnov and Shapiro-Wilk methods with the significance level of $\alpha = 5\%$. Normality test results are obtained of each of the ten constructs of a distributed normally models. The ten constructs are (1) perceived ease of use (PEU), (2) perceived usefulness (PUF), (3) behavior intention to use (BIU), (4) perceived lecturer readiness (LR), (5) perception peer student readiness (PSR), (6) subjective norm (SN), (7) perceived self-efficacy (SE), (8) perceived facilitating conditions (FC), (9) perceived behavioral control (PBC), and (10) usage behavior of m-learning (UBmL). The data is used to estimate the AUBML hypothesis model using the maximum likelihood estimate (MLE) method.

THE RESULT AND DISCUSSION

Reliability and Construct Validity of AUBmL Models

The reliability of the construct is tested by Cronbach alpha value in the limit of ≥ 0.70 , which the construct is declared to be reliable (Cortina, 1993; Cronbach, 1951). The validity of each construct indicators is expressed by the significance value of each indicator relationships to the construct. The value of indicators ≥ 0.30 are valid (Cronbach & Shavelson, 2004). SPSS is used as software in determining of Cronbach alpha. Constructs of PEU, LR, PSR, SE, BIU, PUF, SN, PBC and UBmL from the output of SPSS show the Cronbach's alpha value ≥ 0.70 . This value indicates that the nine constructs are reliable. The value of Cronbach's alpha = 0.628 for the FC construct, while the value of the calculation result uses the construct reliability (CR) formula is 0.713. This value shows that FC constructs are also reliable. Cronbach's alpha approach for estimating the reliability of congeneric measuring gives the too low estimate (Bollen & Curran, 2006). In SEM to estimate the reliability of the construct used composite reliability measure (CR) and variance extracted measure (VE). CR and VE calculations for each of the ten constructs are: PEU, LR, PSR, SE, FC, BIU, PUF, SN, PBC and UBmL have $CR > 0.7$ and $VE > 0.5$. This shows that ten constructs have an excellent reliability. The result of standardized factor loadings λ on each indicator is ≥ 0.5 . This indicates that each item is valid as the indicators that make up its construct (Hair, Black, Babin, & Anderson, 2009).

Analysis Goodness of Fit AUBmL Models

The AUBmL model was designed and analyzed using the maximum likelihood estimation (MLE) method and IBM AMOS version 21. In this study the value of goodness of fit index (GOF) is based on 3 parameters, ie: absolute fit measures, incremental fit measures, and parsimonious fit measures (Hair, Black, Babin, & Anderson, 2009). The GOF value of the model of acceptance and the behavior of m-learning (M-AUBML) is as follows: $GFI=0.9$, $RMSEA=0.0749$, $df=453$, $CFI=0.920$, $TLI=0.889$, $NFI=0.879$, $IFI=0.922$, $\chi^2/df=2.583$, and $PGFI=0.581$. The GOF values indicate that the AUBmL models is good of fit (Arifin, Setyosari, Ardhana, & Kamdi, 2015, pp. 105-110). The AUBmL model and value of goodness of fit are shown in Figure 1 below.

The Result of Hypothesis AUBmL Models

A hypothesis test is done on t-value and the level significance of 0.05. The t-value is a critical ratio (C.R) or probability (p) are obtained by IBM AMOS software version 21. The value of |C.R.| will decide H_0 is rejected or accepted. The output of software value of |C.R.| ≥ 1.967 in the probability value (p) ≤ 0.05 . This shows that the H_0 is rejected, and the meaning that hypothesis of the AUBML models is accepted (Byrne, 2010; Kline, 2011). The result of hypothesis test shows that the acceptance and the behavior of the use of m-learning (M-AUBmL) model is acceptable.

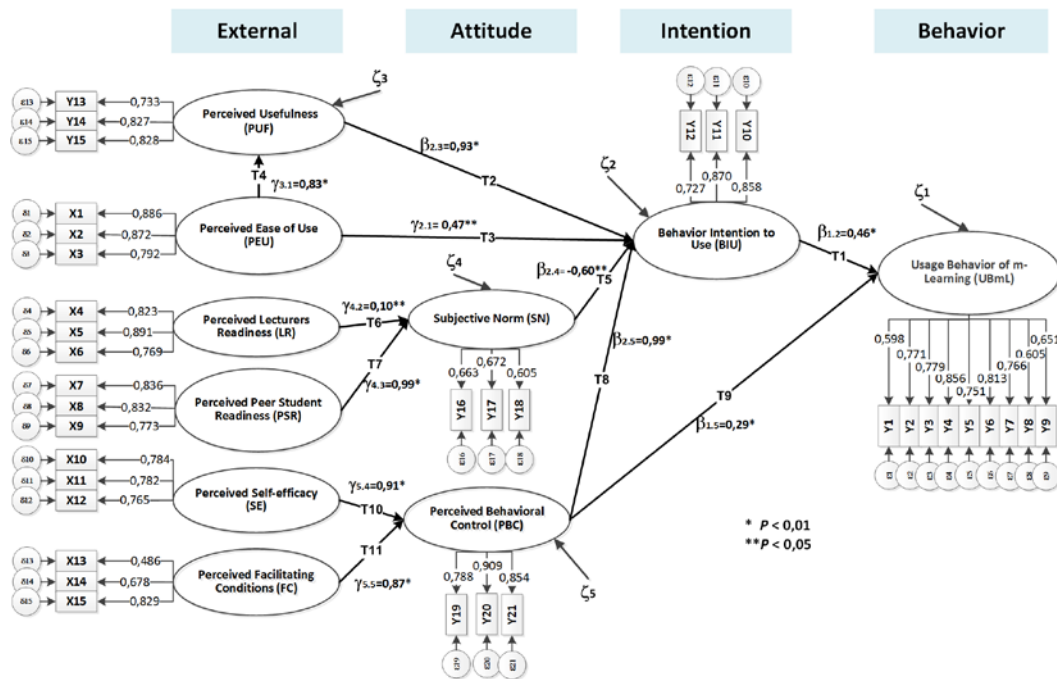


Figure 1. Model of the acceptance and usage behavior of mobile learning (M-AUBmL)

Implication of AUBmL Models in Student Learning

The implication of AUBML models on the use of m-learning in student learning activities is viewed from two things, the first of what students need to do, and the second is what designers need to design m-learning to make more effective and efficient learning.

What do Student Need to Do:

- Selecting the most suitable and convenient a mobile device that will foster self-belief and self-motivation to use m-learning.
- Increasing the knowledge and improving the skills of usage of m-learning that will foster self-confidence that he/she perceived self-efficacy using m-learning in her/him participated in learning activities,
- Establishing discussion forums in online or offline to share experiences and information in using m-learning that it can strengthen of perceived behavioral control,
- Familiarizing in use of application program to read, count, play video, and discuss of both synchronous and asynchronous that it can strengthen perceived self-efficacy, and
- Sharing of information sources that can be accessed to overcome the difficulties that occur in the use of m-learning.

What do the Designer of m-learning Implementation:

- Choosing the software to be used as a content management system (CMS) and learning management system (LMS) that is tailored m-learning characteristics,
- Making ease and simplicity of navigation that it can lead to useful perceptions by students,
- Choosing the size and offering format of contents that are light and in accordance with the characteristics of m-learning,
- Utilizing cloud storage facilities to strengthen of perceived facilitating conditions,
- Paying attention to the size of the touch screen mobile devices is not less than 4 inches to reinforce of perceived ease of use
- Providing the appropriate display mode in mobile devices to enhance perceived ease of use.

CONCLUSION AND SUGGESTION

Conclusion

Based on the analysis and discussion, it can be concluded that:

- The AUBmL models have been good of a fit as a model of acceptance and usage behavior of m-learning, it is supported by the degree goodness of fit is a good fit.
- The models have explained what factors influencing the acceptability and usage behavior of m-learning and has able to estimate both of new and old users of m-learning

- The factor has predicted an acceptance of new users are: perceived ease of use and perceived usefulness, whereas factor has predicted an acceptance of experienced users are: perceived lecture readiness, perceived peer student readiness, perceived self-efficacy, and perceived facilitating conditions.
- The AUBmL models show two implications of student learning activities in the use of m-learning: the first; what students need to do to prepare themselves for using of m-learning. This is by choosing an easy-to-use mobile tool and forming the usability perceptions for using m-learning along their learning activities, as well as increasing a knowledge and skills of using m-learning, and actively in discussion forums to strengthen self-perception and control behavior- perception in use m-learning. The second is what the designer to implement m-learning. This is chosen mobile devices to access is ease, LMS software and CMS, as well as content.

Suggestion

The further research needs to be done:

- The influence of lecturers or instructors as the factor that can build a positive perception and a confidence of student to use m-learning.
- It is necessary a model by developing indicators related to perceived lecturers readiness in using m-learning when he/she interacting with students. The sample is developed for lecturers.

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IMPORTANCE OF ARCHITECTURE FOR THE SUCCESS OF PRIMARY EDUCATION

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ABSTRACT

One of the main aims of architecture as a professional discipline is to provide sufficient spaces for different functions in everyday life. Architectural programs impose this idea throughout their curriculums to both the undergraduate and graduate students. People can be more happy and successful in their everyday life if they are in the right places that provide suitable physical and environmental conditions for them. These places should meet the basic physical and psychological needs of people. Furthermore, they should be adaptive to the rapidly changing requirements of the related functions. In this study, a research of architectural graduate students about the design parameters of primary school buildings is presented. The aim of their research was to find out how the quality of primary school education can be increased via architectural design. The aim of the course was to make the fresh architects conscious about the relationship between people and their environment and the impact of design on this relationship.

Keywords: architectural design, architectural education, environment-behavior, primary education

INTRODUCTION: ENVIRONMENT-BEHAVIOR INTERACTION AND ARCHITECTURAL DESIGN

The well-known professionals studying in the field of environment-behavior studies (EBS) like Altman, Craik, Ittelson, Rapoport, Sommer, Stokols, Wapner, Werner, and Wohlwill put stress on the bilateral relationships between behavior and physical environment. On the one hand, human behavior, including evaluative and responsive psychological processes, can be seen as the “result” of the “physical” environment. On the other hand, human behavior also including interpretative and operative psychological processes can be seen as the “cause” of this physical environment, if the environment is considered as “natural”. (Bonnes, Bonaiuto, 2002). Stokols and Altman (1987), explain different scales of human actions affected by the physical and spatial dimensions of the environment as intrapersonal, interpersonal, group, intergroup and societal levels. As a conclusion of their literature analysis Bonnes and Bonaiuto (2002), indicate that, according to the leading professionals¹, the term “place”, with its spatial-physical properties, activities and meanings, is at the center of the interaction of environment and human behavior.

The term “place” is at the center of another discipline, which is “architecture “. The theory and practice of architecture, of which main aim is to build appropriate environments for biological, psychological, socio-cultural needs of people, is very interested in every level of place making. Thus, the discipline and education of architecture include many aspects and results of environment-behavior interactions. Especially, after the adoption of “universal design” paradigm, which can also be seen as “design for all ” or “accessible design” in the literature, “ user-oriented” approaches have began to be preferred rather than egocentric approaches in architecture. Understanding the relationships in between environment and human behavior gains more and more importance for architects in order to design sufficient “place”s for people having differing ideas and needs.

Environment – Behavior studies constitute a considerable place in architectural education. The interaction system and its outcomes are often discussed at architectural studios in order to make the students conscious about the importance of user preferences during the process of architectural design. Furthermore, in depth researches and analysis are handled throughout the graduate courses having theoretical inclusions. In the scope of this paper, a research made by the students of one of the graduate courses undertaken at Architectural Department of Uludağ University in Bursa/Turkey will be presented. The research made in the context of environment-behavior interaction system and the proposals of the students that offers better learning places for primary schools will be explained in the following sections.

¹ e.g., Canter,1977,1986; Relph,1976; Rapoport, 1982; Russell&Ward, 1982; Bonnes&Secchiarioli,1995

A GRADUATE COURSE OF ARCHITECTURE: ENVIRONMENT-BEHAVIOR AND DESIGN

The graduate course titled as “Environment-Behavior and Design” is one of the compulsory courses at the Graduate Architecture Program in Uludağ University. The first author is the coordinator of the course and the second author was the invited lecturer of the course at 2016-17 autumn semester. The course is given at the first semester of the graduate education, which has six semesters totally. It has three hours a week and 6 ECTS. The aim of the course is to make the freshminded architects conscious about the importance of the interactions in between environment and human behavior and the importance of this interaction system on architectural design. It is a known fact that people can be more happy and successful in their everyday life if they are in the right places that provide suitable physical and environmental conditions for them. Architects should provide them places that meet their basic physical and psychological needs. Furthermore, these places should be adaptive to the rapidly changing requirements of the related functions.

Every semester a new research topic is given to the students, after some readings from the literature. The selected readings are both from the basic and contemporary ones, in order to let them understand the development of the theoretical approaches and perspectives in environment and behavior studies. The research topics are selected together with the students considering their areas of interest. Topics are chosen from a large variety of human groups and social groups like elderly, children, youth, office workers, outside workers. The only principle of selecting a research topic is not to repeat the similar studies. The research topic of 2016-17 autumn semester was children. The aim of the research was to find out how the quality of primary school education can be increased via architectural design.

INVESTIGATION OF THE ROLE OF ARCHITECTURAL DESIGN FOR THE SUCCESS OF PRIMARY EDUCATION

Successful architects are professionals who have special knowledge and capability for taking an effective role in the formation and transformation of the physical environment, can work in collaboration with the other disciplines. Having the ability of making analysis, synthesis and interpretation and also having awareness on the necessity of lifetime learning architects orientate their professional knowledge according to needs of different groups of users of the buildings they design. At this point, the research area of environment-behavior studies helps them to analyze the multidimensional and complex structure of human behavior and to come to consistent decisions for the users and their customers.

The assignment of the course was to answer the question; “is there anything we can do **as architects** to improve the quality of primary education? ” First of all, they had a brainstorming session in one of the lessons. Their main idea was that; education spaces and systems, which have been the same for more than a hundred years, should be changed if we want new generations to be creative and to be happy and to be proud of themselves. Then they made an in depth literature analysis and examined the basic approaches of psychology and education about childhood. They read the works² of notable researchers like Damon (2002), Edwards (2006), Elkind (1999), Montessori (1963,1964), Piaget (1926,1951,1970) and Russell (1956). They tried to understand the psychological and physical needs of children throughout their education process when they are in school. Then they searched for the buildings of primary education from different countries of the world. They analyzed both the architectural plans and site plans of the buildings, and also the interior decoration principles and the building materials used in these buildings. They argued the differences and the similarities of the buildings and the reasons of them. After these researches the students offered some proposals for the architectural design criteria of primary school buildings. Their aim was to offer more sufficient places for children in order to make their learning process easier, happier and more creative. Before their proposals they conceptualized their ideas with the help of the famous work of Lefebvre (1974), *The Production of Space*. At the end of the semester the students shared their ideas with each other via visual presentations and persuasive essays.

² Piaget, J.,(1970), *Science of education and the psychology of the child* ; (1926),*The Language and Thought of the Child*. ; (1951), *Play, Dreams and Imitation in Childhood* ; Montessori, M.,(1963), *The Secret of Childhood*; (1963), *Education for a New World* ; (1964), *The Montessori Method* ; Elkind , D. (1976) *Child Development and Education* ; Damon, W. (2002) *Bringing in a New Era in Character Education*; Edwards, (2006) ; Russell (1956) *Children’s Thinking*

The research outcomes and proposals of the graduate students of architecture aiming to improve the success of primary education can be summarized as the following;

Outcomes of the literature analysis:

When the development processes of children are evaluated it is seen that all of the three major development processes are interrelated with spatial perception of the human beings. They are socio-emotional development process that lasts for a lifetime, perceptual-cognitive development processes that last from birth to nearly twelve and physical-motor development processes that last from birth to nearly eighteen (Kamii, 1982). They learned two important things about learning process of children. The first one is that learning is an individual process and every child may have a different capacity and way of learning. These may be learning from nature, learning with playing, interactive learning, individual learning, group learning. Thus, learning places should have different properties. The second one is that environmental stimuli have great effects on children throughout their learning process. By the help of this information the students come to the point that it is not a sufficient approach to design a standard type of learning place whether it is a school or a classroom or any kind of place for education.

Outcomes of example building analysis:

When the examples of primary school buildings from different countries are examined it is seen that most of the buildings have nearly the same plan scheme and nearly all of them have the same interior design. Some examples of classrooms from very different parts of the world, having very different cultural backgrounds, but having nearly the same forms and interior settings can be seen in photo 1. They also find some sufficient example buildings in different countries, which have more flexible places for different kinds of activities



Rabat/Morocco



London/ UK



Tokyo/Japan



Moscow/ Russia



Abidjan / Ivory Cost



Sao Paulo/ Brazil

Photo 1: Classroom examples from different countries (URL 1)

Proposals of the Students:

After the analysis of literature and example buildings, our students developed some proposals within three basic scales that are used in architectural studies. These are macro scale including urban and neighborhood interrelations like topography, density and accessibility; mezzo scale including architectural design of the buildings or building groups, their interior relations with each other and with the circulation areas, the relationships of inside and outside areas, the transition spaces, and at last the interior of the basic units which are classrooms; micro scale including constructional details, building materials, equipment and furniture.

In the context of these three scales of architectural design the most important design keywords for them were flexibility, transparency, sustainability and spatial hierarchy. They believed that the use of these keywords throughout architectural design of the schools would let the children be more happy and creative when learning. The suitable education places for primary education should let children to experience, to search, to think, to produce and to evaluate. Thus, these places should be flexible and transparent in order to let them feel free and active. Having flexible and transparent places children may orientate themselves both for individual and team works and also for silent studies and different kinds of presentations. A sufficient hierarchical system including different types of places for needed activities throughout the day is another vital necessity. The right hierarchical system of architectural scheme let visual and aural communication be more active. If children dominate and influence their physical environments easily, they can be at the core of the education process. The other vital

design keyword is sustainability. Our students think that this term should be taken into consideration with its three basic components not only for the design and construction of the primary school buildings, but also throughout their lifecycle including the education process they accommodate.

At the end of this study all of the students come to the point that from macro scale to micro scale all of the design criteria should be taken into consideration with the determined keywords; flexibility, transparency, sustainability and spatial hierarchy. The basic requirements they determined can be summarized as the following.

The location of the school buildings should be proper for the target group of students and accessible for them via walking, cycling. The orientation of the building should meet the ecological sustainability criteria in order to benefit from natural assets. The basic units of the buildings, which are classrooms, should be proper for different kinds of educational activities in size, form and indoor physical requirements. The circulation areas should be taken into consideration as social places for informal meetings and should be livable spaces all day long. The outdoor areas in and around the building should meet varying kinds of outdoor activities of children. They should have a hierarchical relation with the inside of the building and also with the natural environment around. The equipment and the furniture used should be suitable in size, form and material. They are very important elements for children's belonging feeling and should have qualifications providing this feeling for them. Beside all of these requirements, the construction system and the building materials used in every stage of the construction and every part of the school buildings should be suitable for the flexibility of the building and also should be sustainable materials. Some examples of flexible use of the classrooms can be seen in photo 2. Some examples of flexible and transparent use of circulation areas can be seen in photo 3.



Photo 2: Flexible classroom examples from different countries (URL 2)

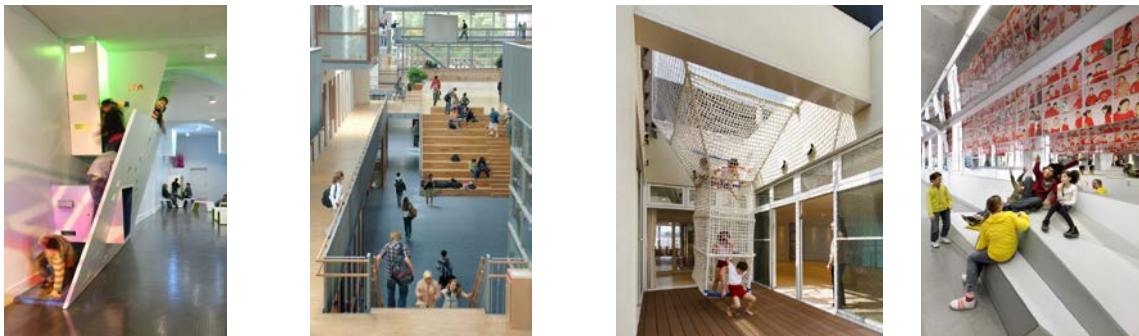


Photo 3: Flexible and transparent from different countries (URL 3-6)

CONCLUSIONS

Throughout the first part of 2016-17 Autumn semester, in 7 weeks course time, this research work gave a chance to the graduate students of architecture, in the other words the young, fresh minded architects, to understand how essential are the multidimensional interrelations of environment and human behavior. They also understood the importance of having an integrated and holistic point of view in order to provide sufficient spaces for people having different qualifications and needs in everyday life. Furthermore, they examined the links between physical, psychological and social aspects and architectural design projects of specialized functions. At the end of their initial literature analysis they reached to a conclusion that childhood development has unique characteristics and have to be handled with significant importance during building design for children in order to let them be more creative and happy. Physical environments have a great importance for this development process as a whole. By the help of their example analysis our students understood that the architectural design of

primary school buildings having very similar properties although being in different parts of the world should be changed. To meet the needs of children who have varying ways and times of learning, architects should offer different types of education places, which have different specialities.

In the scope of this graduate course the young architects learned how to make literature analysis via scientific sources and how to make synthesis of the data they obtained. In particular, they adopted the value of relationships in between environment and human behavior for their career. They developed design criteria for a special group of users in the case of primary education buildings.

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IMPORTANCE OF THE ROLE OF EDUCATION ON BASIC PROBLEMS OF MEASURING AND DETERMINING COSTS IN THE COMPANY

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ABSTRACT

The spheres of business of companies include manufacturing of products, provision of services or a combination thereof. In a transportation company the sphere of business includes mainly shipping services. Shipping activities, as any other activities of a production or service company, are immediately associated with costs. The costs are the main item affecting the price of the shipping performance. The objective of this contribution is to point out the importance education of the comprehensive approach to management of costs in a transportation company. The contribution outlines a procedure for management of costs in a transportation company and describes the individual activities. It includes monitoring of the costs, analysis of the current status and development, identification of problems, proposed measures and verification of their effectiveness.

Key words: costs, shipping performance, types of costs, average and marginal costs, management of costs

INTRODUCTION

Costs of a transportation company influence its economic results. Shipping is a service the basic parameters of which (shipping quantity, time, direction) are determined independently of the carrier that uses its production factors to perform the shipping. Costs are the financial expression of the consumption of company's production factors. The input for decision-making about the shipping performance is the comparison between its costs and proceeds. The costs are the main item affecting the price of the shipping performance. The objective of this contribution is to point out the importance of the comprehensive approach to management of costs in a transportation company. The contribution outlines a procedure for management of costs in a transportation company and describes the individual activities. It includes monitoring of the costs, analysis of the current status and development, identification of problems, proposed measures and verification of their effectiveness. The spheres of business of companies include manufacturing of products, provision of services or a combination thereof. In a transportation company the sphere of business includes mainly shipping services. Shipping activities, as any other activities of a production or service company, are immediately associated with costs. In comparison with other businesses, transportation companies have their characteristic features which result from the essence of the shipping activity. The main mission of transportation companies is to provide shipping services to their customers, i.e. they do not produce (manufacture) products.

Costs and proceeds fundamentally influence normal and sound functioning of any transportation company. The shipping costs make it possible to assess quality of the work as they express how much has been spent on one

service, including its implementation. Decision-making about implementation of a shipping performance is nearly always based on comparison of the costs and proceeds. Transportation companies use the term of costs in the sense of consumption in general. It is reasonable to use the term working costs because they represent costs relating to a particular performance, activity or department of the company. The working costs in transportation represent consumed materialized and live work and financial means expended on shipping and other performance in a particular period of time, under typical conditions of a reproduction process in the individual transportation departments or transportation companies.

BASIC PROBLEMS OF MEASURING AND DETERMINING COSTS IN THE COMPANY

It is not easy to monitor and measure costs in the company. The initial recording of cost information is carried out particularly in accounting that classifies costs by types, which represents one of the basic cost classifications. Likewise, this cost information is used in budgeting. The classification of cost by calculation is the main information source in drawing up an offering budget for prices, etc. Conditions have still not been created in our companies for this classification of costs, though it has great importance in the market economy at planning, economic analysis and pricing.

Each business performance can be carried out only through connection of variable and fixed costs. Therefore, the total costs act as mixed costs containing different types of variable and fixed costs. That has a major impact on average costs calculated per performance unit. While we consider variable costs for proportional, having no effect on average unit costs, fixed costs have a different effect. The same volume of fixed costs is distributed over more or fewer performance units, thus changing their share in a performance unit. It is important especially at the fixed costs that are related to capacity utilisation. A relative fixed cost saving or overrun arises with a different level of capacity utilisation. The relative saving of fixed cost is of particular importance because each production increase above the previous level does not require some new inputs of fixed costs. The relative saving can be arising as far as there is unutilised capacity, and can be reached either by higher intensity of activity, or by extension of productive time. With the level of capacity utilisation, we distinguish free fixed costs and utilised (exploited) fixed costs. Of course, this classification is theoretical; indivisibility of fixed costs does not allow real release of free fixed costs in the monetary form. They are reflected in efficiency indicators, i.e. utilisation of production factors.

The complexity of fixed cost management shows itself therein that it is a conglomerate of various types and kinds of costs. For example, costs of providing for company existence (depreciation, rent, preventive machinery inspections ...), costs of providing for future production (research and development costs), but also costs for providing for current management activity (costs of administration machinery). A part of them is spent on a once-off basis, before the first performance. Thus, their amount is set in advance for the current accounting period. Therefore, fixed costs are often wrongly deemed to be dependent on time, but actually they are allocated to a given time period.

No costs can exist without performance or service. For that reason the relation of costs to performance volume belongs among important ones. The change of production volume directly affects development of costs, while individual cost tasks, or cost elements, or total costs of production act differently. When searching for the optimum volume of production, we have to know the development of costs and determine the size of dependence of cost change on change of production volume. We can find this out from the response coefficient (k_r). Here total costs $/N/$ and total performance volumes $/V/$ are examined. In order to be able to examine given changes in more details, costs need to be classified even more in-depth, to variable and fixed costs.

$$k_r = P_{zn} : P_{zv}$$

P_{zn} - N change percent
 P_{zv} - performance percent

Variable costs, such as was already described, vary with the change of performance volume, more or less proportionately with its increase, or decrease. It was established that the response coefficient has its value different from zero. We distinguish also marginal costs that represent the amount of variable costs, which is added with each following product to total variable costs incurred on the previous number of units. These costs are used in decision-making on taking-up of another production unit /if the production capacity is not utilised / during the planned period. Thus, the marginal cost is actually attributive cost and informs us to what extent it is profitable to increase the volume of production of individual performances within the existing capacity. This is possible while the realized price of a product is equal to marginal / attributive / costs, or exceeds them. Unequivocal inclusion of costs into one or the other group is never easy. It depends highly on conditions. Individual costs act as variable in some company and as fixed elsewhere.

The fixed costs represent one of important reserves of cost reduction. These costs are derived from the need of global and one-time creation of technical, organisational and working conditions for provision of certain performance volume. We call them also capacity costs because they change in their absolute amount at changes to the extent of capacities. Unless there is a change of production volume, they do not vary within the existing capacity at all, or slightly only. The fixed costs are bound to the total performance volume. In calculation per unit of production, the constancy character of these costs vanishes.

These costs are divided into two basic groups, absolute and free fixed costs. By response of individual items of fixed costs at change of the performance volume, we know costs, whose total amount for the same period does not vary even if the performance volume changes. These are fixed costs. They include in particular wages of some employees, depreciation of buildings and structures, patent and licence costs, technological development and others. These are further divided into:

- Nonrecurring costs /are related to new production running-in /;
- Running costs /these depend on time - depreciation, salaries/.

In order to be utilised, nonrecurring costs need the biggest production volume possible. Running costs can be reduced by as high time capacity utilisation as possible. The second group includes costs that do not vary in their total only within a certain production volume. They incur by production of the first product, the next production does not require increase of fixed costs. Should the limit of production capacity be exceeded, the fixed costs will also change, but not gradually. These costs are called relative fixed costs. They represent a one-time increase of some fixed cost elements that are needed for removal of narrow profiles in the total production capacity and prevail in the total volume of fixed costs.

The level of utilisation of production capacity is directly influenced by rate of fixed cost utilisation. The minimum of fixed costs per a performance unit will be reached at full utilisation of fixed costs. However, this does not occur often in practice, thus the fixed costs are usually not fully utilised either. Here we can divide fixed costs to exploited and free costs. Free fixed costs incur in every company due to disproportions among individual capacities. They should be reduced as much as possible because they make economic results in the company worse. This is reached in particular through compensation of free fixed costs with saving of variable costs. The share of fixed costs in the total costs increases with growing activity concentration, mechanisation, automation and others. (Chodasová, Z, 2012;). Individual items of fixed costs are calculated as follows:

$$N_{fv} = (V_k - V_0) \times N_f : V_k$$

$$N_{fy} = V_0 \times N_f : V_k$$

N_F - Total fixed costs

N_{fv} - Free fixed costs

N_{fy} - Fixed costs exploited

V_0 - Planned volume of performances

V_1 - Actual volume of performances

V_k - Time and performance capacity of means of transport

PROGRESSIVE CLASSIFICATION OF COST FOR DECISION-MAKING NEEDS

The most decision-making tasks are aimed at solution of problems about change of volume and assortment of carried out performances, amount of costs, revenues and profit. The well-known method of critical point (zero point, break-even point), or international description CVP proceeds from abbreviations **Cost** – náklady, **Volume** – objem, **Profit** – zisk. It works with classification of costs to fixed and variable ones, such as already described in this paper. If the subject is decision-making from several alternatives, this cost classification needs to be extended by following views of costs (Chodasová Z., Tekulová, Z. 2013).

The subjects of decision-making in the company are different material scopes of activity and their alternatives. Therefore, every task needs to be allocated such information on costs and revenues that correspond to the content and extent of the problem being solved where these are **relevant costs and revenues in terms of the decision concerned**.

Decision-making is connected with valuation and choice among alternatives, of which one (optimum) should be carried out in the future. Consequently, it is characteristic for relevant (influenceable) costs and revenues:

- They are related to the given decision and represent future cash flows;

- They differ in individual alternatives.

Relevant costs and revenues correspond to following characteristics: sacrificed economic sources, expected economic effect, transferability to money. These characteristics are consistently respected in the accounting, too. Hence, the base for determination of relevant costs and revenues are data on **actual, real costs and revenues** as captured in the accounting. The managerial accounting takes over these data, sorts and processes them with regard to their relevancy (susceptibility to influence) at decision-making. The basic purpose of relevant costs and revenues is to express the difference among alternatives that are subject of decision-making. Qualification of these differences for two alternatives leads to quantification of difference (differential) costs and revenues facilitating the choice of optimum alternative based on „bigger – smaller“ valuation or prioritizing „better – worse“. Thus, difference (differential) relevant costs or revenues become the base for valuation in cases of introduction of changes when one alternative replaces another one (Kupkovič, M. et al., 2002).

On the contrary, in terms of decision-making, **irrelevant costs (revenues)** are uninfluenceable, i.e. remain unchanged at any decision, or have the same level at each alternative. For instance, when we know the standard material consumption of a concrete product, and decide to produce it, no alternative (of changes of product's production volume) will change its amount per one product. A separate group of irrelevant costs are such costs that need to be „taken over,, on the unchanged scale. This refers primarily to long-term invested fixed costs, the level of which was decided in the past period (tangible assets and depreciation posted to them). We cannot change them by any other decision; they are therefore called deadweight (sunk) costs. In practice we are not allowed to carry out all possible alternatives, but only one of them. Consequently, the chosen alternative consumes all the potential economic resources and makes it impossible to carry out other opportunities. In order to accept alternatives with the highest effect, alternatives with a lower effect need to be rejected. Therefore, possible alternatives need to be valued first.

Opportunity costs (costs of opportunity) are characterised as „lost revenues,, which a company is losing therethrough that a certain alternative cannot be carried out by capacity reasons. The category of opportunity costs is applied mainly in decision-making on optimisation of assortment of carried-out performances in particular when the company is limited in sources, (e.g. limited possibility to purchase imported material, at limited capacity of special production equipment, etc.). Methods of net present value, profitability index and internal rate of return, used in decision-making on long-term investment projects, are also based on the category of opportunity costs (Tokarčíková, E., Poniščiaková, O., Litvaj, I. 2014).

One of the important forms of relevant costs and revenues with utmost importance for valuation of economic processes and decision-making are **incremental costs and revenues**. They arise by further cost incurrence and realisation of revenues and continue directly on the reached level (comparable base). According to the extent, there are distinguished:

- Total incremental costs (revenues) that represent aggregate quantities obtained by comparison of the final status with the previous status. These are differences arising in consequence of uninterrupted continuation of the relevant activity, to which corresponds also the mathematical method of their determination. That is why, they are sometimes referred to as differential costs and revenues;
- Unit incremental costs (revenues) are connected and quantified for every further performance unit. They are also indicated as limit, marginal costs.

The incremental costs play an important role in short-term decision-making when a part of the total costs can be held for irrelevant. It is then assumed that only variable costs will act as incremental costs, and each revenue exceeding them helps to make a profit increment.

Importance of costs in the enterprise:

- **Costs are a synthetic indicator of quality of business unit work.** They express quantity of consumed materialised and particularly living labour with such accuracy, with which prices express consumption of company production factors. Despite different valuation of product manufacture qualities of goods with prices, the costs characterize best the consumption of production factors and efficiency level and reflect changes of structure of consumed work;
- By monetary expression of consumption of production factors, they **quantify qualitatively different consumption of work, whereby they enable to compare it.** It is possible only by means of costs to quantify how much production and realisation of a certain product costs;
- The cost level is **mirror of how economically a company uses working, material and financial resources** and makes it possible to value the efficiency of the major part of the company activity. Therefore, they are an important management tool;

- **Costs are criterion of economic efficiency.** Company departments are interested in cost reduction because opposing tendencies could cause financial distress for them;
- **Costs are the base for pricing.** Thereby, they are interesting not only for enterprise management, but also for internal in-house management. Costs and prices influence each other. Not only do costs have impact on prices, but prices have impact on the level of costs as well (by prices of inputs into the company transformation process).

COST MANAGEMENT PROCEDURE

The costs are financial expression of consumption of the company's production factors. To manage the costs we need to know more than just their total amount. Cost management seeks to change the course of implementation of the shipping activity so that the costs decrease, with subsequent search for the means and sources to reduce them in the future. This can be achieved if the company has a developed cost management procedure. Scientific research has confirmed that the use of modern methods of process management makes it possible to improve the performance. (Ďurišová, M., 2011)

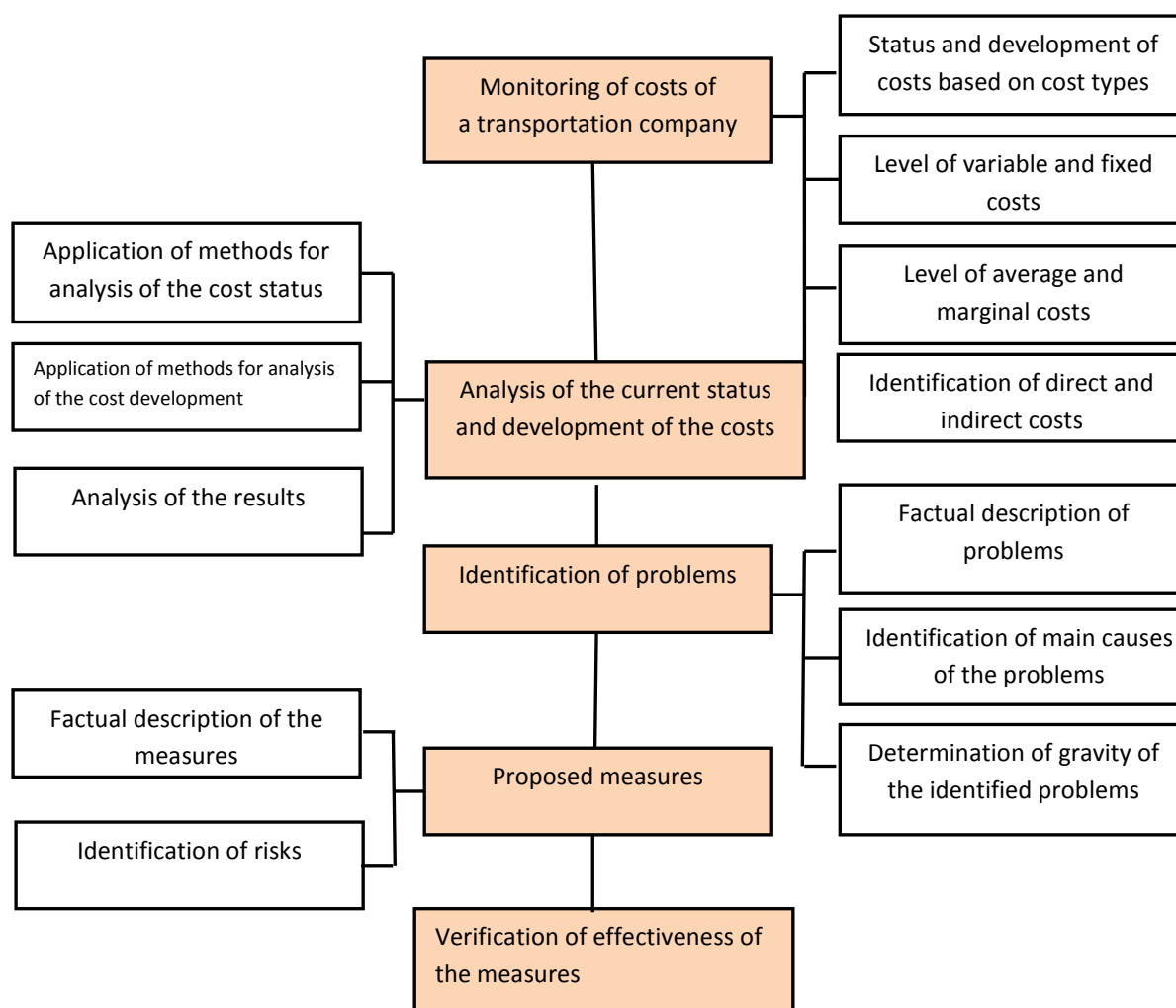


Diagram 1 Costs management procedure in a transportation company

The diagram 1 shows a general and comprehensive cost management procedure which can be adapted to specific conditions of a company. Transport means moving of people, goods, energy and messages in space. Moreover, we need to differentiate between shipping and transportation processes. Shipping means meeting of a request for relocation. Transportation means movement of transportation means on transport routes, method of organization and its management resulting from the shipping implementation. Shipping is a service the basic parameters of which (shipping quantity, time, direction) are determined independently of the carrier that uses its production factors to perform the shipping.

MONITORING OF COSTS OF A TRANSPORTATION COMPANY

Monitoring of costs of a transportation company includes determination of the actual status of the costs. The sources include the profit and loss account and the company records. Subsequently, it is necessary to create groups of costs with specific characteristics. They are represented by individual types of costs, such as fixed and variable costs, average and marginal costs and, last but not least, direct and indirect (overhead) costs. The types of costs in transportation companies are primarily the consumed fuel and lubricants, energy, repairs and maintenance of transportation means, wages and other personnel costs, road tax, toll fees, property tax, depreciations of transportation means and other fixed assets. Fixed costs of a transportation company include depreciations, management salaries, heating costs and administrative costs, while variable costs include consumed fuel, wages of drivers, repair and maintenance costs. Direct costs are those with a defined standard consumption (consumption of fuel, oils, tires, wages of drivers) while indirect costs are recalculated per shipping performance (operational and administrative overheads). Average costs are determined as a ratio of the overall costs on all types of shipping performances and their volume. Marginal costs are additional costs incurred as a result of additional shipping performance. Examples of monitoring of costs are provided in tables 1 and 2 which contain costs for 3 categories of vehicles in a transportation company (Ďurišová, Kucharčíková 2014).

Table 1 Average unit costs

Vehicle type (category)	N_f v [EUR]	N_{vj} v [EUR]	Actual volume of performance on average (V)	N_{pj} [EUR]
Under 3.5 tons	9 167,98	0,19	120 971 km	0,266
Under 7.5 tons	11 860,76	0,31	129 493 km	0,402
Over 7.5 tons	14 614,51	0,59	103 829 km	0,731

The course of the variable unit costs differs depending on the type of dependence on the performance volume. They are determined as a ratio of the overall costs and the volume of performances:

$$N_{pj} = \frac{N}{V} = \frac{N_f + N_v}{V} \quad (1)$$

here N_{pj} - average unit costs (EUR/km); N - overall costs; N_f - total fixed costs (EUR); N_v - total variable costs (EUR); V - volume of performances.

More accurate results can be achieved with marginal costs which express the costs that would not have been expended if the additional performance had not been implemented. They can be calculated with the following formula:

$$n_m = \frac{\Delta N}{\Delta V} \text{ then } N_x = N_f + (V_x \times n_m) \quad (2)$$

here n_m - marginal costs (EUR/km); V_x - volume of the specific shipping performance (km); N_f - fixed costs (EUR); N_x - overall costs of the specific shipping performance (EUR).

Table 2 Marginal costs

Type of vehicle (category)	N_f [EUR]	ΔN [EUR]	ΔV [EUR]	n_m [EUR]
Under 3.5 tons	9 167,98	32 662,17	120 971 km	0,266
Under 7.5 tons	11 860,76	51 797,2	129 493 km	0,402
Over 7.5 tons	14 614,51	75 795,17	103 829 km	0,731

In case of a proportional dependence the marginal costs equal the variable unit costs. One of the functions of the shipping price is to compensate the incurred costs and to provide reasonable profit to the carrier. This requirement, however, does not mean that every single shipping must be profitable but that the receipts of the company must in the long term cover the production costs and provide reasonable profit (Gnap, 2008, p.15).

ANALYSIS OF THE CURRENT STATUS AND DEVELOPMENT OF THE COSTS

When analyzing economic phenomena, attention is paid to differentiating factors. They are not always structural elements, e.g. when analyzing the overall costs attention is paid to individual components of the costs, such as costs of material, wages, depreciations, as well as factors which caused the costs and their size, i.e. the volume of performances, assortment structure, price of inputs, sales price.

An analysis of the identified current status and development of the costs is based on application of suitable methods which have been summarized in table 3.

Table 3 Methods for analysis of the status and development of the costs

Methods for analysis of the current status of the costs	Methods for analysis of costs development
<ul style="list-style-type: none"> • Method of the level of utilization of fixed costs, • Method of relative saving or exceeding of fixed costs, • Method of monitoring of capacity and consumption deviation • Method of comparison of average variable unit costs and marginal costs, • Method of determination of critical volume of performances. 	<ul style="list-style-type: none"> • Cost intensity of shipping, • Monitoring of costs based on indexes, • Operating lever, • Methods focused on examination of impact of factors on the costs - price, shipping volume, assortment, fixed and variable costs.

As an example we present in the Table 4 application of the method of comparison of average variable unit costs and marginal costs for the category of vehicles up to 3.5 tons. The maximum shipping capacity has been determined at 172 800 km per year.

Table 4 Comparison of average unit and marginal costs

Volume of performances [km]	Variable costs [EUR]	Overall costs [EUR]	Costs per 1 km using the marginal costs [EUR]	Costs per 1 km using the average costs [EUR]
0	0	9 167	0,266	0,266
100 000	18 900	28 067	0,281	
110 000	20 790	29 957	0,272	
120 000	22 800	31 967	0,266	
120 971	22 984	32 151	0,266	
130 000	24 830	33 997	0,262	
140 000	27 202	36 369	0,260	
172 800	35 268	44 435	0,257	

The overall costs during various performances over the year calculated based on overall average costs are constant. It is obvious that there are some distortions at lower volumes of performances because the fixed costs are not well included. The method is simple and it is suitable for performances which are near the shipping capacity. To determine prices in a transportation company it is reasonable to prefer the marginal costs method at various levels of shipping performances.

IDENTIFICATION OF PROBLEMS IN COSTS OF A TRANSPORTATION COMPANY

Based on implemented parts of the cost management procedure one can identify a number of problems in the concerned area. They include particularly:

- increase of the individual cost types - consumption of fuel, increase of wage costs without an adequate increase of labor productivity, growing costs of services,
- exceeding to the set limits for the individual cost types, which had been determined with regard to the growing prices,
- decrease of shipping economy,
- negative deviations from the consumption standards,
- failure to reach the critical volume of shipping,
- failure to ensure funding for payment of fixed costs,
- increase of the level of limit costs,
- etc.

Due to the analysis of the value of the shipping process many of the identified problems are interconnected and are mutually conditional.

Proposed measures to reduce the costs

The proposed measures are supposed to address the problems identified above. They may include:

- Utilization of the shipping capacity and specification of the optimized assortment of shipping performances (dominant representation of shipping relations with lower costs per 1 km at the expense

of more expensive shipping relations); to a lesser extent, it is also possible to address utilization of current assets.

- Acquisition of modern vehicles and technologies can be used by transportation companies as a method to reduce costs by modernization of transportation means, replacement of the existing transportation means with technically more advanced vehicles, with better fuel economy, improved technology (new methods of technology application, the work and the work sequence, utilization of transportation means).
- Improvement of organization and management by adapting working hours in a work week to customer needs, which will have an effect on usability of fixed costs, paying attention to optimization of transportation routes for shipping relations.
- Reduction of fuel consumption by using the shortest route, economical driving, good technical condition of the vehicles. Poor technical parameters of the vehicles lead to higher fuel consumption

CONCLUSION

Costs of a transportation company influence its economic results. Shipping is a service the basic parameters of which (shipping quantity, time, direction are determined independently of the carrier that uses its production factors to perform the shipping. Costs are the financial expression of the consumption of company's production factors. The input for decision-making about the shipping performance is the comparison between its costs and proceeds. Following the implementation of monitoring measures it is necessary to verify their effectiveness after a certain period of time. The verification of effectiveness of the measures should be ideally performed by a repeated analysis of the current status and development of the costs, in the same scope and with the same methods to be able to compare the old and new results

The cost management focuses on a change of implementation of the shipping activity so that the costs decrease, with subsequent search for the means and sources to reduce them in the future. This contribution points to the fact that cost management in a transportation company is efficient if approached in a comprehensive manner. The approach includes development and breakdown of a cost management procedure. It includes monitoring of the costs, analysis of the current status and development, identification of problems, proposed measures and verification of their effectiveness.

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IMPROVED LEARNING THROUGH INTERACTIVE VIDEO MINI-LECTURES IN ECOLOGY

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ABSTRACT

The use of educational multimedia resources, such as video mini-lectures, can effectively enhance learning due to increasing student engagement and knowledge retention as a result of multisensory stimuli. The incorporation of interactivity in these resources strengthens learning, as it allows students to play an active role in receiving and processing information, improves problem-solving skills and provides immediate feedback.

The aim of this study was to design and make interactive video mini-lectures for the Ecology subject of the Environmental Sciences Degree using the EDPuzzle tool. EDPuzzle is a free online tool that allows users to edit videos and to embed questions (open-ended or multiple-choice). In this study it has been recorded 3 videos (5-10 minutes length) using Captivate and Camtasia, and in each video were included at least 2 quizzes with 5 multiple-choice questions. These videos were focused on exposing concise concepts of a greater difficulty, and as well, the resolution of exercises and examples concerning Ecology.

The EDPuzzle tool allowed the authors to implement interactivity in their previously created multimedia resources through the questions embedded at different moments of the video, providing immediate feedback after clicking the chosen answers. Those questions had been set up so that students must solve each question or problem raised in the process if they want to continue watching the video. The interactive variable incorporated to the video reduces the passivity of the students and confers a greater participation, what contributes to their autonomous learning. Pauses made during video visualization in order to reflect and to interpret the explanations or the information will allow to gradually increase the understanding of the theoretical contents and the capacity to solve related problems.

INTRODUCTION

This work belonged to the Educational Innovation Project “Development and integration of interactive materials as a methodological strategy for the improvement of the teaching-learning process in subjects of the Degree in Environmental Sciences”, in which it was proposed the design and development of several digital multimedia dynamic and interactive materials using different computer programs.

Nowadays, practically all university institutions have implemented an educational platform or LMS (Learning Management System), such as Blackboard, WebCT, Moodle...to support learning. As well, the proliferation of numerous electronic devices, such as mobiles, tablets, etc., which are used massively and are ubiquitous in all aspects of life, has meant a real social revolution. These systems are firmly settled in the behavior habits of the society and should be incorporated into learning. This is of particular relevance in universities with distance methodology such as UNED (National University of Distance Education of Spain), where technological aspects become more important as these institutions develop all their teaching through e-learning platforms.

Multimedia is one of the best educational techniques because it provides different stimuli to students, as it addresses more than one sense simultaneously (sight and hearing), including elements such as texts, spoken words, sound and music, graphics, animations and still pictures (Aloraini, 2012). The creation and incorporation of this type of high-quality multimedia materials has developed slower in the University than in other education

levels, despite the fact that there are research studies that have reported that students prefer to use audiovisual materials to strengthen the contents of the subjects they are studying (Arrieta and Rayón Encinas, 2015). In this regard, it has been demonstrated that the use of these educational resources manages to increase learning satisfaction due to positive factors, such as a greater mental effort and the higher complexity of multimedia materials, which lead to an enhancement of information processing and contents comprehension (Chiou et al., 2015). These factors contribute to increase the effectiveness of the learning process and the active participation and motivation of students.

The Learning Technology Standards Committee of the Institute of Electrical and Electronics Engineers (IEEE) defines a learning object as "any entity, digital or non-digital, that may be used for learning, education or training (IEEE, 2002). Learning objects are fundamental elements that can increase and improve the effectiveness of learning, and have a special relevance to e-learning (Cohen and Nycz, 2006). Among the Digital Learning Objects (DLO) that can be elaborated to include in multimedia materials are videos, whose positive effects on teaching-learning process have been reported in numerous studies (Green et al., 2012; Morris and Chikwa, 2014; Escolástico et al., 2014).

However, despite the great potential of these digital educational resources, they may also present some shortcomings. Therefore, the incorporation of interactive elements in video mini-lectures can increase learning efficiency because they require a more active participation by students by playing an active role in receiving and processing information (Evans and Gibbons, 2007; Zhang et al., 2006). The term interactivity includes interactions between students, with the tutor or with the teaching material itself; in the context of multimedia materials there are interactions between the student and the computer system, which requires some input from the learner, such as pressing a button or answering a question by clicking on one of a number of options (Evans and Gibbons, 2007). In video- and computer-based materials, it has been suggested that interactivity make easier for students to revisit specific parts of the environments to explore them in depth, to test ideas and to receive feedback (Domagk et al., 2010).

There are currently numerous tools (EDpuzzle, eduCanon, TED-Ed, HapYak, etc.) that bring interactivity to multimedia materials (Baker, 2016). EDpuzzle is a free online tool very easy-to-use that allow video editing. It allows the user to search for video content from multiple sources (YouTube, Vimeo, Khan Academy, Crash Course, etc.), or the teacher may upload his own video created with several computer programs (for example, Camtasia or Captivate). It is also possible to include those edited videos in several e-learning platforms, such as Moodle, Blackboard, WebCT, Canvas or aLF. Edpuzzle also allows to crop these videos, in order to show only the section that the teacher wants students to watch, and as well, the user can insert audio and quizzes onto them.

Thus, in this work EDpuzzle was selected in order to add interactivity to video mini-lectures previously designed and created by the authors for the Ecology I subject of Environmental Sciences Degree, given the ease of this tool and the great amount of interesting functionalities it possesses, as well as its capacity to create high-quality videos.

MATERIALS AND METHODS

The methodology used for the design and elaboration of the interactive videos created for this work mainly consists of three different stages.

In the first stage it was carried out the selection of contents of the subject Ecology I and the preparation of the script to adapt it to the length of the video. These contents were focused on exposing concise concepts of a greater difficulty, and as well, the resolution of exercises and examples concerning Ecology. After that, presentations were created through PowerPoint including images and diagrams about the contents, what served as supporting material for the videos. Next, quizzes with multiple-choice questions regarding the contents of the video and the corresponding feedback were elaborated. The questions referred to several theoretical concepts and the resolution of numerical problems.

The second stage focused on the recording of the videos though the software Captivate and Camtasia.

Finally, in the last stage it was carried out the video editing using EDpuzzle, with the insertion of quizzes to add interactivity and their corresponding feedback.

In order to use EDpuzzle, the user has to register on the web site of this tool (<https://edpuzzle.com>) (Figure 1). Once the user gets access, he has to select the video (*My contents*) to begin its editing. Although EDpuzzle allows users to edit videos from other sources (searching from YouTube or Vimeo) (Figure 2) and to incorporate other functionalities, the authors have only inserted quizzes with feedback in our videos, as was the aim of this work.

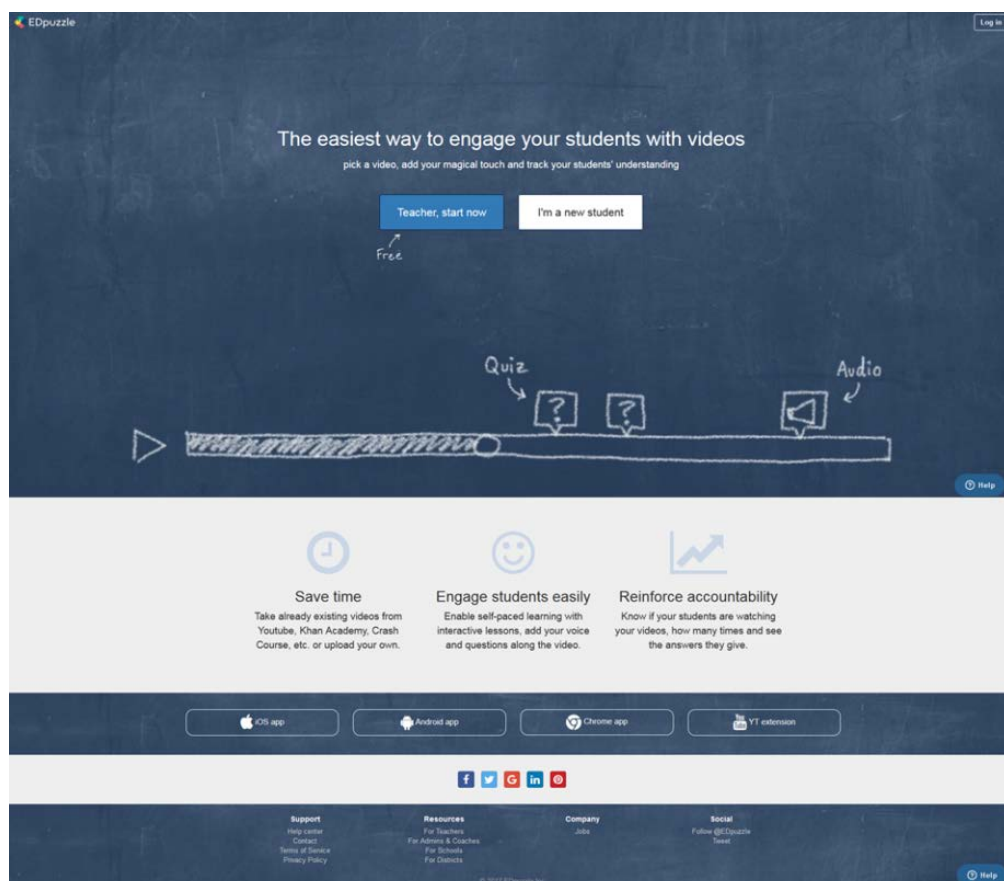


Figure 1: Home page of EDpuzzle website (<https://edpuzzle.com>).

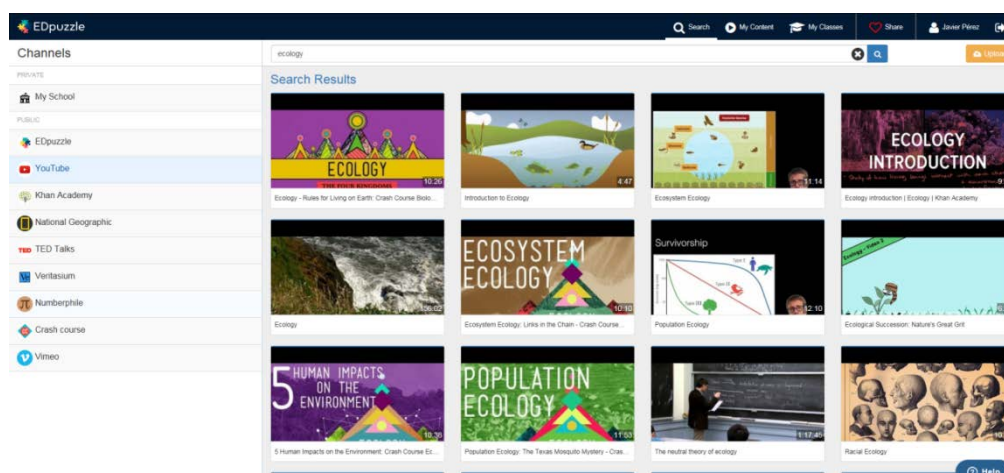


Figure 2: Search for a video from different sources.

RESULTS AND DISCUSSION

Three interactive videos of five to ten minutes length were prepared. Previously, the videos were recorded using Captivate and Camtasia, which allow video capturing from the computer screen. The contents exposed on the videos correspond to those of the lesson five (Population Dynamics) of the subject Ecology I. These contents were selected because the authors have detected in the forums of the subject a higher number of questions raised by the students on this lesson, what indicates that they have special difficulties to understand some of the concepts and to solve the problems of this lesson. Thus, scripts and presentations using PowerPoint were designed and elaborated, as well as quizzes and their corresponding feedback with the solution of each exercise. In each video at least two quizzes were inserted using EDpuzzle. These quizzes consisted of five 5 multi-choice questions and/or problems, each one with 3 possible answers, which only one was correct. It has been also included an immediate feedback, which gives an explanation of each answer to facilitate interactive learning.

The interactive video mini-lectures elaborated by the authors of this work show the progress bar at the bottom. Along this bar there are some green squares with a question mark, which indicate where are located each quiz within the video. When the video is playing and students get to one of these green squares, the video pauses and a quiz is displayed, requiring them to answer in order to continue the video (Figure 3). The student has also the chance to repeat that section of the video if is not still ready to solve the questions.

UNED Tablas de vida Ecología I

* x : Edad.
* n_x : Número de supervivientes con edad x .

1) Tabla de vida horizontal.
2) Tabla de vida vertical.

x	n_x	l_x	d_x	q_x	L_x	T_x	e_x
0	530	1.00	371	0.70	344.5	578.0	1.09
1	159	0.30	79	0.50	119.5	233.5	1.47
2	80	0.15	32	0.40	64.0	114.0	1.43
3	48	0.09	27	0.56	34.5	50.0	1.04
4	21	0.04	16	0.76	13.0	15.5	0.74
5	5	0.01	5	1.00	2.5	2.5	0.50
6	0	0.00					

$l_x = \frac{n_x}{n_0}$ $d_x = n_x - n_{x+1}$ $q_x = \frac{d_x}{n_x}$ $L_x = \frac{n_x + n_{x+1}}{2}$ $T_x = \sum_{i=x}^{\infty} L_i$ $e_x = \frac{T_x}{n_x}$

Tema 5. Dinámica de poblaciones

¿Qué parámetros son necesarios para poder construir una tabla de vida?

100/100

→ ☒ Edad y número de supervivientes en cada periodo de edad

Correcto.

☐ Proporción de supervivientes y tasa de mortalidad

Incorrecto. Para poder elaborar una tabla de vida es necesario conocer los valores de los parámetros x (periodos de edad) y n_x (número de supervivientes en cada periodo de edad), que se sitúan en las dos primeras columnas de la tabla. A partir de dichos parámetros pueden calcularse los restantes parámetros de la tabla de vida.

☐ Esperanza de vida y tiempo restante de vida

Incorrecto. Para poder elaborar una tabla de vida es necesario conocer los valores de los parámetros x (periodos de edad) y n_x (número de supervivientes en cada periodo de edad), que se sitúan en las dos primeras columnas de la tabla. A partir de dichos parámetros pueden calcularse los restantes parámetros de la tabla de vida.

En una tabla de vida, ¿qué significa una cohorte?

0/100

☐ Grupo de individuos que sobreviven hasta el último periodo de la tabla de vida

Incorrecto. En una tabla de vida, una cohorte es un conjunto de individuos de una población con la misma edad, es decir, que han nacido en el mismo periodo de tiempo. El número de individuos de la cohorte corresponde con el número de supervivientes (n_0) en el periodo de edad 0 (primera fila) de la tabla de vida.

☒ Estructura de edad de una población

Incorrecto. En una tabla de vida, una cohorte es un conjunto de individuos de una población con la misma edad, es decir, que han nacido en el mismo periodo de tiempo. El número de individuos de la cohorte corresponde con el número de supervivientes (n_0) en el periodo de edad 0 (primera fila) de la tabla de vida.

→ ☐ Grupo de individuos con la misma edad

Correcto.

Figure 3: Quiz embedded within the video.

After completing the quiz, students can submit it and receive immediate feedback; they can verify then which questions has answered correctly and which ones has failed. In addition, they are provided with a brief explanation of the incorrect answers (Figure 4).

¿Qué parámetros son necesarios para poder construir una tabla de vida?

100/100

→ ☒ Edad y número de supervivientes en cada periodo de edad

Correcto.

☐ Proporción de supervivientes y tasa de mortalidad

Incorrecto. Para poder elaborar una tabla de vida es necesario conocer los valores de los parámetros x (periodos de edad) y n_x (número de supervivientes en cada periodo de edad), que se sitúan en las dos primeras columnas de la tabla. A partir de dichos parámetros pueden calcularse los restantes parámetros de la tabla de vida.

☐ Esperanza de vida y tiempo restante de vida

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0/100

☐ Grupo de individuos que sobreviven hasta el último periodo de la tabla de vida

Incorrecto. En una tabla de vida, una cohorte es un conjunto de individuos de una población con la misma edad, es decir, que han nacido en el mismo periodo de tiempo. El número de individuos de la cohorte corresponde con el número de supervivientes (n_0) en el periodo de edad 0 (primera fila) de la tabla de vida.

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→ ☐ Grupo de individuos con la misma edad

Correcto.

Figure 4: Feedback with explanations of each answer. On the left a correct answer; on the right an incorrect answer.

CONCLUSIONS

The EDpuzzle tool managed to enrich video mini-lectures previously created by the authors through the insertion of quizzes with feedback, converting them to interactive didactic resources. These DLO can be implemented on e-learning platforms, such as Moodle or aLF, as well as on web sites.

The main advantage of this type of interactive resources is that it not only improves attention and motivation of students during the video, but also it facilitates their autonomous and flexible learning. As well, these resources can contribute to the solution of numerous specific questions, what could lead to faster and more efficient advances in the teaching-learning process.

Although it has not been studied in this work, further research should be done on other possibilities offered by the EDpuzzle tool, since it allows to create virtual classes and to track the progress of the students: providing data about the time spent by students watching the video and their answers and grades in each quiz (Figure 5). The analysis of these data would help the teacher to find out the main difficulties in the subject and consequently, to design new activities for the students.

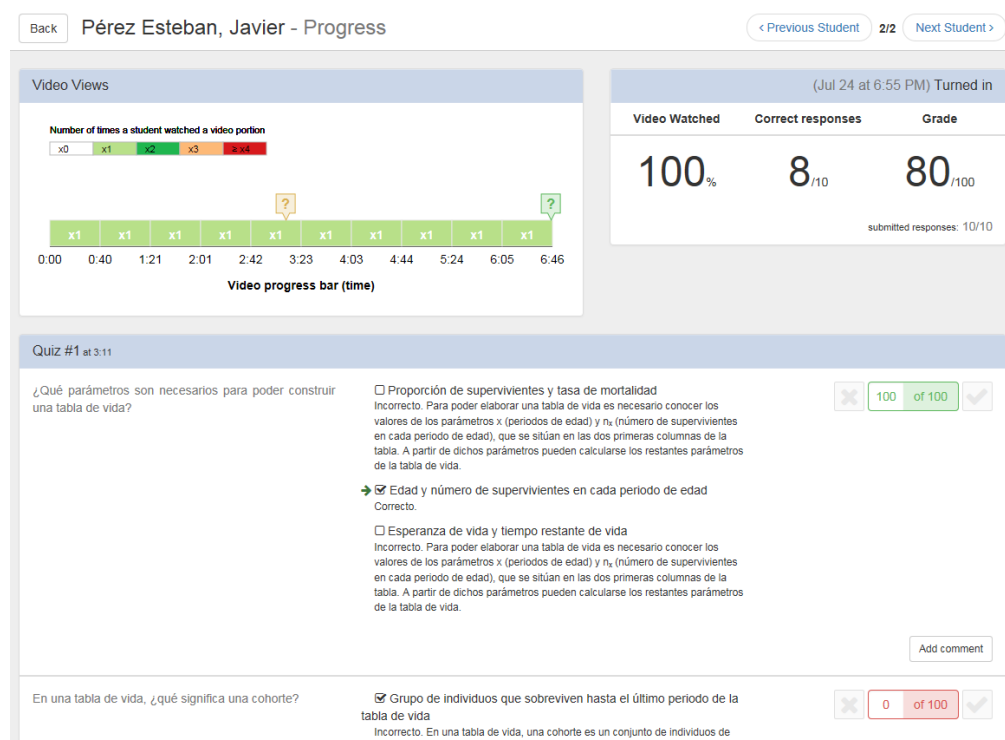


Figure 5: Tracking the progress of students.

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(IN)COINSISTENCY BETWEEN THEORY AND PRACTICE IN THE VIEW OF TEACHERS-PRACTITIONERS AND TEACHERS-THEORISTS

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Abstract: The article reflects the current situation in educational theory and practice, in which a significant disproportion between theory and educational reality in schools appeared so as the lack of methods complying with the requirements of the Framework Educational Program and gaps in the knowledge base of nursery and primary schools teachers, which stems from their ignorance of the curriculum and functional vocabulary. A study based on research and theoretical essay analysis identifies and seeks the causes of discrepancies between theory and practice. It looks at whether there is a direct correlation between changes in curriculum and practice, and whether the skew of theory and practice is also reflected in the training of future teachers. Results of the research have provided the basis for drafting the project OP RDE engaged in building a network of schools and creating a collegial peer training centres, ideological platforms that bring together practitioners and theorists.

Keywords: Curriculum, educational theory, Framework Educational Program, inclusion, pedagogical practice

INTRODUCTION

The relation between theory and practice is old but it becomes topical and more discussed in the current conditions of rapid social changes, information and communication technologies and also in curricular reforms and the transformation of education. The old adage *primum vivere, deinde philosophari* (first live, then philosophize), is still valid and applies to the educational process (cp. Falque, 2016; Adorno, 2008; Novak, 2010). Like in other areas of life, it is however necessary to analyze, measure, examine and compare the practical approaches and based on the results of these investigations to deduce generally valid theoretical conclusions. The impetus for the study of issues related to pedagogical theory and practice was the awareness of a growing and deepening tension between teachers-theorists (academia) and teachers-practitioners, which is enhanced due to the ongoing transformation of the current curriculum, the so called main educational pillars which also corresponds with the content of text books.

The most recent change affecting the practice in schools, at present, is mainly the correction of Framework Educational Program for Basic Education (FEP) due to the incoming joint (inclusive) learning trend (Janík, 2005; Vlčková, 2010). What most common shortcomings, contradictions in the relationship between educational theory and practice are seen by teachers-practitioners and teachers-theorists? What is the cause of theory and practice skew? Do the curricular changes affect the educational practice? Do the teachers consider inclusion, the so called joint education of pupils and pupils with special educational needs, just as theoretical and "modern" trend of curriculum reform or, according to them, is the inclusion applicable in practice? Do the frequent changes and adaptations of curricula derogate the theory from the practice even more? We did look in the research issues from the perspective of teacher-practitioners and teachers-theorists, academics.

Skalková (1984) states that an effective putting theory into practice cannot be founded on the simplified conception that the theory can be simply transferred into practice, which passively awaits what it will bring. According to Korthagen (2001; 2011), if this process between theory and practice should be carried out efficiently and promptly, presupposes mutual communication, constant mutual interest in public discussion and the flow of information between the realization sphere (educational practice) and researchers (institutions). Science is considering how to increase the quality, comprehensiveness, timelines of new knowledge, how to speak in clear language to the sphere of use (Korthagen, 2001; Korthagen et al., 2011; Janík, 2005). Practice should be able to benefit from the innovations, listen sensitively and receive and validate new information and provide feedback (cp. Janík, 2005). One of the criteria of the ability to implement the research results is the educational preparedness and the level of preparedness of teachers (Korthagen, 2001; Korthagen et al., 2011). Maňák (2011) points out, that students of pedagogical faculties are also aware of deepening the skew of theory and practice as well as their constant mutual spacing and in contact with practice they argue for strengthening of practical and methodical readiness for the exercise of their profession.

The legacy of their view might be supported by the distress from their educational practice stemming from a lack of teaching experience and a low number of pedagogical practice tuition at pedagogical faculties or including the methodologies of field didactics, paradoxically, in upper classes (cp. Korthagen, 2001; Korthagen et al., 2011; Janík, 2005; Vlčková, 2010).

The study is based on the comparative analysis of theoretical studies and research surveys dealing with this issue. Deep analysis of educational theory and practice was carried by Shoemaker (2010), who wanted to contribute to the integration of both phenomena to improve the education. Smith (2000) focuses on theory and practice of the curriculum, which leads teachers to work with curriculum watching not only the final product but also the process leading to it and its practical application. The benefit for the concept of the teaching profession is the Terhart's (2001) manuscript. It criticizes the fact that teaching at universities is focused only on specialized subjects and emphasizes the need for practical training. He notes that teachers' professionalism is not in the traditionally strengthening of science skills, but besides that cognitive dimension, the area of social, personal and creative skills is equally important. Fresh impetus to the new solutions brings the publication of Korthagen (2001), in which the author thinks over the technical-rational model of the teaching profession, according to which the pedagogical theory should be included in the training program. Very inspiring is not only the author's conception, but also realization of teacher training, which aligns linking pedagogical theory and practice in a successful symbiosis between universities and training schools. This will return the preparation of teachers to the intentions of the former educational training institutes, to link preparation of teachers and ongoing school with the life.

INSIGHT INTO MUTUAL DETERMINATION OF THEORY AND PRACTICE

Conceptual separation of theory and practice seems according to Maňák (2011) as an accurate, clear and non-problematic. Maňák (2011) defines theory as a system of scientific principles generalizing empirical knowledge of reality, as collated knowledge, as a set of knowledge enabling to understand the context of real issues. Practice is referred to as a physical, sensory objectively purposeful activity, such as the negotiation process, act, activities that relate to various forms of human activity (cp. Korthagen, 2001, 2011; Janík, 2005 etc.). According to Maňák (2011) the importance of the information society increases demanding kinds of practices in connection with theoretical knowledge, the so called external communication, which increases the transfer of knowledge between the theoretical and the practical sphere. The relation between theory and practice in education accompanies the whole history of humanity (cp. Falque, 2016; Adorno, 2008). At the beginning (Korthagen et al. 2001), the practice aimed at survival was typically dominated.

Education took place spontaneously. The development of civilization was growing knowledge, theoretical knowledge which upgraded practical activities. With the advent of the information explosion the acceleration of knowledge and theoretical concepts increased. The school has been given an important role. Pupil started to adopt knowledge and skills by codified standards of behaviour and followed them (Janík, 2005; Vlčková, 2010). With enormous increasing of knowledge, the school focuses more on the acquisition of knowledge, so there was a lack of time for practical training in application of acquired knowledge (Janík, 2005). This will also increasingly create the gap between theory and practice. Czech authors (Janík 2005, Mandel, 1997, Slavík and Janík, 2005) conclude that the growing contradiction must be overcome by combining theoretical approaches and practical activities. Also, the current pedagogy solves the dilemma of theory and practice (it is eg. reflected in the framework programs).

CHRONIC RUPTURE OF THEORY AND PRACTICE

Variable conception of educational content and frequent theoretical controversy over the definition of subjects contribute to the tight relationship between theory and practice. Main reasons for this are the rapid pace of life, the impact of research and information and communication technologies (ICT), which ensures rapid transfer of knowledge into practice, which may not be ready to respond to them adequately. Many theorists are convinced of the necessity of certain practices in education and create a theoretical construction of what education should be like (Průcha, 2000). The drawback of these constructs is that there is no one to bring the ideal theories into practice. Theory can only get into practice when the practitioner takes the theory up and implements it (Slavík, 2003).

The practice and the theory are never consistent and departmental communication has therefore often the nature of practice criticism of and chastise of teachers. This criticism can be viewed (cp. Foucault, 1981, 1994) as an exercise of theorist's power, as the representatives of the programming field and their institutions, the so called universities, research institutes, government agencies, school inspection and others. This type of communication is causing a deepening distrust between theory and practice and their mutual skew, reflected on the side of theories by highly sophisticated publishing of articles about confusing academic problems, and to the practice of

searching for clues in the superficial methodologies with banal descriptions of manufacturing processes, easily administered, and therefore comprehensible and immediately applicable in practice (cp. Slavík, Dytrtová, & Fulková, 2010; Korthagen et al., 2011; Janík, 2005). "Chronic rupture of Practice and Theory" (Slavík, Dytrtová, & Fulková, 2010: 225) is a positive sign of dynamics of the field but also brings undesirable consequences.

The aims of this study (based on comparison of theoretical articles and simple research probe) are a) to confirm the existence of discrepancies between educational theory (curriculum) and practice; b) to identify the causes of discrepancies between theory (current curriculum) and educational practice; and c) to analyse the causes of this in the view of teacher-practitioners and teacher-theorists (academics).

Furthermore, to determine whether teachers understand the current inclusive curriculum changes and if, according to them, this "theory" is applicable in practice. Among others, we mapped the opinions of teachers-practitioners on how to evaluate the training of future teachers, the so called graduates of secondary pedagogical schools and pedagogical universities. The results will serve as material for piloting the project OP RDE "Schools as centres of peer support", which will be implemented from March 2017.

METHODOLOGY

C This research was conducted through a short questionnaire consisting of 10 closed-item questions with a choices and has been conducted in January 2017. Open items were included in order to justify choices of concrete answers. It is therefore a quantitative-qualitative research. Anonymous questionnaire of our own design was prepared for the teachers-practitioners and teachers-theorists, and distributed in hardcopy by educational institution ASTERIA, the educational centre, Ltd. as a part of the evaluation questionnaires for teacher-practitioners at the end of completed accredited educational programs for further education of teachers in Portal Publishing, Ltd. Prague. The total sample consists of 68 teachers from practice and theory. The questionnaires prepared for teacher-theorists were sent electronically and from 25 questionnaires 72% (18) returned back. Teacher-practitioners got the questionnaires on paper and the 100% (50) returned back, as they were provided personally at the training session.

Table 1: Respondents

			THE RESPONSE RATE
GROUP A	nursery and basic school teachers	50	100%
GROUP B	university workers	18	72%

Table 1: The response rate, groups A, B, 2017

The research sample A, has been consisted of teacher-practitioners respondents (i.e. teachers in kindergarten and first grade of primary schools in the Czech Republic) aged 26-56 years, with the length of practice from 2 to 32 years. The research sample B has been consisted of teachers-theorists respondents (from various universities in the Czech Republic aged 30-75 years, with the length of practice from 2 to 40 years).

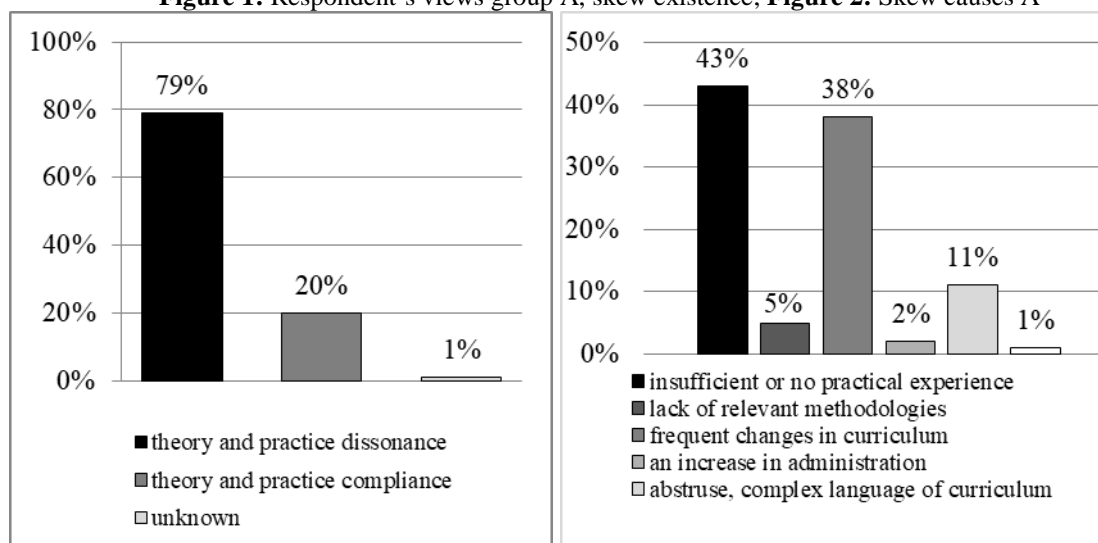
As a helping method we used the interview with teachers from both research samples. We needed to improve clarity and to specify views on the skew existence of theory and practice and on curriculum documents changes, which are mainly caused by the trend of inclusive education.

RESULTS

(In)consistency between theory and practice

According to the A group of respondents as seen in Figure 1, 20% of respondents says that the theory is consistent with the practice, 1% of respondents do not know and 79% of respondents feels that there is a mismatch between educational theory and practice. The cause of this statement they justify as follows (Figure 2):

- Inadequate or no practical experience of university teachers / theorists
- Lack of relevant methodologies suited to the needs of practice
- Frequent changes in the curriculum that cause chaos and poor orientation
- Increase of administration
- Unclear, too complex language of curriculum (where 60% of 50 respondents feel FEP as a sufficient support, but many times do not understand the terms)
- Inclusive trend causing a correction of Framework Educational Programs brings chaos and clutter to the curriculum (the idea of inclusion was supported by 51% of 50 respondents)

Figure 1: Respondent's views group A, skew existence; Figure 2: Skew causes A

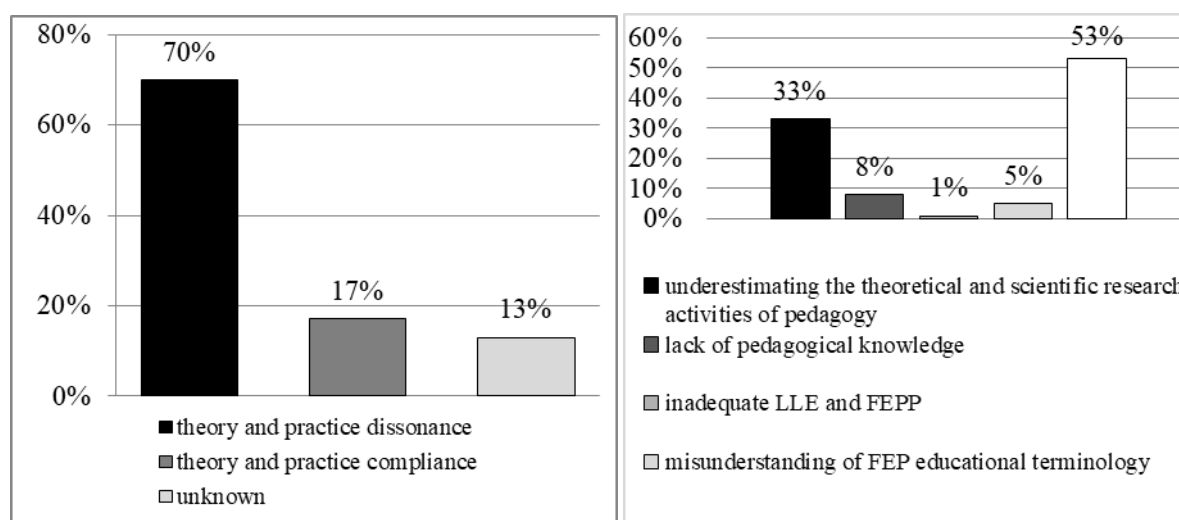
Causes of the scew between tehory and practice

It shows that the majority of respondents (teacher-theorists) from group B (almost 70% of the 25 respondents) believe that there is a skew (mismatch) between educational theory and practice. The cause of this statement they justify as follows:

- Education activities
- Lack of theoretical knowledge of practitioners
- Inadequate lifelong and further education of teachers
- Misunderstanding of educational terminology in Framework Educational Programs and failure to use a functional vocabulary
- Ignorance or disregarding of RVP, random selection of literature

Research study also showed that teachers-practitioners with educational experience up to 20 years, who constitute 65% of the total number of 50 respondents, consider the Framework educational program as educational support and mandatory curriculum document that allows the teacher to work freely and creatively, even though 80% of teachers in kindergartens and 1st stage of elementary schools use textbooks and methodologies according to their own discretion and not in accordance with the FEP recommendations. Only 2% of the 50 teachers-practitioners respondents emphasize earlier curriculum as they regard FEP to be an "abstract" and vague document. 82% of 50 teachers-practitioners respondents criticize constant changes in curriculum across the age spectrum. The idea of joint education of children and students with disabilities is welcomed by 71% of respondents from 50 teachers-practitioners, of which 58% determine the realization of joint education to be the subject for supporting measures, as adequate financial and material equipment with regard to the specific peculiarities of the educator and the necessary presence of an assistant teacher.

Figure 3: Respondent's views - group B skew existence; Figure 4: Skew causes B



DISCUSSION

Research study provided us with information on the views of teachers-practitioners and teachers-theorists on the current relationship of educational theory (curriculum) and the practice and skew causes, relationship to the curriculum and its transformations, relationship to inclusion and its possible applicability in practice.

In the context of issues of theory and practice we do indicate complementary results of the survey realized by the College of European and Regional Studies, public service company in České Budějovice in order to produce an analysis of need for realisation of OPIC project for primary and secondary school teachers "New teaching methods and use of information technologies in the realization of school education program in primary and secondary schools in the Central Region", reg. no. CZ.1.07 / 1 March 04 /01.0027 - (2009-2012) and the project "New teaching methods and use of information technologies in the realization of school education program in primary and secondary schools in the South Bohemian region," Reg. No.: CZ.1.07 / March 1, 06 / 01.0026 - (2012).

Research has shown that 84% of respondents of 100% surveyed teachers from elementary and secondary schools collectively in both regions see the biggest positives in the methodological and mainly practical training of secondary pedagogical schools graduates and emphasize their better linkage to teacher's practice than the graduates of pedagogical faculties. 73% of respondents of 100 surveyed teachers from primary and secondary schools notes, that graduates of pedagogical faculties have broader theoretical overview than graduates from secondary pedagogical schools, but practical skills are lower. Therefore, graduates of pedagogical faculties attend seminars within DVPP with methodological and experiential content more often than graduates of secondary pedagogical schools. Almost 70% of respondents of 100% surveyed teachers from elementary and secondary schools see the greatest deficiency of pedagogical faculties graduates in the absence of practice. Although graduates of secondary pedagogical schools are praised for their practical skills by almost 82% of the 100 respondents, 18% of respondents criticize them for their emotional immaturity and the difficulties in communication with parents.

Based on our findings, the majority of respondents from both theoreticians and practitioners confirm the existence of theory and practice skew, which is according to practitioners caused mostly by insufficient practical experience of university teacher trainers and insufficient practical training of pedagogical faculties graduates. Another cause is the lack of relevant methodologies, increase administration, the constant changes in the curriculum, specialized terminology incomprehensibility that is unnecessarily complicated and does not meet the needs of the practice. Inclusive education is considered to be necessary by teachers, but in terms of the Czech educational system difficult to implement, and if so, then only with strong material, financial and personnel support. These results coincide with a survey conducted by Agency for Market Research and Public Opinion IPSOS, which took place in August 2015 and involved 4,000 teachers. Respondents-theorists see the causes of theory and practice skew in underestimating of pedagogical research activity, in lack of theoretical and methodological knowledge of teachers in practice and in misunderstanding the content and language of educational programs. They also criticize the random selection of scientific literature that is recommended by FEP.

Almost identical results are presented in a study carried out by Šobánková (2011) analyzing the problem of the teacher and his knowledge of the curriculum. Exaggerated disproportion between educational theory and practice in schools is mainly caused by the lack of knowledge of curriculum, terminology and functional vocabulary. This is also confirmed by Bruckner (2011) who argues that teachers do not read FEP and do not use it. Moreover, both also point out to the lack of using literature recommended by FEP. In line with Hazuková (2005), our results suggest that teachers perceive and use the RVP as educational support, but they collect literature at their own discretion. sees the current problem in poor implementation of theoretical knowledge into practice and related skew of both areas, and gaps in the knowledge base for teacher's training. Although there is no great amount of research related to the survey yet, we can still use the comparative survey of a wider range of curricular reform at grammar schools, which, among other things, examine the familiarity with the curriculum (Janík et al., 2010: 28). The research has included all of approbation and the differences between them have been proved as relatively small. According to respondents' subjective estimation, the level of their familiarity with reform plans appeared to be slightly above average. The authors point out that the answers might certainly be distorted by the so-called social desirability of a positive response. As a positive they consider the effort to implement inclusive education.

CONCLUSION

The aim of this contribution was to identify and analyse the discrepancies between theory and practice (and their causes) in the view of teachers-theorists and teachers-practitioners. Results of the research will be used for implementation of the project "Schools as centres of peer support" within the calls OP RDE, which encourages mutual learning and exchange of experiences. Formation of methodological materials and their piloting verification will become the basis for subsequent correction of FEP. Research surveys, realization of discussion platforms, workshops and meetings of theorists, methodologists and practitioners, as well as analysis of theory and practice separation causes are becoming major issues in the educational environment and will help approximation of theory and practice.

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IN THE FOOTSTEPS OF DE LA SALLE: ON BECOMING A LASALLIAN EVALUATION OF THE CONDUCT OF THE INTRO TO LA SALLE AND CONTEXTUALIZATION AND LIVING OUT THE LASALLIAN GUIDING PRINCIPLES SESSIONS FOR ALL INCOMING FIRST YEAR AND SECOND YEAR STUDENTS OF DELA SALLE HEALTH SCIENCES INSTITUTE, SY 2016-2017

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ABSTRACT

This program endeavoured to integrate the Life of St. John Baptist De La Salle in the De La Salle Health Sciences Institute curriculum and contextualize and live out the Lasallian Guiding Principles. Specifically, it aimed to: (1.) Orient the incoming freshman and sophomore students about the life of Life of St. John Baptist De La Salle and the existence of the LGP; (2.) Involve all incoming freshman and sophomore students in the discussion of the Lasallian Guiding Principles through the different programs, team building activities and individual/group presentations and sessions; (3.) Contextualize and live out all lessons learned from the discussion on the life of Life of St. John Baptist De La Salle and conduct Lasallian Guiding Principles; and (4.) Assess/evaluate the implementation of the Intro to La Salle and Lasallian Guiding Principles sessions. The rating scores show that the conduct of Day 1-The Person Session and Day 2-The Inspiration far exceeded the expectations of the first and second year students of DLSHSI. The study also shows that the programs for Day 3-The Association, how the execution and delivery was done, how the facilitators delivered the program, were evaluated excellently. This could be attributed to the materials used during the program, the activities performed by the students and the line-up of facilitators. The excellent rating of the 7 items is a proof that the discussion of the Lasallian Guiding principles slated during Day 4-The Mission was indeed very important for the respondents and that they were all mindful of the contents and details of the said presentations. This day 4 also completed the theoretical foundations of the students vis-à-vis the presentation of their final outputs which is an advocacy video. The excellent mean score clearly shows how successful the conduct of the session had become and how the students enjoyed and loved watching their own outputs, Advocacy Video. Finally, the excellent rating for the conduct of the Intro to La Salle and the contextualization and living out of the Lasallian Guiding Principles sessions clearly shows that the Institute is responsive to the needs of the students and that the integration of such to the curriculum effects positive change into the lives of the students.

Key Words: Educational programme, Health sciences, Programme evaluation

INTRODUCTION

Lasallian is a term to describe a person who is personally fulfilling the mission set forth by Saint John Baptist de La Salle (Retrieved from <https://www.lasallian.info/lasallian-family/5-core-principles/>). Being Lasallian is faithfully based on five (5) core principles: Concern for the Poor and Social Justice; Faith in the Presence of God; Quality Education; Respect for all Persons; Inclusive Community (Rocas, 2009). Furthermore, as cited in <https://www.lasallian.info/lasallian-family/5-core-principles>, in its broadest sense, being Lasallian focuses on attitudes and views of education rather than formal structures. The Lasallian vocation to compassion, commitment and togetherness comes in various shapes and sizes. It has already done so in the course of its history, and it is set to develop completely new forms to meet the needs of today. This is the story of Lasallian Association today. Moreover, a Lasallian is one who can transform the general Christian call to discipleship into a personal vocation, living out in a specific way the call to make Christ present in the world of today (Rocas, 2009).

In an article written by Collins, T. (2001), she highlighted who a Lasallian is. According to her:

A Lasallian is someone who is personally committed to living the gospel values here and now. Being a Lasallian is one way of turning the general Christian call to discipleship into my personal vocation, living out in a specific way the call to make Christ present in the world of today. The general call becomes specific for me, because it comes to me through my personal experience: through my contacts with certain individuals who are significant in my life. In

particular, the Lasallian insight into Christian living comes through the inspiration of one man and the spirituality he developed.

The statements above clearly show the Lasallian distinct identity. Given all of these, being a Lasallian entails a lot of expectations and commitment. This involves faith, service, community, education, scholarship, transformation, compassion, excellence, commitment, and a lot more. But when do we really say we have really become Lasallians, in words and in deeds? How do we measure the Lasallianess in us? How do we manifest the Lasallian Core Values? What guides us in the Lasallianization process? This has become the foremost purpose of the introduction of the Lasallian Guiding Principles of the Philippine Lasallian Family which contain the fundamental guiding principles that the De La Salle Philippines follows as it strives to live out the Lasallian Mission in the Philippines. This is composed of three (3) documents, the Foundational Principles of Lasallian Formation, the Principles of Lasallian Education in the Philippines, and the Principles of Lasallian Social Development which are products of an ongoing effort to define and clarify the nature of the Lasallian presence and mission in the country today (Retrieved from: <http://www.dlsu.edu.ph/inside/lasallian-guiding-principles/default.asp>).

THE STUDY

As clearly stipulated in the document about the Lasallian Guiding Principles, these are the direct result of resolutions passed during the First Lasallian Family Convocation of 2003 calling for the strengthening of the sense of Lasallian identity and the deepening of the Lasallian charism among individuals and institutions in the Philippine District. Each of these statements builds on three (3) values which are fundamental to Lasallian identity: the spirit of faith, zeal for service and communion in mission. Furthermore, the intent of each of the three documents is to articulate the commitments that flow from these values in relation to the training and formation of Lasallian associates and partners, the conduct of the Lasallian educational mission in schools and the socio-political involvement of the Lasallian Family.

In its truest sense, all Lasallian educators are considered formators by virtue of their participation in the Lasallian experience of education and formation as highlighted in the LGP manual. Moreover, those who enable persons to acquire vision, values and practices through activities initiated by the campus ministry, social action, guidance counseling, and Lasallian Family offices are considered in a more formal sense as Lasallian formators.

Today, the mission of human and Christian education is a wide ranging collaborative effort entrusted to men and women of diverse backgrounds and gifts, who, in creative fidelity to De La Salle's Vision, commit themselves to making the benefits of a transformative human and Christian education available to all, most especially to the poor. Each member of the Lasallian Family lives out this commitment through association in a Lasallian educational project according to his or her particular role and area of competence. By our efforts to ensure the vitality, relevance and effectiveness of the educational project, all who participate in and support such work act as partners in the educational process (Retrieved from: <http://www.dlsu.edu.ph/inside/lasallian-guiding-principles/default.asp>).

Education is viewed here as a collaborative effort that involves teachers, administrators, students, auxiliary staff, alumni, parents, and supporters committed to furthering the Lasallian Mission. Collaborating together in a spirit of fraternal solidarity, these groups constitute a community that incarnates and expresses human and Christian values, particularly those of faith, zeal for service and communion. Such a community educates and forms both by way of its curricular offerings and by the quality of its communal life (LGP, 2009).

This program endeavored to integrate the Life of St. John Baptist De La Salle in the DLSHSI curriculum and contextualize and live out the Lasallian Guiding Principles.

Specifically, it aimed to:

1. Orient the incoming freshman and sophomore students about the life of SJB DLS and the existence of the LGP;
2. Involve all incoming freshman and sophomore students in the discussion of the LGP through the different programs, team building activities and individual/group presentations and sessions;
3. Contextualize and live out all lessons learned from the discussion on the life of SJB DLS and conduct LGP; and
4. Assess/evaluate the implementation of the Intro to La Salle and Lasallian Guiding Principles sessions

DAY 1-THE PERSON (background of the program/objectives, De La Salle Philippines and De La Salle Health Sciences Institute in focus (structure and people and functions), Vision-Mission-Values-Creed of DLSHSI, the lasallian prayer, and sharing of expectations)

DAY 2-THE INSPIRATION (life of SJBDLS, video presentations, discussion of the expected output of the students, and workshops/individual/team building activities)

DAY 3- THE ASSOCIATION (who is a lasallian?, who is a la salle student?, the kind of life that a la salle student should have in dlshsi, what is expected of a dlshsi student?, the things that a la salle student shouldn't do, and workshops/individual/team building activities)

DAY 4-THE MISSION (the lasallian guiding principles, video presentations, living out and contextualizing the lasallian guiding principles, and workshops/individual/team building activities)

DAY 5- THE CELEBRATION (sharing/reflections/processing/evaluation, final presentation of output and recognition ceremonies)

This study utilized the descriptive research survey technique. A survey is a non-experimental, descriptive research method. Surveys can be useful when a researcher wants to collect data on phenomena that cannot be directly observed (such as opinions) (<http://www.gslis.utexas.edu/~palmquis/courses/survey.html>).

A survey is a means of gathering information about a particular population by sampling some of its members, usually through a system of standardized questions. It can be conducted by mail, telephone, personal interview or internet. It can be administered either to individuals or groups. Questions may be related to behaviors, beliefs, attitudes and/or characteristics of those who are surveyed. The aforementioned research technique was employed in this study considering that the purpose of a survey is to elicit information which, after evaluation, results in a profile or statistical characterization of the population sampled.

(<http://www.fairfaxcounty.gov/demogrph/pdf/questionnairedesign.pdf>).

The study used the incoming freshman and sophomore students for a total of 1,303 from the seven (7) colleges of the Institute namely: College of Humanities and Sciences, College of Pharmacy, College of Medical Laboratory Science, College of Nursing, College of Rehabilitation Sciences, College of Medical Radiation Technology, and College of Medicine, as respondents of the study. The students were all required to attend the 5-day session.

Data for this study were collected with the use of a researcher-made and validated survey questionnaire. The questionnaire is a structured technique for collecting primary data in a marketing survey. It is a series of written or verbal questions for which the respondents provide answers (Quick MBA, Marketing, Knowledge to Power Your Business/www.quickmba.com/marketing/research/design/2008).

A self-made survey-questionnaire was prepared by the researcher and validated by the pool of facilitators and formators who volunteered to facilitate the conduct of the Intro to La Salle and LGP sessions. It was pilot-tested to the College of Humanities and Sciences and had undergone reliability testing using the Cronbach's Alpha in which the alpha coefficient for the 39 items is 0.848, suggesting that the items have a good internal consistency.

Based on the items contained in the questionnaire, the questions were grouped according to the following: The Person with 8 items; The Inspiration with 8 items; The Association with 7 items; The Mission with 11 items; and The Celebration with 5 items. Commendations and recommendations relative to this were also noted. This study used a 5-Point Likert Scale to evaluate/assess the implementation of the conduct of Intro to La Salle and contextualization and living out the Lasallian Guiding Principles.

- 1= Poor; Does not meet expectations
- 2= Needs Improvement; Sometimes meets expectations
- 3= Fair; Meets expectations
- 4= Good; Exceeds expectations
- 5= Excellent; Far exceeds expectations

The survey-questionnaire was distributed to all participants during the first session day for all the three batches. The same was retrieved during the Day 5 session of the said program. The program started on July 18, 2016 and ended on August 12, 2016.

In order to evaluate and assess the implementation of the conduct of Intro to La Salle and contextualization and living out of the Lasallian Guiding Principles sessions, the following descriptive statistical techniques were applied: mean; and standard deviation. The following was used to interpret the results of the study:

4.21 – 5.00	-	Excellent; Far exceeds expectations
3.41 – 4.20	-	Good; Exceeds expectations
2.61 – 3.40	-	Fair; Meets expectations
1.81 – 2.60	-	Needs Improvement; Sometimes meets expectations
1.00 – 1.80	-	Poor; Does not meet expectations

In the conduct of the program, the researcher adhered to the following:

1. Distribution of assignments per facilitator, per group, per schedule, and per session;
2. Distribution of all materials specific to the topics, facilitators, groups, and sessions;
3. Identification of room assignments;
4. Distribution of the class list;
5. Conduct of the program through the following activities:
 - 5.1. Setting of expectations
 - 5.2. Diagnostic Exam/Quizzes
 - 5.3. On-line searching and googling
 - 5.4. Meta Cards Presentation through group activities
 - 5.5. Sharing and presentations
 - 5.6. Case Analyses through the discussion of the Student Handbook
 - 5.7. Lectures, presentations, demonstrations, Q and A Sessions, feedbacking, processing, and evaluation
 - 5.8. Video presentations
 - 5.9. Music Adaptation for the Lasallian Prayer
 - 5.10. Video Making based on the Advocacy of the group
 - 5.11. Culminating activity and graduation ceremonies
 - 5.12. Awarding

FINDINGS

Table 1. Evaluation of the Conduct of Intro to La Salle and Lasallian Guiding Principles Session for Day 1-The Person

ITEMS	N	Mean	Std. Deviation	Verbal Interpretation
DAY 1-THE PERSON				
I have experienced an orientation program relative to the conduct of Intro to La Salle and LGP sessions.	1303	4.2993	.71481	Excellent
I have been given a clearer background of the Institution where I now belong through the presentation of the De La Salle Philippines and De La Salle Health Sciences Institute and their Structures.	1303	4.4405	.68175	Excellent
I have fully appreciated now the contents of the VISION-MISSION-VALUES-CREED OF DLSHSI after the session.	1303	4.3876	.72654	Excellent
I have fully appreciated now the Lasallian Prayer.	1303	4.5426	.67963	Excellent
I have been given the opportunity to share my expectations about the session/activity.	1303	4.0683	.85730	Good
I have seen the relevance of the activities and have enjoyed them at the same time.	1303	4.1550	.84365	Good
I have seen that the facilitators have prepared for the session.	1303	4.3914	.76421	Excellent
I have noticed that the venue is conducive for the kind of session we have had for the day.	1303	4.4582	.74851	Excellent

Average (Day 1)	1303	4.3441	.57035	Excellent
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Table 1 reveals that generally, the students affirmed that the **Day 1 Session-The Person** was generally conducted excellently with 6 excellent evaluations out of 8 items, as evidenced by the mean score of **4.3441**. As regards the specific items contained in this table, the respondents rated the following with excellent evaluation: I have experienced an orientation program relative to the conduct of Intro to La Salle and LGP sessions; I have been given a clearer background of the Institution where I now belong through the presentation of the De La Salle Philippines and De La Salle Health Sciences Institute and their Structures; I have fully appreciated now the contents of the VISION-MISSION-VALUES-CREED OF DLSHSI after the session; I have fully appreciated now the Lasallian Prayer; I have seen that the facilitators have prepared for the session; and I have noticed that the venue is conducive for the kind of session we have had for the day. The rating scores show that the conduct of Day 1-The Person Session Far exceeds the expectations of the first and second year students of DLSHSI.

Table 2. Evaluation of the Conduct of Intro to La Salle and Lasallian Guiding Principles Session for Day 2-The Inspiration

ITEMS	N	Mean	Std. Deviation	Verbal Interpretation
DAY 2-THE INSPIRATION				
I have seen that introductory activities relative to the Life of St. John Baptist De La Salle has been conducted and participation of everyone has been accomplished.	1303	4.3454	.74187	Excellent
I have fully appreciated who St. John Baptist De La Salle is after the session.	1303	4.4582	.71277	Excellent
I have seen the full attention and participation of everyone.	1303	3.9555	.91136	Good
I have observed that everyone has been given the opportunity to share his/her thoughts about the topics during the session.	1303	4.0491	.87325	Good
I have observed that everyone has been very comfortable sharing his/her thoughts about the topic.	1303	3.9363	.90811	Good
I have seen the relevance of the activities and have enjoyed them at the same time.	1303	4.1420	.87583	Good
I have seen that the facilitators have prepared for the session.	1303	4.3914	.78111	Excellent
I have noticed that the venue is conducive for the kind of session we have had for the day.	1303	4.4137	.75798	Excellent
Average (Day 2)	1303	4.2127	.63720	Excellent

It can be gleaned from Table 2 that in regard the conduct of **Day 2 Session- The Inspiration**, the respondents agreed that it far exceeds their expectations, as reflected in the mean score of 4.2127 with a standard deviation of .63720. Specifically, it can be noticed that out of the 8 items presented, 4 have excellent ratings and 4 also have the good ratings. Positively, when the general mean score was computed, the over-all rating still showed an excellent conduct of the said session.

Table 3. Evaluation of the Conduct of Intro to La Salle and Lasallian Guiding Principles Session for Day 3-The Association

ITEMS	N	Mean	Std. Deviation	Verbal Interpretation
DAY 3-THE ASSOCIATION				
I have seen that introductory activities relative to the topics for the session has been conducted and participation of everyone has been accomplished.	1303	4.3177	.74902	Excellent
I have fully appreciated what is expected of me as a Lasallian and as a Lasallian student.	1303	4.4160	.71335	Excellent
I could personally say that I have now fully understood the things that I shouldn't do as a Lasallian student after the session.	1303	4.4267	.69602	Excellent

I have seen the relevance of the activities and have enjoyed them at the same time	1303	4.2709	.81526	Excellent
I have seen that the facilitators have prepared for the session.	1303	4.4213	.72252	Excellent
I have noticed that the venue is conducive for the kind of session we have had for the day.	1303	4.4206	.71710	Excellent
I have observed that the discussion of the topic-The Association has promoted an atmosphere of active participation, commitment and solidarity in our group.	1303	4.3454	.74084	Excellent
Average (Day 3)	1303	4.3740	.59962	Excellent

Table 3 clearly presents that in terms of the evaluation of the respondents on the conduct of **Day 3 Session- The Association**, all of them affirmed that this session far exceeds their expectations, as seen in the mean score of 4.3740 with a standard deviation of .59962. The rating shows that the programs for Day 3, how the execution and delivery was done, how the facilitators delivered the program was evaluated excellently. This could be attributed to the materials used during the program, the activities performed by the students and the line-up of facilitators.

Table 4. Evaluation of the Conduct of Intro to La Salle and Lasallian Guiding Principles Session for Day 4-The Mission

ITEMS	N	Mean	Std. Deviation	Verbal Interpretation
DAY 4-THE MISSION				
I have been given a copy of the Lasallian Guiding Principles.	1303	4.5602	.70057	Excellent
I have experienced that a good orientation relative to the conduct of LGP session has been done.	1303	4.3308	.76724	Excellent
I have been given a clearer background of the Lasallian Guiding Principles during the session.	1303	4.3408	.74914	Excellent
I have now a clear understanding of the contents of the Lasallian Guiding Principles after the session.	1303	4.3078	.76582	Excellent
I have been given the opportunity to share my expectations about the session/activity.	1303	4.1159	.86736	Good
I have observed that everyone has been given the opportunity to share his/her thoughts about the topics during the session.	1303	4.1305	.85141	Good
I have observed that everyone has been very comfortable sharing his/her thoughts about the topic.	1303	4.0614	.89077	Good
I have seen the relevance of the activities and have enjoyed them at the same time.	1303	4.1888	.85309	Good
I have seen that the facilitators have prepared for the session.	1303	4.3975	.74984	Excellent
I have noticed that the venue is conducive for the kind of session we have had for the day.	1303	4.4190	.73804	Excellent
I have observed that the discussion of the topic-The Mission has promoted an atmosphere of active participation, commitment and solidarity in our group.	1303	4.3216	.78497	Excellent
Average (Day 4)	1303	4.2887	.61872	Excellent

Taking into consideration the conduct of the **Day 4 Session-The Mission**, Table 4 highlights that over-all, the respondents believed that it far exceeds their expectations, as supported by the mean score of 4.2887 interpreted as Excellent. Significantly, out of 11 items in this session, 7 were rated excellently. This is a proof that the discussion of the Lasallian Guiding Principles slated during Day 4 was indeed very important for the respondents and that they were all mindful of the contents and details of the said presentations. This day 4 also completed the theoretical foundations of the students vis-à-vis the presentation of their final output which is an advocacy video.

Table 5. Evaluation of the Conduct of Intro to La Salle and Lasallian Guiding Principles Session for Day 5-The Celebration

ITEMS	N	Mean	Std. Deviation	Verbal Interpretation
DAY 5-THE CELEBRATION				
I have experienced that a review of the previous sessions and activities have been conducted during the last session.	1303	4.4213	.72464	Excellent
I have witnessed wonderful presentations from the different groups.	1303	4.5472	.66562	Excellent
I have seen that the final outputs of the 5-day session are clear manifestation of the success of the program.	1303	4.4612	.72257	Excellent
I find the conduct of the Intro to La Salle and LGP session very relevant, helpful and contributory to my development as a student and as a Lasallian.	1303	4.4605	.74864	Excellent
I can now proudly say I am a true Lasallian.	1303	4.6431	.64225	Excellent
Average (Day 5)	1303	4.5067	.58229	Excellent

Table 5 presents the evaluation of the respondents in terms of their experience in attending the **Day 5 Session-The Celebration**. The table points out that the all items contained in this session were all rated excellently, as reflected in the mean score of 4.5067 verbally described as far exceeds expectations. The said mean score clearly shows how successful the conduct of the session had become and how the students enjoyed and loved watching their own outputs-Advocacy Video. This day also was celebrated through the distribution of the certificate of completion and the token for all those who successfully completed the 5-day program.

Table 6. Summary of Evaluation

ITEMS	N	Mean	Std. Deviation	Verbal Interpretation
DAY 1-THE PERSON	1303	4.3441	.57035	Excellent
DAY 2-THE INSPIRATION	1303	4.2127	.63720	Excellent
DAY 3-THE ASSOCIATION	1303	4.3740	.59962	Excellent
DAY 4-THE MISSION	1303	4.2887	.61872	Excellent
DAY 5-THE CELEBRATION	1303	4.5067	.58229	Excellent
OVER-ALL MEAN	1303	4.3449	.53081	Excellent

In summary, the over-all result of 4.3449 with an excellent rating verbally described as far exceeds expectations is a manifestation and an empirical proof of the success of the program. Notably, the individual mean score and standard deviations per session day reveal that the objectives of the program were met, the facilitators and the secretariat did their very best to be able to have a better result. The excellent rating for the conduct of the Intro to La Salle and the contextualization and living out of the Lasallian Guiding Principles clearly shows that the Institute is responsive to the needs of the students and that the integration of such to the curriculum effects positive change into the lives of the students.

CONCLUSIONS

In the light of the findings of the study, the following conclusions are drawn:

1. The rating scores show that the conduct of Day 1-The Person Session and Day 2-The Inspiration far exceeded the expectations of the first and second year students of DLSHSI.
2. The rating shows that the programs for Day 3-The Association, how the execution and delivery was done, how the facilitators delivered the program, was evaluated excellently. This could be attributed to the materials used during the program, the activities performed by the students and the line-up of facilitators.
3. The excellent rating of the 7 items is a proof that the discussion of the Lasallian Guiding principles slated during Day 4-The Mission was indeed very important for the respondents and that they were all mindful of the contents and

details of the said presentations. This day 4 also completed the theoretical foundations of the students vis-à-vis the presentation of their final outputs which is an advocacy video.

4. The excellent mean score clearly shows how successful the conduct of the session had become and how the students enjoyed and loved watching their own outputs, Advocacy Video.

5. The excellent rating for the conduct of Intro to La Salle and the contextualization and living out of the Lasallian Guiding Principles sessions clearly shows that the Institute is responsive to the needs of the students and that the integration of such to the curriculum effects positive change into the lives of the students.

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I have become who I am today because of De La Salle Health Sciences Institute. My gratitude is forever accorded to the men and women of this beloved Institute of Higher Learning who value faith, zeal for service, communion in mission, and reverence for life.

Animo La Salle!

J.O.C.

For All That Has Been, Thanks

Growing a Sense of Gratitude

Dr. Rowan Williams and Joan Chittister

THE INSTRUMENT

IN THE FOOTSTEPS OF DE LA SALLE: ON BECOMING A LASALLIAN

INTRO TO LA SALLE AND CONTEXTUALIZATION AND LIVING OUT THE LASALLIAN GUIDING PRINCIPLES SESSIONS FOR ALL INCOMING FIRST YEAR AND SECOND YEAR STUDENTS, SY 2016-2017

Directions: Please evaluate the program you have just attended by checking the box corresponding to your rating:

- 1= **Poor; Does not meet expectations**
- 2= **Needs Improvement; Sometimes meets expectations**
- 3= **Fair; Meets expectations**
- 4= **Good; Exceeds expectations**
- 5= **Excellent; Far exceeds expectations**

ITEMS	1	2	3	4	5
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DAY 1-THE PERSON					
I have experienced an orientation program relative to the conduct of Intro to La Salle and LGP sessions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have been given a clearer background of the Institution where I now belong through the presentation of the De La Salle Philippines and De La Salle Health Sciences Institute and their Structures.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have fully appreciated now the contents of the VISION-MISSION-VALUES-CREED OF DLSHSI after the session.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have fully appreciated now the Lasallian Prayer.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have been given the opportunity to share my expectations about the session/activity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have seen the relevance of the activities and have enjoyed them at the same time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have seen that the facilitators have prepared for the session.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have noticed that the venue is conducive for the kind of session we have had for the day.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DAY 2-THE INSPIRATION					
I have seen that introductory activities relative to the Life of St. John Baptist De La Salle has been conducted and participation of everyone has been accomplished.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have fully appreciated who St. John Baptist De La Salle is after the session.					
I have seen the full attention and participation of everyone.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have observed that everyone has been given the opportunity to share his/her thoughts about the topics during the session.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have observed that everyone has been very comfortable sharing his/her thoughts about the topic.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have seen the relevance of the activities and have enjoyed them at the same time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have seen that the facilitators have prepared for the session.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have noticed that the venue is conducive for the kind of session we have had for the day.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DAY 3-THE ASSOCIATION					
I have seen that introductory activities relative to the topics for the session has been conducted and participation of everyone has been accomplished.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have fully appreciated what is expected of me as a Lasallian and as a Lasallian student.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I could personally say that I have now fully understood the things that I shouldn't do as a Lasallian student after the session.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have seen the relevance of the activities and have enjoyed them at the same time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have seen that the facilitators have prepared for the session.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have noticed that the venue is conducive for the kind of session we have had for the day.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have observed that the discussion of the topic-The Association has promoted an atmosphere of active participation, commitment and solidarity in our group.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DAY 4-THE MISSION					
I have been given a copy of the Lasallian Guiding Principles.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have experienced that a good orientation relative to the conduct of LGP session has been done.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have been given a clearer background of the Lasallian Guiding Principles during the session.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have now a clear understanding of the contents of the Lasallian Guiding Principles after the session.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have been given the opportunity to share my expectations about the session/activity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have observed that everyone has been given the opportunity to share his/her thoughts about the topics during the session.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have observed that everyone has been very comfortable sharing his/her thoughts about the topic.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have seen the relevance of the activities and have enjoyed them at the same time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have seen that the facilitators have prepared for the session.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have noticed that the venue is conducive for the kind of session we have had for the day.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have observed that the discussion of the topic-The Mission has promoted an atmosphere of active participation, commitment and solidarity in our group.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DAY 5-THE CELEBRATION	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have experienced that a review of the previous sessions and activities have been conducted during the last session.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have witnessed wonderful presentations from the different groups.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have seen that the final outputs of the 5-day session are clear manifestation of the success of the program.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I find the conduct of the Intro to La Salle and LGP session very relevant, helpful and contributory to my development as a student and as a Lasallian.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can now proudly say I am a true Lasallian.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

COMMENDATIONS:

RECOMMENDATIONS:

Thank You Very Much!

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INCORPORATING PROBLEM BASED LEARNING FOR INTERIOR DESIGN STUDENTS TO ENHANCE GLOBAL PERSPECTIVES

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Problem based learning (PBL) is an instructional methodology that aims to expand the learner's knowledge application, problem solving, and self-directed learning (Jonassen & Hung, 2008). PBL derives from a couple theories including "information processing" and "bucket theory" and was originally used with medical students before implication into other fields (Kilroy, 2004; Allen, Donham & Bernhardt, 2011; Hung, Jonassen & Liu, 2008). PBL requires learners in a group setting with a team-based approach to solve issues in a given situation by analyzing the information, organizing the information within that scenario, applying prior knowledge, and to develop questions to research additional information to solve the problem individually, then the group reconvenes and shares findings (Kilroy, 2004; Allen et al., 2011; Galford, Hawkins & Hertweck, 2015). PBL is problem focused, student centered, self-directed and self-reflective (Hung et al., 2008). Galford et al., (2015) argued that in an interior design setting, the incorporation of PBL with the studio-based learning process enhances student performance in actual job settings. The purpose of this study was to apply PBL to the interior design studio classroom for an interior design project. The instructor changes the role from a lecturer or teacher, to a facilitator, guide, and creator of good problems with clear goals. The students' process included understanding of terms and list of problems, analysis of the problems, selection of the priorities, objectives for the problems, and individual study (Kilroy, 2004). Then, students came up with the design solution for the project. It was observed that students enhanced reasoning process by constantly improving and analyzing their own reasoning skills. On the other hand, PBL might be not as successful in information recall. Further study related to long-term and short-term memory of PBL learners might be conducted.

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INCREASING THE SUCCESS RATE IN MATHEMATICS AT THE COLLEGE OF POLYTECHNICS JIHLAVA (CZECH REPUBLIC) AS A RESULT OF THE IMPLEMENTATION OF SUPPORT MEASURES

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ABSTRACT

This article evaluates students' success rate in Mathematics 1, and its main objective is to show that the success rate has been increasing over the last two years. The introduction of several support measures has been the impetus for the achieved improvement. First of all, it was decided to make students with insufficient level of mathematical knowledge enrol in a supporting course, called the Mathematical Seminar, before studying Mathematics 1. In Mathematical Seminar these students can complete and practice their knowledge and skills of secondary mathematics. A database of solved and unsolved exercises, a textbook, and an e-learning module were created to fit the purposes of the Mathematical Seminar. The characteristic feature of these introduced materials is the special emphasis that has been placed on their comprehensibility and complete clarity. The possibility to attend the winter and summer schools of mathematics represents yet another supportive measure. Research has shown that statistically significant improvements have been achieved by students in the programmes of Finance and Management, Applied Computer Science, and Travel and Tourism. On the contrary, no significant improvement has been demonstrated regarding the students in the Computer Systems programme. To assess the dependencies we used the analysis of contingency tables and correspondence analysis. In order to identify a statistically significant improvement in the students' results in Mathematics 1 nonparametric two-sample tests of equality of means were applied.

INTRODUCTION

The students' success rate in mathematics has been declining at the College of Polytechnics Jihlava (CPJ) in recent years. This is evidenced by the data covering the last twelve academic years, obtained from the CPJ's information system. The data contain information on students' grades in the subject Mathematics 1 and students' identification details, such as their study programme, form of study, graduation year, etc. The gathered data are predominantly categorical, so we used the analysis of contingency tables and correspondence analysis for the evaluation of dependencies. The dependency of the variables in the contingency table was evaluated using the Pearson's test of independence. In order to identify a statistically significant improvement in the students' results in Mathematics 1 two-sample tests of equality of means were used. Students' grades were evaluated by the ordinal scale of 1 to 4. Due to the fact that the majority of students is always rated with an F, the grades' distribution is significantly asymmetric; the normality of this distribution was rejected by the Shapiro-Wilk test and the Kolmogorov-Smirnov test with Lilliefors correction. Considering the ordinal character of the data and the rejected normality, the Mann-Whitney U test and the Wald-Wolfowitz Runs test were used to identify the statistically significant improvements.

A paper by Zámková and Blašková (2014) focused on similar issues. The paper's objective was to assess the Mathematics-1 exam success rate at the Faculty of Business and Economics of Mendel University in Brno. Similarly Kučera, Svatošová, and Pelikán (2015) analysed the relationship between the admissions mathematics test results and the success rate in Mathematics, and Mathematical Methods in Economics. Kouřilová and Bebčáková (2015) concluded that the mathematical knowledge of students coming from high schools is decreasing each year. On that note – the impact of the decreasing quality of high school mathematical education on university success rates in mathematics was addressed by Kučera, Jindrová, and Vydrová (2013). Uysal (2007) compared the success rate in mathematics at selected schools in Turkey. Kuncová and Mulač (2016) compared trends in higher education in the Czech Republic, Slovakia and Austria.

There are other authors (McDonough and Tra, 2017) who conclude that the level of mathematical skills is consistently low among students at American schools, which is in line with the conclusion of our research. While Mathematical Seminar was introduced at CPJ, a computer-supported mathematical tutorial was created to support the mathematical knowledge of the students at Clark County School District in Nevada; its impact was later studied, to assess its influence on the success rate in mathematics. Beal et al. in their article (2007) describe a similar on-line tutorial for students, intended to enhance their mathematical skills. A case study with a group of students showed that the tutorial brought about the greatest improvement to the students with the weakest level of the initial mathematical skills. Even much more extensive support measures for the education of mathematical subjects were introduced by Oliveira and Freitas (2016) at the School of Engineering of the University of Porto; their arrangements included namely an additional support to the face-to-face classes, distance education system, using technology and social networks to enhance learning with multiple learning strategies (forum, videoconferences, multiple-choice tests, materials repository, etc.). Analysed data regarding students' success rate revealed the fact that all mathematical courses that implemented this project in the lessons later reported an improvement of results. Majovská and Friedrich (2014) from the Technical University of Ostrava proved that the usage of simple study materials and modern technologies improved students' success rate and their attitude towards mathematics. Ulrychová (2015) addressed the relationship between the knowledge of mathematical theory and the ability to solve exercises among the students of University of Economics. The results lead her to question what the ideal ratio of theory to practise is in mathematics courses at non-technical universities.

MATERIALS AND METHODS

Primary data was taken from the College of Polytechnics information system. The categorical data includes students' success rates in Mathematics 1 for the years 2004-2016 and relevant identification variables. Mathematics 1 is supposed to provide students with basic knowledge of mathematical analysis and linear algebra.

Contingency tables present an easy way of displaying relations among categorical data. Depending on the character of the data we then used applicable tests of independence. According to Řezanková (1997), for the case of a contingency table of the $r \times c$ type (r is the number of rows, c is the number of columns) we most often use the test statistic:

$$\chi^2 = \sum_i \sum_j \frac{(n_{ij} - e_{ij})^2}{e_{ij}}, \quad (1)$$

where e_{ij} is the expected frequency and n_{ij} the observed frequency. We use the statistic χ^2 in Pearson's chi-square test with asymptotically $\chi^2_{(r-1)(c-1)}$ distribution. The null hypothesis of the test assumes independence. For further details see Hindls (2003). The condition that maximum 20% of the expected frequencies are less than five must be met in order to use the Pearson's chi-square test, see Hendl (2006) and Agresti (1990). We use Fisher's exact test in other cases or we calculate the simulated p-value of χ^2 statistic, see Anděl (2005). Usage of the test was described in Chalupová and Prokop (2014) as well.

Correspondence analysis that was used for this study is a multivariate statistical technique, which allows the display and summary of a set of data in two-dimensional graphic form. It is traditionally applied to contingency tables – correspondence analysis decomposes the chi-squared statistic associated with this table into orthogonal factors. The distance between single points is defined as a chi-squared distance. The distance between i th row and i' th row is given by the formula

$$D(i, i') = \sqrt{\sum_{j=1}^c \frac{(r_{ij} - r_{i'j})^2}{c_j}}, \quad (2)$$

where r_{ij} are the elements of row profiles matrix \mathbf{R} and weights c_j are corresponding to the elements of column loadings vector c^T , which is equal to mean column profile (centroid) of column profiles in multidimensional space. The distance between columns j and j' is defined similarly. The aim of this analysis is to reduce the multidimensional space of row and column profiles and to save maximally original data information (Hebák et al., 2007). The total variance of the data matrix is measured by the inertia, (see, e.g., Greenacre, 1984), which resembles a chi-square statistic but is calculated based on relative observed and expected frequencies. Unistat and Statistica software was used for primary data processing.

Nonparametric two-sample tests are applied in situations when the requirement of data normality is not met. These tests work with a sequence of values, thus they can also be used for ordinal data. Let us assume that X_1, \dots, X_m is a random selection from a statistical distribution and that Y_1, \dots, Y_n is another random selection from the same distribution as the first only shifted by a constant of δ and independent on the first selection. Thus the

random variables X_1, \dots, X_m and $Y_1 - \delta, \dots, Y_n - \delta$ have the same distribution. We test the null hypothesis $H_0: \delta = 0$, that these distributions are identical with the same distribution function, against a two-sided alternative $H_1: \delta \neq 0$. All of $m+n$ values of the quantities X_1, \dots, X_m and Y_1, \dots, Y_n are to be arranged in ascending order before testing. Let us denote the sum order of values of X_1, \dots, X_m by T_1 and similarly sum order of values of Y_1, \dots, Y_n by T_2 . It holds that $T_1 + T_2 = \frac{1}{2}(m+n)(m+n+1)$. It is possible to work out the statistics

$$U_1 = mn + \frac{n(n+1)}{2} - T_1, \quad U_2 = mn + \frac{m(m+1)}{2} - T_2.$$

It holds that $U_1 + U_2 = mn$. We compare minimum of (U_1, U_2) with the critical value of $w_{m,n}(\alpha)$. If $\min(U_1, U_2) \leq w_{m,n}(\alpha)$, then we can reject the hypothesis H_0 at a significance level of α . This test is sometimes called the Mann-Whitney test and is also implemented in the Statistica software. If we use the so called Wald-Wolfowitz test, we proceed in the same way, only after arranging all $m+n$ values in ascending order, we will use another test statistic denoted by R , which is the number of progressions of consecutive values belonging to the same selection. If $R \leq r_{m,n}(\alpha)$, where $r_{m,n}(\alpha)$ is the critical value of the test, then we can reject the hypothesis under test at a significance level of α , see Anděl (2005).

FINDINGS

The table of row relative frequencies below, covering the whole monitored period, suggests that the programmes Finance and Management and Travel and Tourism reported better success rate in Mathematics 1 than the other two. The success rate there varies around 45%. As for the more technically oriented programmes (Applied Computer Science and Computer Systems), the success rate has gone slightly over 30% [see Table 1].

Row relative frequencies	Succeeded	Failed
Finance and Management (FM)	44.90%	55.10%
Applied Computer Science (ACS)	32.76%	67.24%
Computer Systems (CS)	30.45%	69.55%
Travel and Tourism (TT)	46.52%	53.48%

Table 1: Contingency table: Study programme and success rate in Mathematics 1.

The next table of row relative frequencies indicates that following the overall downward trend, the year of 2015/2016 saw an improvement in the success rate. The success rate has increased by approx. 10 percentage points [see Table 2].

Row relative frequencies	Succeeded	Failed
2004/2005	65.40%	34.60%
2005/2006	72.33%	27.67%
2006/2007	72.22%	27.78%
2007/2008	58.47%	41.53%
2008/2009	41.51%	58.49%
2009/2010	46.60%	53.40%
2010/2011	42.84%	57.16%
2011/2012	41.23%	58.77%
2012/2013	35.09%	64.91%
2013/2014	31.88%	68.12%
2014/2015	32.01%	67.99%
2015/2016	42.10%	57.90%

Table 2: Contingency table: Monitored period of time and success rate in Mathematics 1 (FM, ACS, CS, TT).

The row relative frequencies below show that the proportion of A grades has been decreasing in the past years. However, in the last academic year, the build-up of A grades allowed to reach roughly the same level of the percentage share as was noted in the first years of the reference period. There was no significant development with regard to the B grade. The C grade demonstrated a decrease in the period under review, albeit with some

exceptions; however the last year seems to indicate a distinctive increase in the number of students graded with C, i. e. approx. 2 percentage points. Looking at the E grade, there is a similar development trend. With the exception of the first two years, the proportion of F grade demonstrated values above 60% and close to that. In 2013–2015 the share of F grades even exceeded 70%. The last reference year was a year when this share fell back to the above 60% level [see Table 3].

Row relative frequencies	A	B	C	D	E	F
2006/2007	8.49%	4.40%	16.98%	11.95%	28.93%	29.25%
2007/2008	4.09%	2.92%	11.99%	7.89%	25.15%	47.95%
2008/2009	3.30%	2.61%	6.73%	4.53%	17.45%	65.38%
2009/2010	3.84%	2.43%	8.83%	4.87%	20.87%	59.15%
2010/2011	3.82%	3.58%	5.43%	8.01%	15.78%	63.38%
2011/2012	1.49%	3.73%	8.36%	11.04%	14.33%	61.04%
2012/2013	1.22%	2.44%	8.03%	8.03%	14.83%	65.45%
2013/2014	1.83%	4.79%	7.89%	5.49%	7.61%	72.39%
2014/2015	2.28%	2.98%	7.18%	5.95%	7.88%	73.73%
2015/2016	3.78%	4.62%	9.03%	5.88%	11.13%	65.55%

Table 3: Contingency table: Monitored period of time and final grades in Mathematics 1 (FM, ACS, CS).

It is clear from the correspondence map that the worst results in mathematics were achieved in the period 2013–2015, the points corresponding to those years are placed close to the F rating and at the same time are most distant from the points representing the rest of the grades. The results of the last academic year under review came again close to the 2010–2013 numbers [see Figure 1].

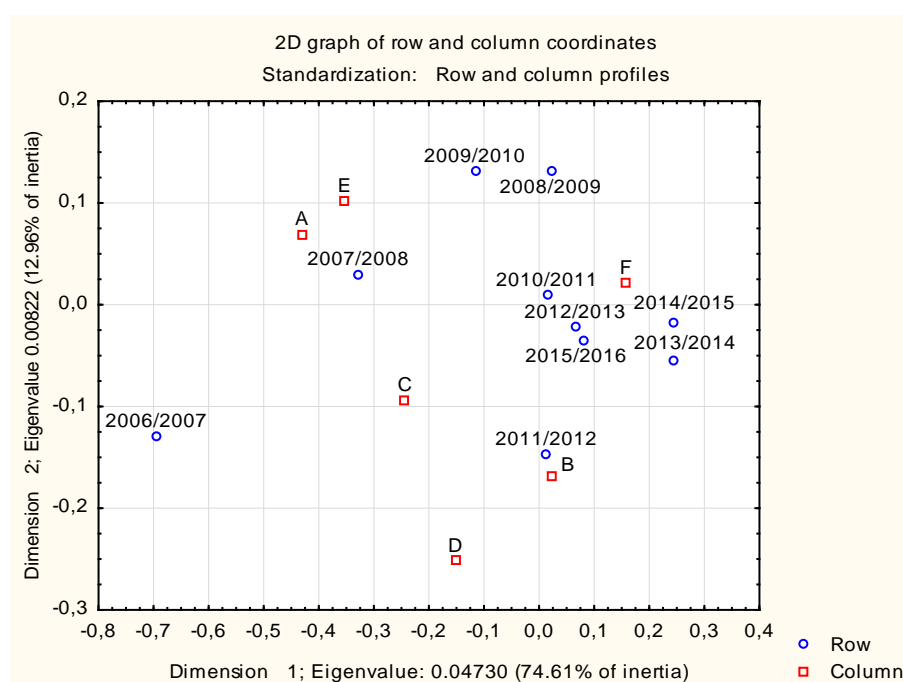


Figure 1: Correspondence map: Monitored period of time and final grades in Mathematics 1 (FM, ACS, CS).

Drawing on the row relative frequencies table below [see Table 4], the success rate of students enrolled in Applied Computer Science appear to have dropped significantly in the academic year 2012/2013. Since then, the success rate has been continuously slightly improving with a significant increase of the success rate in the last monitored year, amounting to approx. 17 percentage points. The following table points [see Table 5] of row relative frequencies shows that in 2011–2013 there has been a distinctive decline in the success rate with regard to the students of Travel and Tourism, the success rate dropped to almost 30%. The last year of the reference period saw a significant increase in the success rate, by about 18 percentage.

Row relative frequencies	Succeeded	Failed
2007/2008	42.70%	57.30%
2008/2009	38.55%	61.45%
2009/2010	46.67%	53.33%
2010/2011	41.67%	58.33%
2011/2012	49.15%	50.85%
2012/2013	12.68%	87.32%
2013/2014	14.63%	85.37%
2014/2015	19.57%	80.43%
2015/2016	36.52%	63.48%

Table 4: Contingency table: Applied Computer Science – monitored period of time and success rate in Mathematics 1.

Row relative frequencies	Succeeded	Failed
2007/2008	81.58%	18.42%
2008/2009	79.80%	20.20%
2009/2010	69.70%	30.30%
2010/2011	64.06%	35.94%
2011/2012	44.02%	55.98%
2012/2013	33.04%	66.96%
2013/2014	36.51%	63.49%
2014/2015	36.57%	63.43%
2015/2016	54.46%	45.54%

Table 5: Contingency table: Travel and Tourism – monitored period of time and success rate in Mathematics 1.

Focusing now on the Finance and Management programme: there had been an initial increase of the students' success rate and after that, since 2007/2008, we witnessed a decrease that reached values around 30–40%. Comparing the period of 2013–2015 and the last year, the success rate grew by about 10 percentage points [see Table 6].

Row relative frequencies	Succeeded	Failed
2004/2005	65.40%	34.60%
2005/2006	72.33%	27.67%
2006/2007	84.62%	15.38%
2007/2008	61.17%	38.83%
2008/2009	35.43%	64.57%
2009/2010	42.43%	57.57%
2010/2011	37.85%	62.15%
2011/2012	40.00%	60.00%
2012/2013	42.11%	57.89%
2013/2014	34.47%	65.53%
2014/2015	33.83%	66.17%
2015/2016	43.00%	57.00%

Table 6: Contingency table: Finance and Management – monitored period of time and success rate in Mathematics 1.

Here the row relative frequencies suggest that after a gradual decrease in success rate in 2006–2012, the students in the Computer Systems programme and their success rate displayed a sharp decline in the academic year 2012/2013 – the success rate dropped to almost 10%. This programme reported the least significant

improvement in the last year under review – only 1 percentage point. Therefore the applied measures were the least effective with regard to this programme [see Table 7].

Row relative frequencies	Succeeded	Failed
2006/2007	48.80%	51.20%
2007/2008	43.33%	56.67%
2008/2009	40.86%	59.14%
2009/2010	41.67%	58.33%
2010/2011	34.44%	65.56%
2011/2012	35.48%	64.52%
2012/2013	15.52%	84.48%
2013/2014	12.77%	87.23%
2014/2015	12.63%	87.37%
2015/2016	13.25%	86.75%

Table 7: Contingency table: Computer Systems – monitored period of time and success rate in Mathematics 1.

We used tests of equality of means in order to determine the improvement of the students' results in Mathematics 1 after the implementation of support measures in the last two years. This is a comparison of results achieved by different students, hence the two-sample tests were used. The results of the students were evaluated on an ordinal scale from 1 to 4. The scale includes 6 values in total. The use of a parametric t-test requires at least approximate normality of the input data. The normality was tested with the use of the Shapiro-Wilk test and the Kolmogorov-Smirnov test with Lilliefors correction. The normality was rejected by all the tests [see Figure 2], considering the remarkably asymmetrical distribution with a majority of students graded with an F.

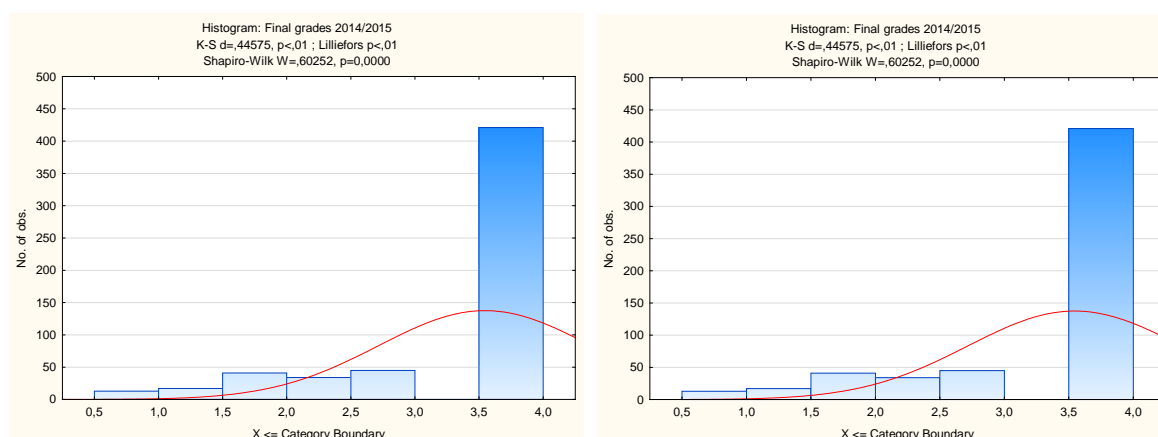


Figure 2: Histogram: Normality tests - final grades in Mathematics 1 (FM, ACS, CS).

Study programme	FM, ACS, CS	ACS	FM	CS
Rank Sum Group 1	310643.0	10120.00	134801.5	8255.500
Rank Sum Group 2	237985.0	10383.00	89983.50	7144.500
U	124459.0	4167.000	49797.50	3741.500
Z	2.347781	2.136098	2.005308	0.212297
p-value	0.018886	0.032672	0.044931	0.831875
Z adjusted	2.900400	2.730389	2.344873	0.384463
p-value	0.003727	0.006326	0.019034	0.700636
Valid N Group 1	571	91	387	93
Valid N Group 2	476	111	283	82

Table 8: Mann-Whitney U Test - final grades in Mathematics 1, years 2014/2015 and 2015/2016.

Based on the rejected data normality and the ordinal character of the data, nonparametric tests were employed instead of the parametric tests, these included namely the Mann-Whitney test and the Wald-Wolfowitz test [see Table 8 and Table 9]. The significant tests at $p < 0.05$ are highlighted.

Study programme	FM, ACS, CS	ACS	FM	CS
Valid N Group 1	571	91	387	93
Valid N Group 2	476	111	283	82
Mean Group 1	3.545534	3.769231	3,418605	3,854839
Mean Group 2	3.390756	3.450450	3,254417	3,780488
Z	-7.93070	-4.13317	-10.6913	-10.3749
p-value	0.000000	0.000036	0.000000	0.000000
Z adjusted	7.899520	4.061935	10.65164	10.29881
p-value	0.000000	0.000049	0.000000	0.000000
No. of Runs	393	72	193	20
No. of ties	388	69	189	16

Table 9: Wald-Wolfowitz Runs Test - final grades in Mathematics 1, years 2014/2015 and 2015/2016.

Both tests confirmed a statistically significant improvement in the ACS and the FM programmes, plus in the overall evaluation of all students, with the exception of the TT programme. The CS programme proved to have achieved an improvement according to the Wald-Wolfowitz test; the Mann-Whitney test failed to reject the equal evaluation. Considering the greater significance of the Mann-Whitney test, we concluded not to confirm an improvement with regard to the CS programme.

Row relative frequencies	Succeeded	Failed
2014/2015	36.57%	63.43%
2015/2016	54.46%	45.54%

Table 10: Contingency table: Travel and Tourism – success rate in Mathematics 1, years 2014/2015 and 2015/2016.

In the Travel and Tourism programme, the students are only granted credits when finishing the course successfully, it was therefore impossible to use the test of equality of means. There is a contingency table provided for the Travel and Tourism programme [see Table 10] and the Pearson's chi-square test confirmed that the students of this programme have reached a significant improvement, p-value is less than 0.001.

DISCUSSION AND CONCLUSIONS

The analysis proved that when it comes to the course called Mathematics 1, the students enrolled in the Finance and Management and Travel and Tourism programmes are more successful – with the success rate around 45%. The students in the more technically oriented programmes have proven to have a success rate by about 15 percentage points lower. The years 2004–2015 saw a continuous decline of the success rate in the aforementioned course. In the academic year of 2014/2015, several support measures were implemented with the aim to improve the success rate. These measures include the Mathematical Seminar for students who have failed in the entrance test for the course Mathematics 1, summer and winter schools in mathematics, and new learning materials (textbooks and innovated e-learning module). In addition to that, the students now have an access to an on-line collection with a database of solved exemplary exercises. The introduction of these measures was followed by a statistically significant improvement of the students' performance in the course Mathematics 1 after the academic year 2014/2015. Further probe focused on the individual study programmes and confirmed the statistically significant improvement with regard to the students of the three courses – Finance and Management, Applied Computer Science, and Travel and Tourism. As for the Computer Systems programme, the improvement was not positively confirmed due to the different outcomes of two performed tests (Mann-Whitney U Test, Wald-Wolfowitz Runs Test). In order to demonstrate a statistically significant development in the last two years, non-parametric tests were put to use, considering the input data non-normality. Further on, contingency tables and the Pearson's chi-square test of independence were used to carry out the success rate analysis of individual years and to assess the success rate improvement in the Travel and Tourism course. The data in the contingency tables clearly demonstrate that the greatest success rate increase was recorded in the last two academic years in the Applied Computer Science and Travel and Tourism programmes – about 18

percentage points; the students of the Computer Systems on the other hand have been confirmed to achieve only minor improvement – less than one percentage point. All the tests turned out to be statistically significant (p-value is less than 0.05), with the exception of the task to confirm the statistically significant improvement in the past two years regarding the students of the Computer Systems programme. The Pearson's chi-square tests suggest even greater significance (the p-value is less than 0.001).

Our research showed that the students' success rates in Mathematics 1 are statistically significantly dependent on the study programme. It was the goal of the research pursued by the authors Zámková, Prokop and Stolín (2016a) and Zámková, Prokop and Stolín (2016b) to find more factors influencing the students' success rate. The same authors have found out that gender, form of study, and the study programme have an impact on the success rate in the course Mathematics I. Similarly, Kučera, Svatošová and Pelikán (2015) evaluated different success factors in mathematical courses.

The state of affairs before the implementation of the measures is well depicted in an article by Zámková, Prokop and Stolín (2016c). Similarly to the approach covered by Fonteyne et al. (2015), we too have come with various improvements to change student's grades in mathematics, the first of those being an entrance test for this subject to be completed by the students as a part of their first lesson. Those who fail in the entrance test are allowed to cancel their enrolment in the course Mathematics I and go for a complementary Mathematical Seminar. Still, despite the acclaimed improvement that came with the supporting measures, the most frequent grade obtained in mathematics at the Faculty of Business and Economics of Mendel University in Brno and also at CPJ is F – failed, as is confirmed also by Zámková and Blašková (2014). After the introduction of a vast array of measures at the School of Engineering of the University of Porto, the authors Oliveira and Freitas (2016) recorded an improvement of grades in mathematical courses. It stems from our research that our taking similar steps helped with a significant improvement of students' grades in mathematics. Majovská and Friedrich (2014) claim that the more updated and more simple study materials, the better the success rate. Our college also made an effort to achieve simplicity and comprehensibility of new learning materials – textbooks, e-learning module and a database of examples.

The students' success rate in Mathematics 1 course at the College of Polytechnics in Jihlava will be closely monitored in the future and we shall continue to evaluate the efficiency of introduced measures.

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INDECISION MANAGEMENT AND DECISIONAL PROCRASTINATION

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ABSTRACT

The term “indecision” means difficulty in making a decision. Indecision is inability to decide. Indecision is positively correlated with uncertainty, anxiety, stress, procrastination, perfectionism, atychiphobia and dependency. Indecision is also negatively correlated with stability. Some people may confuse the term “indecision” with indecisiveness. Indecisiveness, is not planned and is based on irrational thinking. Indecisiveness is more of a personality trait. Indecision isn’t always bad. Sometimes hesitation gives us valuable time to think about the situation. Sometimes intelligent people lack the expertise or information to make an effective decision at the given moment. Indecision and indecisiveness are acceptable as natural. Therefore, indecision management is possible such as stress management. The indecision management is acceptable as a means of modern thinking. Uncertainty, perfectionism, atychiphobia, anxiety and stress cause decisional procrastination. Also decisional procrastination causes dependency.

INTRODUCTION

Changes in the managerial environment, which are taking place at an increasingly fast pace and are becoming less and less predictable, are leading to a situation where information is becoming quickly outdated, and in some cases it is already not very reliable by the time of its acquisition by managers. Moreover, the amount of information that managers acquire is increasing every year, which means that the level of saturation brings about changes in the decision-making model: from decision-making under conditions of incomplete information towards conditions of information overload (Malewska & Sajdak, 2014).

The Concept of Indecision means difficulty in making a decision. It is inability to decide. Indecision is positively correlated with fear, uncertainty, anxiety, stress, low self-esteem, procrastination, perfectionism, atychiphobia and dependency. Indecision is also negatively correlated with stability. Three factors of indecision are derived from decision theory: being insufficiently informed about the alternatives, valuation problems, and uncertainty about the outcomes. Within decision theory, normative as well as descriptive models are developed. Normative or prescriptive models provide guidelines for how people should make optimal decisions, whereas descriptive

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models are based on how people actually make decisions. According to the normative decision theory (e.g., expected utility theory), the optimal choice is the one that maximizes the expected utility. The expected utility of an alternative is based on a combination of the value and probability of the outcomes that are anticipated from each alternative (Gati & Asher, 2001). In the expected utility model, the decision problem is solved in different stages (Gati, 1986). First, a person has to identify and define the desirable goals (step 1) and weigh these goals by importance (step 2). Further, one has to identify which alternatives exist (step 3), after which each alternative is rated with respect to the opportunities it offers for satisfaction of each value (step 4). This rating is multiplied by the weight given to the value (its importance, step 5). For each alternative the sum of products of the importance and the opportunities is calculated (step 6). Finally, this sum is modulated by an estimate of the probability of success (or entry) for each option (step 7) (Gati, 1986). These seven steps result in an expected utility for each alternative. The optimal choice is the alternative with the largest expected utility.

Some people may confuse the term “indecision” with indecisiveness. Indecisiveness, is not planned and is based on irrational thinking. Indecisiveness is more of a personality trait. The notion of “*indecision*,” which can be defined as a state in which a person remains uncommitted to any particular course of action despite having acknowledged the need for some such commitment. And a given person is said to be “indecisive” to the extent that he or she exhibits indecision chronically, beyond some norm (Beheshtifar, et. al (2012). Undecided refers to a specific decision, while indecisive is the characteristic of being unable to decide in general. Indecisiveness, in contrast, is chronic and trait-like and, thus, a more pervasive problem with making decisions across life domains (Osipow, 1999). Additionally, indecisiveness leads to many deficits in the decision-making process. Indecisive individuals need more time to make decisions (Frost & Show, 1993).

It is useful to specify some expressions: “It is in your moments of indecision that your dreams are destroyed.”, Dr. Marc Dussault. “I am very indecisive. I am always afraid of making the wrong decision.”, Katie Leung. “Indecision and delays are the parents of failure.”, George Canning. “If I decide to be indecisive, that's my decision.”, Roger McGough. “The word tomorrow was invented for indecisive people and for children.”, Ivan Turgenev. “Each indecision brings its own delays and days are lost lamenting over lost days... What you can do or think you can do, begin it. For boldness has magic, power, and genius in it.”, Johann Wolfgang von Goethe. “What you can do, or think you can, begin it.”, Johann Wolfgang von Goethe. “Indecisiveness and procrastination are the chosen ways of life for most people. They follow the course of least resistance, which is to do nothing. This provides a security blanket of never being wrong, never making mistakes, never being disappointed and never failing. But they will also never succeed.”, David Peoples. “He who hesitates is sometimes saved.” James Thurber.

INDECISION IS NOT ALWAYS BAD

Indecision is acceptable as natural. Therefore, indecision management is possible such as stress management. Sometimes hesitation gives us valuable time to think about the situation. Sometimes intelligent people lack the expertise or information to make an effective decision at the given moment. The indecision management is acceptable as a means of modern thinking. A common myth with indecision it is as follows: “Making a bad decision is better than making no decision at all.” More true information is as follows: “Rejecting a belief prevents the tolerance. Therefore, indecision is better than rejecting a belief.”

INDECISION AND LEARNING BY INQUIRING

Rejecting a belief prevents tolerance. Therefore, indecision is better than rejecting a belief. Inquiring is to suspect and is doubt. If there is no doubt it is to learn by heart. There are two choices in traditional representation of logic. For example, the options are to be slow or fast. Slow can be replaced by 0, fast instead of 1. Indecision can be thought of in terms of fuzzy logic. In the example, there may be many more options: Slowest (0-0,25), slow (0,25-0,5), fast (0,5-0,75), fastest (0,75-1). Fuzzy logic” is a new form of thinking. Another example, let a 100 ml glass contain 30 ml of water. Then in Aristotelian Logic, there may be considered two concepts: Empty and Full. In fuzzy logic, then one might define the glass as being 0.7 empty and 0.3 full. Fuzzy Logic is necessary for problem-solving skills. Because, fuzzy logic facilitates to learn the reasons.

DECISIONAL PROCRASTINATION

Procrastination has been considered a dysfunctional behavior or an irrational delay of behavior (Ellis & Knaus, 1977; Silver & Sabini, 1981) associated with negative outcomes. It has been defined as a “voluntarily delay of an intended course of action despite expecting to be worse off for the delay” (Steel, 2007, p.66). Counterbalancing the negative view that has dominated this field of research, Choi and Moran (2009) developed the construct of “active procrastination.” The latter describes the behavioral characteristic that includes an individual's preference for time pressure, cognitive decision to procrastinate, capacity to meet deadlines, and ability to achieve satisfactory outcomes.

Procrastination is simply postponing action. For some, procrastination is just a once-in-awhile nuisance; for others it is a constant nemesis. Emotional procrastination can start with a whisper of negative emotion. Once aware of an emotional trigger for procrastination, this information can be used to tune into a conflict between procrastination and productive actions. It is useful to specify some expressions: "Procrastination is opportunity's natural assassin.", Victor Kiam. "A year from now you may wish you had started today.", Karen Lamb. "You cannot escape the responsibility of tomorrow by evading it today.", Abraham Lincoln. "If it weren't for the last minute, nothing would get done.", Rita Mae Brown. "It is easier to resist at the beginning than at the end.", Leonardo da Vinci. "Life always begins with one step outside of your comfort zone.", Shannon L. Alder.

PERSONALITY AND PROCRASTINATION

Personality can be described as all the physical, mental, emotional, social, moral and behavioural characteristics of an individual by which that individual can be distinguished from other individuals (Aremu et al, 2011, 95). Procrastination shares many features with the Dark Triad of personality, such as high impulsivity and low conscientiousness (Lyons, M. & Rice, H., 2014, p.34). In businesses, shyness, aggressiveness and entrepreneurship are important types of behavior. Shyness is to be overly sensitive to being negatively assessed by others. Aggression is to be insensitive to the rights and feelings of others. The aggressor violates the rights of other individuals by improper means. Gumption makes it possible for us to exercise our rights without violating the rights of others. The easygoer behavior is the type of behavior most desired. Shyness which is one of these three types of behaviors causes procrastination.

Type A personality postpone their private life. Type A individuals are often highly achieving workaholics who multitask, drive themselves with deadlines, and are unhappy about the smallest of delays. Type A behavior was first described as a potential risk factor in coronary disease in the 1950s by cardiologists Meyer Friedman and R. H. Rosenman. They have a sense of time urgency and often become angry when they get delayed (or if they are going to be late) or are around other people whom they view as incompetent. Type A people has the following traits: Competitive, aggressive, unable to relax, very time conscious, fast talking, impatient. Type B personality postpone their business life. People who are classified as having Type B personality are better at relaxing without feeling guilty and working without becoming anxious or agitated. Some of the other characteristics include being more relaxed about time, and are not easily angered. It is assumed that Type A people tend to have more risk of heart disease than Type B people.

PERFECTIONISM AND PROCRASTINATION

Perfectionism is actually a mild disorder, and is a cause of procrastination. Perfect means a person or thing without any defects or flaws. As a personality trait in psychology, perfectionism corresponds to a person's starvation for perfectness, setting high standards for self, being overly self-critical and paying too much attention to what others think about his/her work. Factors such as work load and stress may interfere with the performance of an individual. Thereby resulting in the possible delay or inability to finish what one has already started (Slaney & Ashby, 1996, p. 393).

Perfectionists postpone their decisions. "Healthy striving is self-focused: "How can I improve?" Perfectionism is other-focused: "What will they think?", Brené Brown. Perfectionism is expecting more than one's own or another's level of performance (Başol & Zabun, 2014). Frost, Marten, Lahart, and Rosenblate (1990) define perfectionism as setting standards over performance and being intolerant to the idea of failing according to the standards one has placed for him/herself. Frost et al. (1990) looked at perfectionism under six dimensions: Organization, Concern over Mistakes, Personal Standards, Parental Expectations, Parental Criticism, and Doubts about Actions. Hamachek (1978) states that conditional acceptance, unsupportiveness, and inconsistent parental attitudes are factors that provoke the development of perfectionism in children. As such, children growing up in a family atmosphere espousing a perfectionist attitude feel the need to be perfect in order to receive their parents' approval.

Perfectionism is a combination of exceedingly high standards and a preoccupation with extreme self-critical evaluation concerns over making mistakes, fear of negative social evaluation, feelings of discrepancy. In support of the possibility that domain moderates relationships between perfectionism and burnout, it is noted that research has found that burnout is related to job and workplace characteristics with some vocations (e.g., nurses and teachers;) more vulnerable to burnout than others (Hill, A.P.& Curran, T., 2015). Academic Procrastination may result when students with high Maladaptive Perfectionism are confronted with a task that may elicit concern over mistakes or doubting of actions. Academic procrastination may provide students with a temporary escape from the anxiety over being potentially evaluated then exposed as being incompetent (Chang, 2014). At the heart of perfectionism is an excessive fear of making mistakes and the concern that making mistakes might make you

less successful, likeable or even less worthy. It is definitely possible to value excellence and success without being a perfectionist.

WORK-FAMILY CONFLICT AND PROCRASTINATION

In reality, work and family are two major social components for individual and society; so that keeping order and general health of the people is related to balanced and efficient performance of these parts. This issue is an inevitable matter in societies in which development of social roles is possible for all members of the society and requirements of the social structure and personal development favorites are affected by the role of people. Work-Family Conflict is related to lower job and life satisfaction, higher stress, increased depression and anxiety, physical health complaints & hypertension, increased fatty food consumption, increased turnover intentions. One of the greatest problems faced nearly all people is conflict of work and family and its effect on personal performance of employees.

BURNOUT IS RELATED TO DELAY AND INSTABILITY

Burnout was initially a very slippery concept—there was no standard definition of it, although there was a wide variety of opinions about what it was and what could be done about it. Although exhaustion reflects the stress dimension of burnout, it fails to capture the critical aspects of the relationship people have with their work. Exhaustion is not something that is simply experienced—rather, it prompts actions to distance oneself emotionally and cognitively from one's work, presumably as a way to cope with the work overload. Within the human services, the emotional demands of the work can exhaust a service provider's capacity to be involved with, and responsive to, the needs of service recipients. Depersonalization is an attempt to put distance between oneself and service recipients by actively ignoring the qualities that make them unique and engaging people. Their demands are more manageable when they are considered impersonal objects of one's work. Outside of the human services, people use cognitive distancing by developing an indifference or cynical attitude when they are exhausted and discouraged. Distancing is such an immediate reaction to exhaustion that a strong relationship from exhaustion to cynicism (depersonalization) is found consistently in burnout research, across a wide range of organizational and occupational settings. Burnout is higher among people who have an external locus of control rather than an internal locus of control. Similar results have been reported on coping styles and burnout. Those who are burned out cope with stressful events in a rather passive, defensive way, whereas active and confrontive coping is associated with less burnout. In particular, confrontive coping is associated with the dimension of efficacy.

CONCLUSION

The indecision management is acceptable as a means of modern thinking. Decisional procrastination is simply postponing decision and also action. Perfectionism is other-focused and is actually a mild disorder, and is a cause of procrastination. Perfectionists postpone their decisions. Intuition and reason-based decision making may prevent decisional procrastination. The optimal choice is the alternative with the largest expected utility. Work-family conflict and also burnout syndrome cause indecision and decisional procrastination. Making decisions is hard, but being a decision-maker may be even more difficult.

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INDUSTRY AND VOCATIONAL EDUCATION

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ABSTRACT

When quality in education is mentioned, the appreciation of education system, the education being perfect, people having knowledge and skill to follow new developments in education, briefly education those people who has such attitudes comes into mind. The aim of vocational education is to train skillful people who have adequate vocational knowledge and the ones who the institutions and companies in business life really need. Companies and industry associations suggest that they can't find manpower high who is quality, skilled, qualified, having enough vocational knowledge and schools don't achieve to train manpower which has the above aspects. Education such manpower who has such aspects mentioned above his only possible with high quality vocational education and teaching.

Key Words: Vocational education, quality, industrial enterprises, schools, knowledge and skill.

INTRODUCTION

The most important aspect of education process is the quality of education. As for the quality of education, it is a phenomenon to respond to the society's needs and demands in expected level and stage with their related knowledge, skills and attitudes of the people who are exposed to education (Tufan, 2009, P.27-40)

While developed countries train human sources according to their quality and quantity which they target, undeveloped countries have a serious crisis in education human resources the country needs for the economy of the country (Kurul-Tural, 2002). Vocational education has been a decisive and definite factor in human beings advance (Rickey, 1971, p.1). Vocational education, regarding its character, is a type of formal education which costs more expensive than general education (Alkan, 2001, p.12).

In order to introduce high quality vocational education and to succeed in it, guidance from advisers, according to students individual capacity must be conducted by starting from nursery school continuing to the end of high school. Students become successful both in vocational education at school and their business life when they choose a profession not by chance, but according to their interest, skills, capacity. When students start to work in an area related to their profession after graduation, a choice of profession must be given importance and interest, skills and the capacity of the students must be taken into account so as to adapt to their new profession. Schools should have an infrastructure to respond to the students and society's expectations in order to improve the quality of education and to increase the student's success. Quality in education is the convenience of education goals, the students carrying out the employer's demands which occur in working life after graduation, students performance, their experience and theoretical and practical knowledge gain (Bulut, 1998, p.68).

Quality council, quality developing teams and quality rings must be established so that high quality education can be done at schools.

The leaders of the organization form quality councils because they become the pioneer to determine necessary desire and the key topics for the success of the organization.

Quality councils act as leaders, direct, find source and form the total quality managements communication.

Quality developing teams who are formed following quality councils are usually the teams who solve the problems the quality councils determine.

Quality rings are small groups who volunteer in the department and help to develop continually with the new approach which both quality council and quality developing teams have formed. Generally, they work to improve the procedure of the working surrounding and the relation with other departments (Hergüner, 1998, p.1-21).

Total quality managements application must be used commonly in the institutions which carry out vocational education and education since qualified, skillful people and the ones who have enough vocational knowledge

which companies and industry associations need can't be trained at schools as it is mentioned earlier in the summary section.

Here are the criteria listed below to show the difference in education associations:

-Students characteristics

-Teachers aspects

-Infrastructure (workshops, laboratory, library etc.)

-Counseling service (being a trainee, communication with graduates)

If a meaningful quality increase in education is really asked, the factors mentioned above must be taken into account.

THE STUDY

In this study, The vocational education contribution of The cooperation of school and industry has been examined. Quality in vocational education can't be achieved with the approach which classical quality mentality programmed and plans everything in the center and applies it to the lower grades.

Our country is in a struggle as well for a reform in vocational and technical education which is suitable to the knowledge required by dynamic labor market and skills and support the quality education and training. In this sense, young people need to gain qualifications and improve and renew this qualification constantly for being employed in a dynamic and changing labor market.

Instead of this system, education associations should be examined individually and quality standards are supposed to be developed according to education regions, the aspects of industry associations, the data about beginning the working life.

Quality rings should be formed as well. It is known by a lot of educators that a resistance to learning in vocational education generally forms. The reasons are that the listeners are always passive in education and the education being given is boring, incomprehensible and not up to date. As to the solution of this problem, it is possible to apply student-centered education, enjoyable and didactic education models (Atherton, 1999, p.265-271)

FINDINGS

In order to realize education and education at schools which offer vocational technical education according to standards which companies need?

- Workshops and laboratories at schools should be equipped with the latest technology.
- Schools should be in contact with industry associations and companies.
- Industry associations, companies and employers should know what kind of aspects the staff must have regarding the profession.
- Measuring and evaluating must be carried out whether the students have learned adequate vocational knowledge out of the education and education presented.
- When workshops and laboratories at school are inadequate, related industry associations, companies, workshops, laboratories and application areas must be used.
- A questionnaire regarding students' interests about their profession must be conducted; in this questionnaire students must be asked questions about their profession. The questions must include the curriculum, the way how vocational education is done, the communication between educators and students and teaching methods, that's to say, all the elements in vocational education.
- Industry associations which will be in contact with must follow technology and use the up- to-date technology (Becen, 2016, p.945-947).
- So as to determine whether vocational education at schools are done in accordance with the goals, a commission consisting of experts in their field should check the schools at particular intervals.
This commission must include the related companies, industry associations, the representatives of profession rooms.
- It is also to contain the graduates from the related school and those who work freely and the members and academicians who have reached a particular career in their profession.
- When students graduate from schools and start the working life, methods which can measure and determine their success must be applied.

- When students are graduate and start the working life, their opinions and recommendations regarding the area in their profession must be asked.

It is financially difficult to install up-to-date technology related to professions at schools.

Basic knowledge regarding must be professions taught at schools and advance knowledge and related applications must be carried out at work.

Vocational adequacy while preparing the curriculum must be taken into account and must be updated to respond to the developing technology.

Vocational foreign language, education at school must be carried out because students have difficulty in reading and commenting on the projects, catalogues about their profession when they start the working life after graduation. That causes the quality to decrease.

Vocational counseling units, especially at high schools must be set. These units must contact with the related associations and institutions and carry out profession presentations at school.

Those who don't choose their profession according to their capacity, skills, interest become unsuccessful in school life. As a result, they don't work in the field related to their profession and cause to waste workforce in education period.

One of the factors that affect the quality of education is that educators must have adequate knowledge about their profession.

In order to catch up with the quality both in the goods produced in companies and in the obtained services, firstly, high quality vocational education must be conducted at schools.

Students must be informed about the problems related to their profession which they may encounter in working life and their motivation must be increased.

Cooperation between school and industry associations must be definitely done for the quality in vocational education. This cooperation must include all the stages of education and education. These stages are:

-Theoretical and applied education must be given to students in companies.

-While programs are being started at schools, the companies and industry associations' opinions must be asked.

-Staff need of industry associations and companies must be taken into account while programs are being started.

-While preparing the curriculum of the programs, the opinions and suggestions of the well educated and experienced managers and workers who work in industry associations and companies must be taken into consideration.

Mutual trust between working life and associations which provides vocational education must be achieved. Necessary legal arrangements must be made to cause the cooperation between universities and working life obligatory.

In order for school industry cooperation to be sustainable delisting legal arrangements should be madetocoverboth schoolandrelated businesses. While education and training program sarebeingorganized, opinions of enterprise sand related industrial organizations should be taken.

CONCLUSIONS

High quality vocational education and education may be achieved in a demanded level if schools and industry associations cooperate; educators who are exposed to education in particular period and learn about new technology and teach it to students.

Thanks to counseling and questionnaire, if students have a right profession choice.

If students opinions and suggestions about their vocational education after graduating from schools and start the working life are taken into account.

When high quality education and education is carried out, staff who are qualified, who can contribute to production, who can solve problems, who are skillful, who have adequate vocational knowledge can be educated.

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INFLUENCE OF EXPERIENTIAL EDUCATION IN PRE-GRADUATE TRAINING OF TEACHERS ON THE CLASSROOM CLIMATE – THE CONFLICTS

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ABSTRACT

The classroom as a social and formal group is the environment where pupils spend all the time of the educational process at school. Each class is specific and perceived through the dominating climate. The organization of classroom is in the competence of the teacher, from the point of the view of the educational process is in the competence of the class teacher. Teacher affects expressively the classroom climate by its approach. Experiential education appears as one of the possibilities of creating a positive classroom climate. The contribution presents the possibility of the influence of experiential education in pre-graduate training of teachers on the positive change of classroom climate. Based on the results of research realized at selected elementary schools in Slovakia the authors emphasize the influence of class teacher on creation of a positive classroom climate, specifically on one of its components – the conflicts, through experiential education. Authors confirm the importance of implementation of experiential education into the pre-graduate training of teachers by realized research, which showed the difference between the work of teachers who had implemented experiential education within pre-graduate training and teachers who use experiential education only on the basis of their own knowledge.

INTRODUCTION AND THEORETICAL STARTING-POINTS

Upbringing and educational process at schools is making progress and teachers reach for newer and more effective means, methods and ways to impart knowledge to their pupils. Their endeavor is to prepare pupils on a theoretical basis in order to obtain the given knowledge by easier but more durable way. However, these activities related to education often neglect the factors which significantly contribute to efficiency of the learning process. Whether a pupil accepts new knowledge with interest, or perceives it as a duty or as a matter of course is highly important. Pupils' interest in the subject matter as a whole is conditioned by relationships – relationships between a curriculum, a pupil, a teacher, between pupils themselves and by entire **classroom climate**. The classroom atmosphere, the mentioned interrelationships, the cooperation of the particular components of the teaching process, attitude and emotions all characterize the climate of the class. The importance of pleasant environment, a place of good emotional background for learning activity, is obvious from several aspects. Optimum conditions, good, positive and optimal climate in a class predetermine the required results of the teaching process. Kolář et al. (2012) considers climate of a class as long-term atmosphere typical for a particular class created by pupils of the whole class, groups of pupils in a given class, individual pupils and teachers teaching in a particular class. Based on Průcha, Walterová and Mareš (2003) classroom climate is a variable representing long-term socio-emotional atmosphere and emotional responses of pupils to events happening in their class. The authors distinguish between current and preferred climate. The current climate is considered existing in given time and space. The preferred climate is required from the point of view of pupils and teachers. Petlák (2006) defines the climate of the class as the environment in which a student remains for a certain part of a day. The deeper meaning of the class he describes from several viewpoints, particularly in terms of social relations and moral values. From his point of view, it is not possible to separate the climate of the class and the teaching climate as they influence each other. In practice, a certain class is often marked as a good class, a cohesive class, a problematic and non-problematic class, a bad class, etc. The class status itself, used as a slang by teachers in a particular team, indicates class character and climate of the class. However, the status of the class is often only a 'result' of subjective assessment of the teacher who has built up his/her relationship to that class. Teachers have to remember that every pupil in the class is a personality and the composition of the class is currently diverse. The class team is made up of talented pupils as well as pupils with special needs and different researches confirm that teachers are unsufficiently prepared just in relation to the educational process and care of talented pupils as well as pupils with specific needs (Machů, Málek, 2015). The teachers' unpreparedness leads to a negative impact on the entire class climate. Classroom climate can be observed from five aspects – satisfaction, discrepancies, competitiveness, learning difficulties and class cohesion. Each teacher should know the climate of his class and develop it in positive way. In this respect, a social pedagogue as a professional school employee, who focuses on preventive and re-educative impact on pupils, can be helpful. According to Hroncová (2017) a social pedagogue functioning at school, is able to provide class discussions, pupils' talks, group interactive games and exercises, experiential talks, etc., thus by the way of

consultations he/she would also have impact on teachers while they are creating positive class climate. At the present teachers have several options, ways, methods of developing positive classroom climate. One of them is also experiential education.

Experiential education develops a personality of an individual universally via specific forms, methods and means of education based on personal experiences and obtained experiences (Kratochvířová, 2010). It is actually an analysis of educational processes which work with an introduction, analysis and reflection of experiential events in order to obtain experience and their subsequent transfer to a real life (Jirásek, 2004). In experiential education, an experience is the way to achieve a goal, it is not a goal itself. Experience is the result of experiencing, a mental phenomenon that is emotionally coloured and strictly individual (Hartl, Hartlová, 2010). Experiential education is built (1) on the principles of carefully selected experiences completed with reflections, critical analysis and synthesis, on experiences and adventures structured in order to require an initiative, decision-receiving and responsibility for the results from the educated individual; (2) it is built on active involvement of an educated individual during the realization of the experience, on the adventure in questioning, experimentation, problem solving, taking responsibility, creativity and constructive thinking; (3) on intellectual, emotional and social involvement of educated individuals in the process; (4) on the discovery and testing own value systems of educated individuals during the process (Neuman, 2004). In the educational process, elements of experiential education have an irreplaceable position. Through targeted provoking an experience, simulative situations and analyzing a situation we are aiming to process the experience and transform it into an experience that greatly influences the individual's value system. The basic means of experiential education is **activity**. Pupils' activity in the educational process can be understood as a relationship between a teacher, a pupil and the aim of educational process in which pupils participate in their own cognitive activity. We can divide the means of experiential education into following activities (Hanuš, Chytilová, 2009): physical, artistic, socio-psychological, social, cognitive, technical, IT and medial. In conditions of pedagogical practice, the most common means of experiential education is a game. Every game should bring a moment of surprise and should be the way to gain an experience. Playing games results in taking on different roles. It is up to a pupil how he/she is experiencing this role, whether he/she is able to move beyond his/her limits while meeting the goals of the game. Well-prepared and realized games are universally reflected in the development of the personality of a pupil involved. The pupil is given a space to make a free decision on choice of involvement and choice of measure of involvement (Nemcová, 2015). Drama plays in schools supporting interpersonal relationships and contacts are irreplaceable (Puchalová, 2005). Using the means of experiential education in the pedagogical process is obvious, but it is important to use the means on the highest level of expertise. Since the different researches show the positive impact of means of experiential education on classroom climate, it is necessary for future teachers to master the methods of application of experiential education in their pedagogical practice, to learn how to work with the means of experiential education and to use them effectively during their pedagogical activities (Orosová, 2010; Orosová, 2011; Brestovanský, 2013; Ferencová, Šutáková, 2004). The issue of the scientific research on how the experiential education impacts on the development of the teachers' competency profile becomes thus highly up-to-date.

In recent years, the issue of education has frequently been discussed and reflected in a curriculum reform of our school system, one of the results of which was the adoption of the State Educational Program designed in accordance with the international standard classification ISCED 97. All schools were therefore requested to create their own School Educational Programmes according to newly set objectives and content emphasizing orientation and development of functional literacy as well as key competencies of pupils (Petrová, Duchovičová, 2013). The undergraduate training of teachers should therefore copy requirements of pedagogical practice and as stated by Petrová and Duchovičová (2013, p. 9): "just for the changed position of a teacher it is necessary to adjust undergraduate higher education of teachers so that they are able to respond to current changes in a society". Teachers should therefore be experts not only in the field of imparting knowledge, but also in curriculum designing and approach to the development of a pupil's personality. It is necessary to move from a teacher- consumer of curriculum with minimal professional autonomy through a teacher- modifier of the curriculum to a teacher-creator of curriculum (Rovňanová, 2015). Teacher as an active creator of curriculum can be much better innencouraging individual cognitive and non-cognitive development of a pupil on different levels (Kosová, 2017). Such innovations should lead to a class and pupils' needs. This requirement should be already raised in undergraduate training focused on the development and creation of **a competency profile of a future teacher**. The researches confirm the need to support and broaden practical and professional preparation of future teachers leading to the development of a competency profile (Kosová, Tomengová et al., 2015; Pavlov, 2013). Multilateral innovation and interdisciplinarity are required in order to build reflective nature of the practical professional training of future teachers, focusing on the introduction of various training and model simulations of school situations in the context of practical training in university conditions (Vonk, 1993; Ward, McCotter, 2004). The main focus and importance of developing the professional competencies of undergraduates are in their synergetic helping undergraduates think about their acting in both common and difficult school situations and show them which other competencies

need to be improved (Murray, Christison, 2011; Sahlberg, 2010). One of the approaches of how to create and develop competence profile of future teachers appears to be an implementation of experiential education in their undergraduate training. Students who actively master learning methods, forms and means of experiential education and learn to use them in their pedagogical practice, according to the research below, are able to influence classroom climate positively. Since in our conditions there is no evidence of research investigation on the impact of experiential education on creating positive classroom climate, we decided to build on research studies on classroom climate, pre-gradual training and experiential education, to merge these aspects and realize our own research.

METHODOLOGY

The research was focused on the influence of experiential education applied by the class teacher in their work on the classroom climate. The aim of the research was to find out whether the classroom climate is, in fact, influenced by the class teacher who had employed the features of experiential educational already during their own pre-graduate training.

The goal of our research was to detect the influence of expert level experiential teaching on the classroom climate. As the independent variable, class teachers of the 5th year of the primary school were selected, based on the following criteria:

- a) *they used experiential education on the expert level*, i.e. *they studied* subjects aimed at the implementation of experiential education into the educational process from the position of the class teacher; and they actually apply this knowledge during class meetings.
- b) *they used experiential education on the non-expert level*, i.e. *they did not study* subjects aimed at the implementation of experiential education into the educational process from the position of the class teacher; however, they apply the method during class meetings because they learned it on their own.

The dependent variable was the classroom climate consisting of the following components: satisfaction, friction, competitiveness, teaching difficulty and class cohesiveness. For the purpose of this study, only conflicts were selected for focus.

In order to achieve the research goal, it was important to fulfil the following **research tasks**:

1. Identify the initial classroom climates in the research groups – pretest.
2. Carry out a teaching experiment – use experiential education by the class teacher during class meetings.
3. Verify the classroom climate after the experiment was carried out – posttest.

After these tasks were fulfilled, obtained data were statistically processed and correlations detected. Based on them, recommendations for the teaching practice were formulated.

The selected sample of subject consisted of pupils of the 5th year of primary schools located in the eastern part of Slovakia, namely the districts of: Stará Ľubovňa, Sabinov, Humenné, Prešov, Vranov and Košice. The collectives did not change in terms of members between the 4th and 5th years.

The sample was selected according to three criteria:

- ✓ there were at least two classes in the given year of study at the given school,
- ✓ one of the class teachers studied subjects aimed at the implementation of experiential education into the educational process from the position of the class teacher; and they applied this knowledge during class meetings.
- ✓ one of the class teachers did not study subjects aimed at the implementation of experiential education into the educational process from the position of the class teacher; however, they applied the method during class meetings based on what they learned on their own.

The experimental group (EG) consisted of 160 pupils from 6 primary schools. The control group (CG) consisted of 154 pupils from 6 primary schools. The total number of pupils involved in the research was 314 pupils in their 5th year of studies from 6 primary schools. 12 class teachers participated in the research; 6 teachers studied subjects aimed at the implementation of experiential education into the educational process from the position of the class teacher; and they applied this knowledge during class meetings, i.e. they used experiential education expertly; 6 teachers did not study subjects aimed at the implementation of experiential education into the educational process from the position of the class teacher; however, they applied the method during class meetings based on what they learned on their own, i.e. they did not use experiential education expertly.

Research sample labelling:

EG – experimental group – classes led by teachers who studied subjects aimed at the implementation of experiential education in the educational process from the position of the class teacher, i.e. they used experiential education expertly

EG – control group – classes led by teachers who did not study subjects aimed at the implementation of

experiential education into the educational process from the position of the class teacher; however, they applied the method during class meetings based on what they learned on their own, i.e. they did not use experiential education expertly.

EEE – Class with a class teacher who used experiential education expertly.

NEE – Class with a class teacher who did not use experiential education expertly.

Table 1: Structure of research samples

Group	Class	# of pupils			Total
		boys	girls	total	
EG	1EEE	13	16	29	160
	2EEE	10	14	24	
	3EEE	12	15	27	
	4EEE	13	13	26	
	5EEE	12	13	25	
	6EEE	12	17	29	
CG	1NEE	11	16	27	154
	2NEE	11	13	24	
	3NEE	10	16	26	
	4NEE	11	14	25	
	5NEE	12	13	25	
	6NEE	13	14	27	
Total		140	174	314	314

Source: own processing

The standardized „Naša trieda“ MCI (My Class Inventory) questionnaire originally created by Fraser and Fischer (1986, in Lašek, Mareš, 1991) was used in the first and third stages of our research. The questionnaire is designed for primary school pupils from the 3rd to 6th years of study. This method was selected because of the simplicity of questions, ways the opinion was to be expressed, and minimization of exhaustion in pupils. The questionnaire was filled in by both the experimental and control groups before (pretest) and after (posttest) the experiment was carried out. The questionnaire allowed us to evaluate the classroom climate from five perspectives. However, for the purpose this study, only one perspective will be discussed – class conflicts. The items in the questionnaire were assigned 3, 2, and 1 points to the answers YES, I DON'T KNOW, and NO respectively. The characteristics of the classroom climate - conflicts were subsequently evaluated based on the following criteria:

Table 2: Scale of classroom climate characteristics for conflicts

Variable	Climate characteristics	# of points
conflicts	Inappropriate	13.1 - 15
	Worse	10.1 - 13
	Good	7.1 - 10
	Excellent	5 - 7

Source: personal processing according to Kőbőlova, Rőtling, Sihelsky, 2006

In the second stage of the research, the teaching experiment was carried out: all teachers led the class meetings according to identical plans. In the experimental groups, class teachers used methods of experiential education (physical activities, visiting nature, didactic games, music, painting, etc.) as they were taught during their pre-graduate training. In the control groups, class teachers used experiential education methods (physical activities, visiting nature, didactic games, music, painting, etc.) as they learned on their own.

RESEARCH RESULTS

Phenomenon analysis, descriptive statistics (mean, mode, standard deviation, kurtosis, skewness, range, maximum, minimum, sum, median) and inductive statistics (Kolmogorov–Smirnov test – a nonparametric test of data distribution normality; Wilcoxon signed-rank test – to verify the research hypothesis).

Items no. 2, 7, 12, 17, 22 were aimed at identifying class conflicts. Statements were focused on complication in relations between pupils, on the amounts of tension, disputes and battles in the classroom. The fifth year of study is a milestone for primary school pupils, because the system of teaching changes and the frequency of their contact with their class teacher are much lower. Minimisation of conflicts in the classroom is very important in this year, because students are just acquiring habits necessary for the second level of primary school (subjects suddenly taught by different teachers, etc.).

Table 3: Class conflicts

Group	Class	Conflicts				
		pretest		post test		change
		mean	climate	mean	climate	
EG	1EEE	11.97	Worse	9.97	Good	-2.00
	2EEE	11.13	Worse	9.21	Good	-1.92
	3EEE	10.00	Good	7.04	Excellent	-2.96
	4EEE	9.92	Good	8.15	Good	-1.77
	5EEE	12.28	Worse	10.36	Worse	-1.92
	6EEE	9.93	Good	6.97	Excellent	-2.96
	Total	10.86	Worse	8.58	Good	-2.28
CG	1NEE	11.11	Worse	10.00	Good	-1.11
	2NEE	12.96	Worse	11.96	Worse	-1.00
	3NEE	8.81	Good	8.04	Good	-0.77
	4NEE	11.12	Worse	10.96	Worse	-0.16
	5NEE	9.96	Good	9.52	Good	-0.44
	6NEE	12.00	Worse	11.78	Worse	-0.22
	Total	10.98	Worse	10.21	Worse	-0.62

Source: own processing

The initial measurement showed that the overall climate in the research groups was worse in the area of conflicts. Seven groups the conflicts component of the climate was weaker. The numerical representations of other groups did not differ significantly. However, the final measurement showed differences in the climate among different groups. The most significant change was observed in EEE – the climate changed by -2.28. Another significant change was observed in 3EEE and 6EEE in which the good climate improved for excellent. The overall climate – conflicts in the EG and CG changed by -2.28 and -0.62 respectively.

Using the methods of descriptive statistics, basic characteristics of the statistical sets were identified.

Table 4: Descriptive statistics Pretest_EG

<i>N</i>	<i>Valid</i>	160
	<i>Missing</i>	0
<i>Mean</i>		10.86
<i>Mode</i>		13.00
<i>Std Dev</i>		2.66
<i>Kurtosis</i>		-.56
<i>Skewness</i>		-.41
<i>Range</i>		10.00
<i>Minimum</i>		5.00
<i>Maximum</i>		15.00
<i>Sum</i>		1737.00
<i>Percentiles</i>	<i>50 (Median)</i>	11.00

Table 5: Descriptive statistics Posttest_EG

<i>N</i>	<i>Valid</i>	160
	<i>Missing</i>	0
<i>Mean</i>		8.58
<i>Mode</i>		5.00
<i>Std Dev</i>		2.99
<i>Kurtosis</i>		-.90
<i>Skewness</i>		-.45
<i>Range</i>		10.00
<i>Minimum</i>		5.00
<i>Maximum</i>		15.00
<i>Sum</i>		1373.00
<i>Percentiles</i>	<i>50 (Median)</i>	8.00

Table 6: Descriptive statistics Pretest_CG

<i>N</i>	<i>Valid</i>	154
	<i>Missing</i>	6
<i>Mean</i>		10.98
<i>Mode</i>		11.00
<i>Std Dev</i>		2.64
<i>Kurtosis</i>		-.25
<i>Skewness</i>		-.44
<i>Range</i>		10.00
<i>Minimum</i>		5.00
<i>Maximum</i>		15.00
<i>Sum</i>		1691.00
<i>Percentiles</i>	<i>50 (Median)</i>	11.00

Table 7: Descriptive statistics Posttest_CG

<i>N</i>	<i>Valid</i>	154
	<i>Missing</i>	6
<i>Mean</i>		10.21
<i>Mode</i>		11.00
<i>Std Dev</i>		2.67
<i>Kurtosis</i>		-.58
<i>Skewness</i>		-.09
<i>Range</i>		10.00
<i>Minimum</i>		5.00
<i>Maximum</i>		15.00
<i>Sum</i>		1572.00
<i>Percentiles</i>	<i>50 (Median)</i>	11.00

Results were statistically verified. Using the Kolmogorov–Smirnov test it was found out that the data distribution was not normal in either of the groups.

Table 8: One-Sample Kolmogorov-Smirnov Test

	Pretest_ES	Pretest_KS	Posttest_ES	Posttest_KS
<i>N</i>	160	154	160	154
<i>Normal Parameters</i>				
<i>Mean</i>	10.86	10.98	8.58	10.21
<i>Std. Deviation</i>	2.66	2.64	2.99	2.67
<i>Most Extreme Differences</i>				
<i>Absolute</i>	.15	.17	.19	.14
<i>Positive</i>	.10	.11	.19	.11
<i>Negative</i>	-.15	-.17	-.12	-.14
<i>Kolmogoro v-</i>	1.85	2.13	2.39	1.69
<i>Smirnov Z</i>				
<i>Asymp. Sig. (2-tailed)</i>	.001	.000	.000	.004

Due to the results of the Kolmogorov–Smirnov test ($p < 0.05$), hypotheses were verified using the non-parametric Wilcoxon signed-rank test.

Before the teaching experiment statistical equality of the research samples in the area of conflicts (both experimental and control groups) was detected.

H0: At the beginning of the experiment there was no difference between the experimental and control groups in the area of conflicts.

H1: At the beginning of the experiment there was a difference between the experimental and control groups in the area of conflicts.

Table 9: Wilcoxon pretest_ES with pretest_KS (Paired)

Ranks

	N	Mean Rank	Sum of Ranks
<i>Pretest_ES – Pretest_KS</i>			
<i>Negative Ranks</i>	67	66.96	4486.50
<i>Positive Ranks</i>	67	68.04	4558.50
<i>Ties</i>	20		
<i>Total</i>	154		

TestStatistics

	<i>Pretest_ES – Pretest_KS</i>
<i>Z</i>	-.08
<i>Asymp. Sig. (2-tailed)</i>	.936

Conclusion

$p > 0.05$ The null hypothesis was accepted: There was no statistically significant difference between the experimental and control groups at the input in the area of conflicts.

During the teaching experiment statistical differences in the classroom climate – conflicts were detected and hypotheses verified.

H0: (Expert) use of experiential education in the position of a class teacher does not influence conflicts in class pupils.

H1: (Expert) use of experiential education in the position of a class teacher does influence conflicts in class pupils.

Table 10: Wilcoxon pretest_ES with posttest_ES (Paired)

Ranks

		N	Mean Rank	Sum of Ranks
<i>Pretest_ES – Posttest_ES</i>	<i>Negative Ranks</i>	2	13.00	26
	<i>Positive Ranks</i>	97	50.76	4924.00
	<i>Ties</i>	61		
	<i>Total</i>	160		

TestStatistics

	<i>Pretest_ES – Posttest_ES</i>
<i>Z</i>	-8.67
<i>Asymp. Sig. (2-tailed)</i>	.000

Conclusion

$p < 0.05$ Alternative hypothesis was accepted. (Expert) use of experiential education in the position of a class teacher does influence conflicts in class pupils.

H0: (Non-expert) use of experiential education in the position of a class teacher does not influence conflicts in class pupils.

H1: (Non-expert) use of experiential education in the position of a class teacher does influence conflicts in class pupils.

Table 11: Wilcoxon pretest_KS with posttest_KS (Paired)

Ranks

		N	Mean Rank	Sum of Ranks
<i>Pretest_KS – Posttest_KS</i>	<i>Negative Ranks</i>	24	33.31	799.50
	<i>Positive Ranks</i>	40	32.01	1280.50
	<i>Ties</i>	90		
	<i>Total</i>	154		

TestStatistics

	<i>Pretest_KS – Posttest_KS</i>
<i>Z</i>	-1.64
<i>Asymp. Sig. (2-tailed)</i>	.100

Conclusion

$p > 0.05$ The null hypothesis was accepted: (Non-expert) use of experiential education in the position of a class teacher does not influence conflicts in class pupils.

Statistical verification of hypotheses at the significance level of 0.05 confirmed differences in the impact of expert and non-expert use of experiential education on the classroom climate – conflicts.

CONCLUSIONS

Graduates of teachers preparing courses have professional competencies which they have acquired during their studies. Their professional competencies should be focused on three basic dimensions: a pupil, an educational process and professional development. All three dimensions can utilize experiential education by means of which the personality of a pupil as well as the personality of a future teacher can be developed. The importance of implementing the means of experiential education in a pre-graduate training and subsequently in pedagogical practice of teachers were confirmed by realizing our research. Their active using has contributed to the positive change of the classroom climate, which is a key factor not only in educational but also upbringing process at schools. We believe that experiential education should be a part of many pedagogical and didactic disciplines, ideally also as a separate studying subject in teacher studying programmes. During pedagogical practice at schools the teachers of academic subjects become class teachers, so subsequently also active creators of positive classroom climate. It means that experiential education has an irreplaceable place in teachers' training and development of their competency profile, the effect of which is reflected in classroom climate.

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INFORMAL CAREGIVERS' KNOWLEDGE AND PERCEPTIONS ABOUT PREPARATION FOR HIGH CLINIC

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Abstract

Background: Knowing the perception that informal caregivers have on the planning of higher in elderly patients, allows nurses to know the real needs of the caregiver and the elderly, thus contributing to the decrease in anxiety, prevention of complications and therefore greater satisfaction for the care received.

Objectives: Knowing the perception of informal caregivers on planning discharge of the elderly, identifying the sociodemographic variables, professional, family, medical and psychosocial are predictive of this perception.

Methods / procedures: We conducted a quantitative study, cross-sectional, descriptive and correlational, using a non-probabilistic convenience sample consisting of 41 informal caregivers of elderly patients admitted in the Medical Service 1 at Hospital of the Algarve - Faro Unit. The method appealed to the questionnaire of sociodemographic, professional, family and clinic, and the use of the Barthel Index, High Planning Questionnaire (PREPARED) and the scale of the Hospital Anxiety and Depression (HADS).

Results: Of the 41 informal caregivers, 73.17% were female, 78% are married / de facto union, 39.0% remain active professionally full-time and 51.2% are children of the elderly, who have an average age of 78.78 years. Most of the caregivers (82.9%) lives in the same home as the elderly, and are informal caregivers for less than three months (58.5%). Caregivers have a mild to moderate anxiety level, being this level higher in females, although there was no statistically significant differences between genders. Regarding the perception of caregivers related to planning high, most privileges related information on how to get to the AVD, stating that they feel prepared to return home, yet most do not feel confident to perform daily tasks at home. It was found that the presence of the formal network support significantly influences the perception of high planning ($p < 0.05$), and the gender, household and degree of dependence, although partially (for display only) are also predictive of perception.

Conclusions: Despite the small sample size, the results show the importance of organization of care in order to meet the needs of the elderly and their caregivers in health care, as they relate to planning high, looking for quality.

INFORMATION LITERACY LEVEL OF COASTAL AND SMALL ISLAND COMMUNITY IN INDONESIA ON ACCEPTING THE EDUCATION OF TECHNOLOGY WITH ANIMATION BASE

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ABSTRACT

Technology introduction in rural can increase economic value of natural resources. Education of technology is required by the community so they can use technology for managing the natural resources. Center for Scientific Documentation and Information, Indonesian Institute of Sciences (PDII-LIPI) has developed technology education for the community in coastal and small island in Indonesia in animated video creation with the contents are the appropriate technology of building solar drying cabinet (SDC) and sealer, and constructing ground reservoir. This is the successful project of technology educating which has been done by PDII-LIPI in the village of Tanjung Batang, sub-district of Pulau Tiga, District of Natuna, Indonesia. Indonesia consists of many small islands and coastal areas. This project can imitate in other areas in coastal and small island in Indonesia that have the same characteristic. The similarity of information receiving level in this areas can be seen from the level of information literacy. Information literacy level can be used as standar for apply this model in other area. The purpose of this research is to determine the information literacy level of the community in District of Natuna, Indonesia. The result shown that in generally, the community in this area have a skill to recognize the information need but do not have the ability to locate and access the information, and they do not understand the content of the information. However if the information presenting in a form they understand easily they will use the information about processing marine resources and fresh water management for their activity. This facts leading to a recommendation that education of technology presenting in animation based can be used in other rural area especially in coastal and small island in Indonesia that has a basic level of information literacy in term of education level and skills.

Keyword: information literacy level, coastal and small island community, education of technology, animation

INTRODUCTION

Technology introduction in rural can increase economic value of natural resources. The previous study show that adopting and further adapting the technologies by farmer in rural can achieve cost savings, as well as substantial improvements in quality and productivity that strengthen significantly their strategic position (Bennett, Theodorakopoulos, & Sa, 2012). In Indonesia, technology introduction for processing and managing natural resources in rural area especially in coastal areas and small islands has not been done.

Diffusion of technologies need the research and advisory intermediaries with the function for brokering as building a coalition community of practice, facilitating and configuring via workshops and training/technical assistance visits (Theodorakopoulos, Nicholas; Bennett, David; Sanchez, 2014). The limited number of advisory intermediaries and vast territories consisting of small islands scattered make such activities difficult to do in Indonesia. The number of researchers in Indonesia is less than 10000 (LIPI, 2017)(LIPI, 2017)(LIPI, 2017)(LIPI, 2017)(LIPI, 2017) while its population reaches more than 260 million. Many technology introduction programs have been unsuccessful due to lack of mentoring from advisory intermediaries. Therefore the rural communities especially in coastal and small island in Indonesia requires a technology education media that is easy to understood and capable for transferring technology without accompaniment.

Technology education is related with information dissemination. The product resulted from information dissemination can be used as a tool for technology education. The successful of disseminating information to people in rural need three factors, which is categorized in information, provider and communication channel and media (Yoganingrum, 2016). Animation is a media that has been widely used for effective information dissemination and education. Iwasa (2017) used the animation for visualizing the complex scientific research to be easy presentation for education. Bello-bravo & Pittendrigh (2013) use animation as an educational material for low literate learner. Therefore animation technology is very good to be adopted to present the results of research. Center for Scientific Documentation and Information, Indonesian Institute of Sciences (PDII-LIPI) developed the animation for disseminating the research information especially appropriate technologies.

One of the project developed in technology education for the community in coastal and small island in Indonesia is

animated video creation with the contents are the appropriate technology of building solar drying cabinet (SDC) and sealer, and constructing ground reservoir (Yoganingrum, Soeprihantoro, Martosudirdjo, & Maryati, 2016). This is the successful project of technology educating which has been done by PDII-LIPI in small island in Indonesia. This project conducted in the village of Tanjung Batang, sub-district of Pulau Tiga, District of Natuna, Indonesia. The communities were taught how to use technology to empower their natural resources to become more valuable. The education used the animated video as a media for accompaniment. This community achieve the goal to imitate the technology without advisory intermediaries.

This successful project can imitate in other areas in coastal and small island in Indonesia that have the same characteristic. The similarity of information receiving level can be seen from the level of Information Literacy level. The acceptance of information services and education is closely related to the level of information literacy. Egunjobi (2014) use the information literacy as a predictor of community information services utilization in south western Nigerian public libraries. Therefore, it is necessary to explore the level of information literacy as one of factors that cause the community successfully imitate the technology presented with multimedia without advisory intermediaries. Information literacy is the capacity of people to recognize their information needs, locate and evaluate the quality of information, store and retrieve the information, make effective and ethical use of information, and apply information to create and communicate knowledge. The result of this study is used as a guide to predict whether the information services applied in this area can also be applied in other similar areas. The level of information literacy can be used as a standard for apply this model in other area. Therefore it is necessary to see the level of information literacy in District of Natuna as a coastal area and small island.

The purpose of this research is to determine the information literacy level of the community in District of Natuna, Indonesia. This paper report the information literacy level of coastal and small island community in Indonesia in accepted the technology education about processing of marine resources and fresh water management with animation base.

THE STUDY

Information literacy level used the UNESCO standar (Catts & Lau, 2008) (Isfandyari-moghaddam & Kashi-nahanji, 2011). Survey method is used to collect the self assessment data. The respondent is the community of 100 people in the village of Tanjung Batang, sub-district of Pulau Tiga, District of Natuna, Indonesia. The data was collected in April 2015. In 2015, the real condition of the level of information literacy of community is measured before it is influenced by animation-based information services. Descriptive statistics are used to process and conclude the data.

Measuring information literacy level used two indicators (education and skills) as a measurement parameters. Level of education starting from level 0 (kindergarden) up to the level 6 (research). The Skill level is measured by self assessment. The set of question is used to assess the skill level. The questions related to the ability of information literacy to manage marine resources and fresh water management. Both issues will be educated for through appropriate technology that can improve people's competitiveness. Statement using Likert scale 1-5 with the scale 1 is weak agreement statement and scale 5 is strong agreement statement. Set of question as on the Table 1.

Table 1. The skills level and test question measurement

Skill	Test Question
1. Definition and articulation of information need	Q1. Do you need information about processing of marine resources (fish, shells, etc) and fresh water management? Q2. Whether information available on processing of marine resource and fresh water management meets your need?
2. Location and access of information	Q3. Do you know where to find information about processing of marine resources and fresh water management?
3. Assessment of information	Q4. Do you understand the language on the available information? Q5 Whether the available information about processing of marine resources and fresh water management is clear and easy to understand.
4. Organization of information	Q6. Do you searching and managing the information about processing of marine resources and fresh water management?
5. Use of information	Q7. Do you use the information that you got for processing marine resources and managing fresh water?

The education level is as follows:

Level 0 = Kinder garden

Level 1 = Elementary

Level 2 = Junior High

Level 3 = High School

Level 4 = Post Secondary

Level 5 = Undergraduate

Level 6 = Research

Table 2. Measurement indicators of information literacy level publish by UNESCO (Catts & Lau, 2008)

Level of Information Literacy	Education Level	Skill
Basic	Level 0 - 2	Skill 1-2
Medium	Level 2 - 3	Skill 2-3
High	Level 3 - 4	Skill 3-4
Advance	Level 4 - 6	Skill 4-6

FINDINGS

This study resulting the description of the information literacy level in District of Natuna as a coastal and small island area in Indonesia in receiving the education of technology about processing marine resource and fresh water management. Factors affecting the level of information literacy in this area discussed in detail as follows.

Demographic Information of Respondent

Demographic information shows that most of respondents are in the poverty level from economical income. The community in rural in generally used the natural resources as their livelihood and source of income (Schwarza & Zeller, 2005). Therefore improving their ability to process and manage natural resources become important. Use of simple applicable technology can influence the value of their product and achieve the goal to improve their income.

The low level of income in community also affect on their facility for access the information that also affect on the level of information literacy (Bai, 2014). The community can afford to buy a means of communication (ex: smartphone), but they have no cost for subscribe to the internet. Facility of information services as a library also not available. Information services are needed to overcome the limited facilities.

Educational status also become the main problem in the information literacy skill. Tabel 3 shows that even 15% of the community have no education. This will affect the ability to receive educational technology offered. Animation base can be used to meet the information need of community that have oral tradition in communication such as in rural. This sudy limite to the data about ability of reading in this community.

On the other hand, there are also 17% of people with education at high levels. This will affect to technology education for the community. Advisory intermediries that is required for technology transfer process based on theory of Theodorakopoulos, Nicholas; Bennett, David; Sanchez (2014) can be done in stages. The people with higher levels of education can act as intermediaries. Information services through an animation base can be translated by a small proportion of people with high level education to most other communities with low levels of education. This can overcome the problem of limited number of researchers and advisory mediaries in educating technology to rural communities, especially those on coastal and small island. Demographic information of respondent can be seen in Table 3.

Table 3. Demographic information of respondent

Heading	No. of Respondents	Percent
Sex		
Male	63	63%
Female	37	37%
Monthly income in 1000 Rupiah (USD)		
Less than 1.000 (less than 75 USD)	40	40%
1.000-5.000 (75 – 373 USD)	55	55%
5.000-10.000 (373 – 746 USD)	3	3%
Above 10.000 (above 746 USD)	0	-
Educational status		
No education	15	15%
Primary	40	40%
Higher secondary (Junior high and High school)	28	28%
Bachelor's degree	17	17%

Information Literacy Level Based on Education Indicator

The result shown that most community (67%) are at basic level of information literacy based on education indicators. Other small part of community are at the medium level (16%) and at the higher level (17%). According to Tan & Gorman (2012) the same level of education can result different level of skill depending on the area of the origin. Urban student in generally have a higher information literacy than the rural student. However, a small amount at a high level of information literacy in this area still adequate for a community to receive technological education. It can be concluded that to apply educational technology with animation based in rural area especially in coastal and small island areas it is required at least 17% of the community with the high level of information literacy based on education indicator.

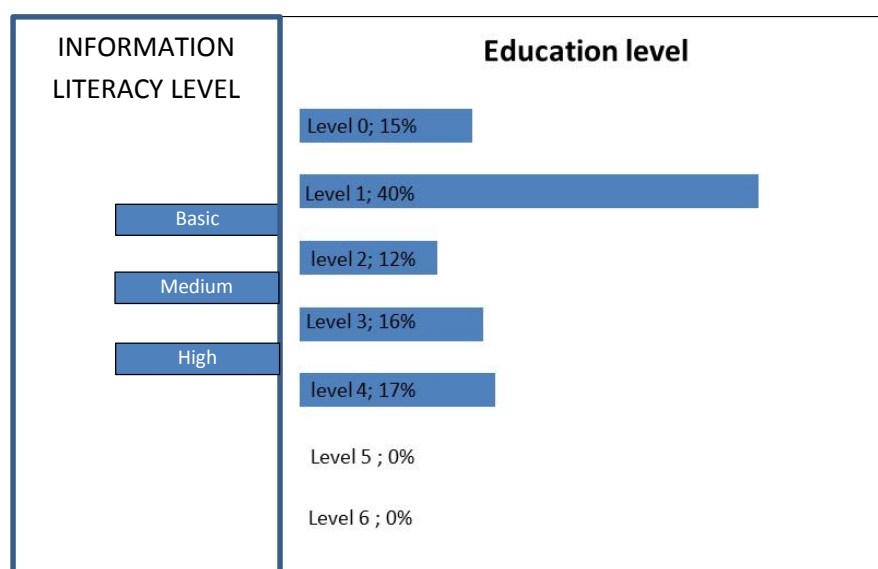


Figure 1. Measurement of information literacy level based on education level

Information Literacy Level Based on Skills Indicators

The study shows that the skill that is most recognized by the community in Natuna Island is the skill at the basic level of information literacy. A total of 81 people out of 100 people states that they have the ability to definition and articulation of their information needs (statement at Likert scale >3 with the average 4,03). This skill is needed

to determine what information that the community needs to improve its competitiveness by utilizing marine resources and managing fresh water. It is important to have and be the basis in utilizing the information service that will be given. Education technology provided will not succeed if the public does not know the information needs.

Skill 2 (location and access of information) and skill 3 (assessment of information) present the medium level of information literacy. Only 26 people out of 100 people of the community state that they have the ability to determine the location for accessing the information they need. Only 34 people out of 100 people state that they have the ability to assess the information. The ability judge from the statement at the scale >3 . It can be conclude that most of community recognize that the available information about processing of marine resources and fresh water management is not clear and difficult to understand. This shows that the information service that has been done has not reached the public. Education technology in the form of animation will overcome the limitations on skill 3 that is understand the information content submitted. This is in line with the previous study that information repackaging process can overcome the lack of information literacy in the rural community (Maryati, Ira; Yoganingrum, 2015).

Skill 4 (organization of information) and skill 5 (use of information) can be the trigger of their success in obtaining technological education. A number of 50 out of 100 people recognize that they doing searching the information and 43 people out of 100 use the information about processing of marine resources and fresh water management for their activity. Both skills (4-5) present the high level of information literacy. This is somewhat contrary to some statements that the higher the education will be the higher the skills of information literacy owned (Bucciarelli, Odoardi, & Muratore, 2010) (Bai, 2014). In this case it can be seen that people who have high education level only as much as 17%, however the numbe of people which skill 4 and 5 reached 50%.

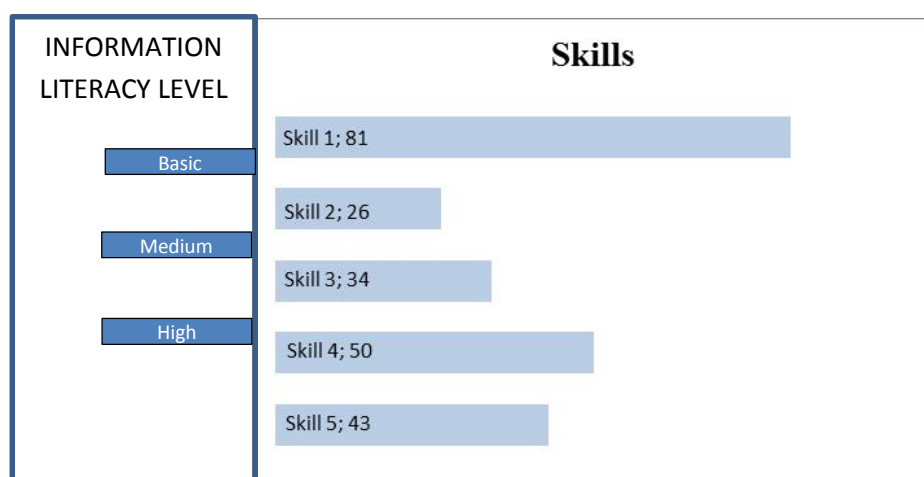


Figure 2. The number of people with the strong statement (>3) to each skill of they have

Overall it can be concluded that the community know their information needed but they have no access to the location and they do not understand the content of the information but if the information presenting in a form they understand easily they will use the information about processing marine resources and fresh water management for their activity. It shows their sincerity in trying to improve their lives by utilizing the natural resources they have. The study conducted by Parvathamma & Pattar (2014) state that the community in rural in generally know the information needs but can not access to the information because of the lack of facilities such as internet and other communication media. Unfortunately, many rural area have the lack of ICT which are cause by electricity (Chaklader, Alam, Islam, & Sabbir, 2013) including in small island in District of Natuna. Low cost network infrastructure base on solar powered can be offered as a solution to overcome the lack of ICT. The average skills of the community on Natuna Island can be seen on the Figure 3 and Table 4.

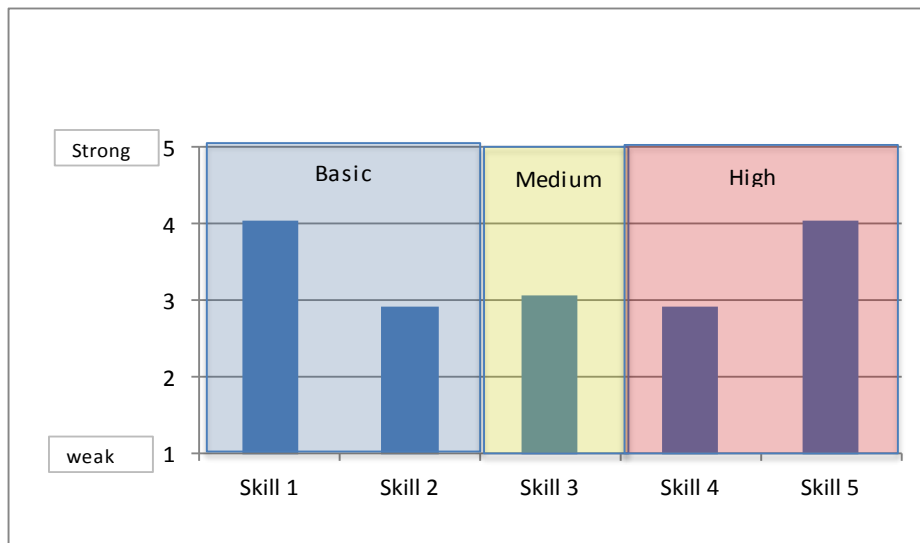


Figure 3. The number of people with the strong statement (>3) to each skill of they have

Table 4. The average of self assessment statement value of the community in Natuna Island

No	Skill	\bar{x}	SD
1	Definition and articulation of information need		
	Do you need information about processing of marine resources (fish, shells, etc) and fresh water management?	4,04	1,97
	Whether information available on processing of marine resource and fresh water management meets your need?	3,83	1,73
2	Location and access of information		
	Do you know where to find information about processing of marine resources and fresh water management?	2,93	0,82
3	Assessment of information		
	Do you understand the language on the available information?	3,06	0,93
	Whether the available information about processing of marine resources and fresh water management is clear and easy to understand.	3,05	0,96
4	Organization of information		
	Do you searching and managing the information about processing of marine resources and fresh water management?	3,17	0,97
5	Use of information		
	Do you use the information that you got for processing marine resources and managing fresh water	4,00	1,01

CONCLUSIONS

Most of the community in District of Natuna, Indonesia have a level of education in the basic level of information literacy (67%). Other small part of community are at the medium level (16%) and at the higher level (17%). Educational technology with animation based in rural area especially in coastal and small island areas require at least 17% of the community with the high level of information literacy based on education indicator. This amount of people is required for replacement the advisory intermediaries. In generally, the community in this area have a skill to recognize the information need but do not have the ability to locate and access the information, and they do not understand the content of the information. However if the information presenting in a form they understand easily they will use the information about processing marine resources and fresh water management for their activity. This facts leading to a recommendation that education of technology presenting in animation based can be used in other rural area especially in coastal and small island in Indonesia that has a basic level of information literacy in term of education level and skills.

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INITIATIVE TAKING LEVELS OF SCHOOL PRINCIPALS*

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ABSTRACT

The word initiative is widely used in everyday language (as "take initiative"). Especially in critical and complex events and in crisis situations it is usually the decision and the action of implementation of the person who is in charge. While this word is used, it has many meanings such as taking responsibility, taking risks, strength, self-confidence as well as having an active performance in practice.

The main purpose of this study is to examine the level of personal initiative use of school principals working in state secondary schools in the Northern Cyprus according to the principal, assistant principals, and teachers. This study was designed in accordance with the descriptive method. Since sampling was easy to achieve, no samples were taken and the entire universe was reached (43 principal and 108 assistant principal). Because of the number of teachers, 499 randomly selected teachers represented the relevant universe. Personal Initiative Measurement Tool for School Principals (Akin, 2012) was used to determine personal initiative use scores in the research. There are three sub-dimensions of the scale: self-starting, proactivity, persistency. In the analysis of the data, the t-test was used for the binary variables and F test was used for more than two variables to determine the difference between the groups. To find the source of the difference between the variables, the Scheffe significance test was applied.

When the averages of the responses to the statements of the self-initiated dimension examined, it was seen that both principals and teachers fully participated and the deputy principals were largely extent the idea of the managers have taken the initiative in this sub-dimension. In terms of pro-activeness, principals, deputy principals, and teachers were found to fully agree that managers were taking initiative in proactivity. On the aspect of persistence, it has been seen that the principals of schools have fully participated in the statements which the managers have taken initiative in insistence, but the deputy principals and teachers have greatly participated in these statements. According to the second sub-problem of the research, there was a statistically significant difference in the self-initiation, proactiveness and persistency subscales. The views of school principals, assistant principals, and teachers regarding the use of initiatives by school principals differed significantly according to their seniority and according to their level of education. Appropriate recommendations are given in the light of this data.

INTRODUCTION

The term of personal initiative is often used in administrative implementations. It can be said that the concept of personal initiative contains many leadership notions in itself. For this reason, this concept is examined in terms of management science. Schools are educational organizations administered by school principals. School principals have a great responsibility to guide the creation of a school culture that incorporates a vision, mission, and core values to make the school organization productive, successful, and effective. Therefore, it is considered to be an important issue in the field of educational sciences as well. In this study, the term of the personal initiative was taken in terms of school principals who are the leaders of school organizations.

In educational organizations, school principals are responsible for school management. For this reason, school principals' role in managing and directing their school's educational activities is of vital importance. Today, it is becoming increasingly important for school principals to take personal initiative. Likewise, as mentioned by Şimşek (1999) having personal initiative is defined as a leading leadership feature. The fact that the principal is able to take personal initiative for the vision and mission of the school in an effective manner is expected to positively affect many aspects of the school, including organizational health.

The word initiative is widely used in everyday language (as "take initiative"). Especially in critical and complex events and in crisis situations it is usually the decision and the action of implementation of the person who is in charge. While this word is used, it has many meanings such as taking responsibility, taking risks, strength, self-confidence as well as having an active performance in practice (Denizir, 2016). There are 3 sub-dimensions of personal initiative: self-initiated behavior, proactive behavior and persistence. These sub-dimensions can be explained briefly as follows.

Behaviors that the employee performs beyond the behavior required by his or her own role are defined as self-initiated (starting) behaviors. A self-initiated employee will be personally committed, highly self-confident, successful and motivated (Frese, 2001).

Proactive behavior can be described as taking the initiative to develop existing situations or to create new ones. In a sense, it is a kind of rebellion rather than adaptation to the passive situation. Proactive behavior, in a sense,

also includes innovation and change. By creative solutions it means taking the initiative to develop current situations or to create new solutions. In other words, it is an open attitude to innovation rather than adaptation in a passive way (Denizer, 2016).

Persistence is a leadership feature that allows you to reach a conclusion by acting in a determined and patient manner when performing an objective or task (Denizer, 2016). An initiated and ongoing work may be interrupted by economic or other reasons. Resisting insistently rather than giving up in such adverse situations is seen as an important leadership feature (Morgan & Hull, 1926 as cited in Akin, 2012).

School principals must use all available resources to achieve the goals of the school. For this cause, he/she should cooperate and communicate with teachers, students and employees. Concurrently, school principals must have active, responsible, committed to the school, strong, innovative and persistent personality traits that can follow events and problems (Karshi, 2016). Besides, there are studies that show that self-efficacy is positively related to personal initiative (Speier & Frese, 1997) as well as research that self-efficacy is positively related to personal initiative (Akin, 2014). Both are necessary for effective school management. For this reason, it is necessary to investigate the concept of personal initiative.

This subject has never been investigated in North Cyprus before and this reveals the importance of research. With this information in mind, the main purpose of this study is to examine the level of personal initiative use of school principals working in state secondary schools in the Northern Cyprus according to the principal, deputy principals, and teachers. In order to analyze this main objective, the following sub-problems were examined.

- 1) Is there a meaningful difference between the views of school principals, deputy principals, and teachers on the level of personal initiative which is taken by school principals?
- 2) Do the seniority, the level of education, and the time work with the principal, differentiate the views of teachers and deputy principals on the level of personal initiative of the principal?

THE STUDY

This study was designed in accordance with the descriptive method. Descriptive research is aimed at casting light on current issues or problems through a process of data collection that enables them to describe the situation more completely (Fox & Bayat, 2007). Due to it is easy to reach the principal and deputy principal population, no sample has been taken and the entire population has been reached (43 principal and 108 deputy principal). The abundance of the teachers at secondary education institutions made sampling an obligation. For this reason, 499 teachers selected with stratified method and random sampling represented the relevant universe. The distribution of sampled participants depending on independent variables is as follows: based on professional seniority, 79.1% of school principals, and 56.5% of deputy principals are working at their school for 21 years or more. In addition, it is seen that 28.9% of teachers are in the profession for 16 to 20 years. According to the education level variable, 67.4% of principals, 79.6% of deputy principals and 77.6% of teachers have undergraduate degrees. After obtaining the necessary permits from the Ministry of National Education, the researchers personally collected the data.

In the study, the information form which was developed by the researcher was used to obtain the necessary data about the characteristics of the school principal, deputy principal and teachers and the schools they work in. In the second place 'Principals' Personal Initiative Measurement Tool' (Akin, 2012) was used to determine personal initiative scores in the research. The scale consists of a total of 32 questions. There are three sub-dimensions of the scale: self-initiate, proactivity, persistency. Persistence sub-dimension aims to measure persistent personality structure while Proactive sub-dimension aims to measure proactive personality structure and self initiation sub-dimension aims to measure self-willing behavior in actions. Cronbach Alpha internal consistency coefficient for the self-initiation subscale was 0.88, for the proactivity dimension was 0.83 and for the persistence dimension was 0.89. The reliability of the scale was calculated as 0.86. As a result of the analyses made for this research, it was calculated that Cronbach Alpha internal consistency coefficient for the self-initiation subscale was 0.97, for the proactivity dimension was 0.86 and for the persistence dimension was 0.77. The Cronbach Alpha coefficient for the scale validity of the Principals' Personal Initiative Measurement Tool was calculated as 0.95. Accordingly, it is concluded that the scale is valid and reliable for use in the sample of the Northern Cyprus.

In the analysis of the data, the t-test was used for the binary variables and F test was used for more than two variables to determine the difference between the groups. To find the source of the difference between the variables, the Scheffe significance test was applied.

FINDINGS

In order to display the opinions of school principals, deputy principals and teachers as regards the personal initiative usage status of school principals (as per self-initiation, pro-activity and persistence dimensions), the mean values of answers given according to scale items was used. Accordingly, when the mean values of the answers given by participants to the expressions in self-initiation dimension are examined, it can be seen that both principals and teachers agreed that principals take initiative in terms of self-initiation ($\bar{X}_p=4,76$; $\bar{X}_t=4,26$), and that deputy principals agreed considerably ($\bar{X}_{dp}=4,19$). It is observed that in the self-initiation sub-

dimension, the opinions of deputy principals and teachers overlapped with those of school principals considerably. Accordingly, it can be said that principals and teachers think that school principals take self-initiative without waiting for the orders and directives in order to perform their school-related duties. In addition, the fact that teachers completely agree that school principals perform self-initiation and launch their duties on their own indicates sufficient cooperation between principals and teachers. There are research findings in the literature which support these data (Akin, 2012). The fact that the belief that school principals take initiative is that parallel and high shows that, as indicated by Bursalioglu (2015), school principals have behaviours that comply with their leadership role and that the responsibility at schools rests with the principals.

When the mean values of the answers given by participants to the expressions in pro-active behaviour dimension are examined, it can be seen that principals, deputy principals and teachers agree that principals take initiative in terms of pro-activity ($\bar{X}_p = 4,87$; $\bar{X}_{dp} = 4,27$; $\bar{X}_t = 4,36$). As a result, it can be said that school principals perform their duties with an innovative and entrepreneur attitude. In addition, it can be commented that school principals are seen by teachers as leaders with high organizational commitment who can take personal initiative and perform their duties. It is seen that there are studies in the literature which support the results of this research. In Akin's study (2012) it is displayed that the expressions with the highest and lowest agreement by school principals, deputy principals and teachers at pro-activity dimension coincided with each other.

When the mean values of the answers given by participants to the expressions in pro-active behaviour dimension are examined, it can be seen that principals agree that principals take initiative in terms of persistence dimension ($\bar{X}_p = 4,72$) but that deputy principals and teachers considerably agreed with the judgment ($\bar{X}_{dp} = 4,12$; $\bar{X}_t = 4,11$). Accordingly, it can be claimed that principals take initiative, act as pioneers and work with insistence so that they can perform the tasks and expectations related to the school, and bring their school change, development and innovation. The finding that initiative-taking level of school principals at persistence sub-dimension has high mean values can be associated with the fact that persistence is accepted as an essential attitude in the path to success.

In order to find an answer to the first sub-problem of the research, an examination is made to see whether there is significant difference between the opinions of school principals, deputy principals and teachers in terms of self-initiation, pro-activity and persistence dimensions of the school principals.

Table 1 Anova test results for the use of personal initiative according to the views of the principal, deputy principal and teachers.

	Duty	N	\bar{X}	ss	sd	F	P	Sig
Self initiation (si)	Principal	43	4,765	,35230	,5372	12,780	,000	Prin/D. Prin Princ/teach
	Deputy principal	108	4,1903	,76184	,7331			
	Teacher	499	4,2577	,65282	,2922			
Pro-activity (pr)	Principal	43	4,8671	,25592	0,3903	16,165	,000	Prin/D. Prin Princ/teach
	Deputy principal	108	4,2544	,70387	0,6773			
	Teacher	499	4,3548	,61445	0,2751			
Persistence (p)	Principal	43	4,7302	,40446	,06168	8,468	,000	Princ/teach
	Assistant principal	108	4,3204	1,59999	,15396			
	teacher	499	4,1106	,88328	,03954			

As can be seen in table 1, there is significant difference in favour of school principals in the opinions of school principals, deputy principals and teachers in terms of self-initiation, pro-activity and Persistence dimensions of the school principals [$F_{si} = 12,78$, $p < 0,05$; $F_{pr} = 16,16$, $p < 0,05$; $F_p = 8,46$, $p < 0,05$]. Akin (2012) reached similar findings in his study. According to the obtained findings, it can be claimed that school principals find their school-related efforts adequate, are aware of their duties and do not need any external motivators, pay effort to improve the existing situation and work until the end in order to perform their duties. As a result of analyses, it can be thought that the found difference means that the efforts of principals are not noticed by deputy principals

and teachers or not shared by principals adequately. This result can be associated with the fact that the tasks that participants are performing have different circumstances. As can be seen from the table, school principals agree more than deputy principals and teachers that they take active part in personal initiative-taking. As stated by Freese and Fay (2011), using personal initiative means self-initiation, being proactive and sedulous. Accordingly, it can be said that school principals are using initiative.

As regards the second sub-problem of the research, one-way ANOVA test was used to analyse whether there is significant difference between initiative-using levels of school principals in secondary education institutions based on the opinions of school principals, deputy principals and teachers according to their seniority and education level and the results are shown in table 2.

Table 2 Anova test results for the use of personal initiative according to the seniority and education level of the principal, deputy principal and teachers.

Seniority	N	\bar{X}	ss	sd	F	P	Sig
1-5 year	88	4,2330	,55918	,05961	2,392	0,049	11-15/>21
6-10 year	83	4,3261	,63852	,07009			
11-15 year	98	4,1199	,62288	,06292			
16-20 year	175	4,3059	,60211	,04552			
21 and up	206	4,3526	,74216	,05171			
Total	650	4,2854	,65488	,02569			
Education Level	N	\bar{X}	ss	Sd	F	P	Sig
Bachelor	502	4,2938	,65435	,02921	5,363	,05	Bach/PhD Master/PhD
Master	140	4,2156	,65299	,05519			
PhD	8	4,9767	,03235	,01144			
Total	650	4,2854	,65488	,02569			

As can be seen in table 2, there is significant difference between the opinions of school principals, deputy principals and teachers on initiative-taking by principals according to their seniority [$F = 2,39$, $p = 0,04 < 0,05$]. Post-Hoc Tukey test results were examined in order to understand the seniority level which generated this difference. Participants with 21 and more years of professional career ($\bar{X} = 4,35$) tend to think that school principals are taking initiative compared to participants with 11 to 15 years of career ($\bar{X} = 4,23$) which, in turn, indicates that the experience of teachers in their profession has a positive role on their viewpoint and understanding. Although there are no studies which display the relation between direct initiative and career, there are studies which show that seniority is an essential variable in organizations (Tor, 2011; Katipoğlu, 2014); on the other hand, some other studies show that it does not make any difference (Bilgiç 1998).

According to analysis results, there is significant difference between the opinions of school principals, deputy principals and teachers on initiative-taking by principals according to their level of education [$F = 5,36$, $p = 0,05 = 0,05$]. Post-Hoc Tukey test results were examined in order to understand the seniority level which generated this difference and it was seen that those with PhD degree show higher agreement with the expression that principals take personal initiative. In the light of this information, it can be expressed that level of education has positive impact on personal development and that educators with higher level of education enjoy the opportunity of viewing professional subjects from a wider perspective.

CONCLUSION

According to the perception of school principals, deputy principals and teachers working at secondary public schools in TRNC, school principals totally use personal initiative while performing their duties. In the study, it was found out that school principals totally and deputy principals and teachers considerably agreed with the expression that school managers show self-initiation, persistence and pro-activity in personal initiative-taking. These findings indicate that school principals at secondary schools have initiative-taking characteristics which is an essential leadership skill. In addition, it can be claimed that school principals do not refrain from advancing upon work-related problems, notice opportunities and evaluate them for the benefit of their school, insist on performing hard tasks and pay effort to improve the existing situation, and do all the foregoing with professional ethics without external pressure. Moreover, it is witnessed that as the level of education and seniority of teachers,

school principals and deputy principals' increase, they have more positive opinion on the initiative-taking of school principal.

In summary, it can be claimed that the concept of personal initiative, which is evaluated as an effective behavioural role in especially managerial applications today, consists of several powerful leadership concepts (Denizer, 2016). Accordingly, principals of our schools are managers who are open to innovation, aware of their role and responsibilities, and ready to undertake the tasks that their role requires in the eyes of the teachers and deputy principals.

In order to sustain and even upgrade this situation, on-the-job training can be provided to all personnel within the education-management-supervision. It is believed that with such training activities, school principals, deputy principals and teachers will benefit from information and education that coincide with innovations and requirements. In addition, it is believed that the laws and by-laws which lose their functionality within years should be reviewed and especially the authorities and rights of principals should be examined. It is also believed that regular performance evaluation of employees and awarding the personnel so as to increase success at and devotion to their schools should be launched so that healthier school organizations can be obtained, which, in turn, requires managers who can take personal initiative.

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INNOVATION AND CHANGE IN EDUCATION.

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Since 2014 and funded by a number of NJ manufacturing firms, NJIT Continuing Professional Education (CPE) has been developing MechaFORCE as new strategy to reverse the shortage of trained workforce for this industry sector in New Jersey. Known as M-RIM or MechaForce—Registered Internship Manufacturing, the program has evolved from CPE's continuing and earlier stewardship of three of New Jersey's seven Talent Networks (TNs) in Advanced Manufacturing, Distribution/Logistics/Transportation and IT STEM industry sectors. CPE's success with these talent networks recognizes the long history of NJIT's proactive and deliberate accentuation of collaboration with companies, NJ's 2- and 4-year institutions of higher education, traditional and career/technical education high schools, and the State's workforce and education systems.

M-RIM is a career and educational pathway program commissioned by industry to ready high school students and millennial/generation x populations for professional and high paying careers in NJ's small to medium-sized manufacturing firms and to furnish companies with a new source of much needed skilled talent. Its unique modus operati will be described by emphasizing how its major four working parts are being integrated in ways not tried before. The four components are Apprenticeship USA program of the US Department of Labor; NJ Advanced Manufacturing Talent Network (M-NJ), funded by the NJ Department of Labor and Workforce Development; Dream It. Do It (DIDI) program, developed by The Manufacturing Institute and in operation in some 30 States; and the NJ Career Center Coalition (NJC3) whose members are collegiate career development professionals.

INNOVATION OF EDUCATION IN RISK AND CRISIS MANAGEMENT

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ABSTRACT

The importance of risk and crisis management in the current economic situation depends on all the efforts of organizations to increase the overall security of countries, citizens as well as business entities. Developments in the international relations are dominated by uncertainties and negative risks (turbulence in the global economy, the economic crisis in Greece, the conflict in Ukraine and a range of conflicts in the Middle East, the migration crisis, Brexit etc.). Working with risks requires the necessary knowledge that managers can acquire through university studies but also through lifelong learning and practice. The Faculty of Security Engineering at the University of Žilina (FSI UNIZA) is constantly striving to update education within the problematic areas on line with the latest information in the research field, theory and practice, and by training and preparing experts who are able to apply risk and crisis management to different areas other than public sector and within business activities. The aim of the article is to bring out the possibilities of education in the section of risk and crisis management at the FSI UNIZA.

Keywords: risk management, crisis management, innovation, education, university.

INTRODUCTION

Globally higher focus is given to training for handling crisis phenomena such as floods, landslides, earthquakes and many other natural disasters, technology and pollution incidents, fires, leakage of chemicals, cutting off the supplies of strategic materials or energies, terrorism, danger of critical infrastructure efficiency or rather negative consequences of economic crisis, international refugee migration and others.

From the point of view of company those situations present especially problem with interruption of business, loss of markets, customers and as a result growing costs not only for renewal but also for covering the losses. The state is trying to get prepared for solving the possible crisis phenomena in all of the spheres of its field of activity through legal norms, establishing specialised formations in the section of rescue systems, civil defence or in some cases by armed forces.

Within this issue experts are trained by FSI UNIZA which strives to connect theory with practice, take into consideration peculiarities of security environment and security system of Slovakia on one hand and requirements of the present time and strategic partners on the other hand. FSI UNIZA is managerial-technical faculty has been acting in the system of academic education for more than sixty years and develops educational and scientific and research activities in providing complex safety for society and individual citizens. It is focused on educating crisis managers, workers of fire and rescue forces, experts dealing with management of people and property protection processes in all of spheres of society life and managers of transport ensuring of crisis situations.

The faculty has established stable position in a professional security community in Slovakia and in abroad with the emphasis on EU countries. It has developed contacts and broadened cooperation with educational and scientific and research institutions, public administration authorities and business subjects which are acting in this sector. Faculty students go places in home and international competitiveness within competitions of students' scientific activity. They were awarded with many various awards and within the mobilities they are allowed to study at chosen universities in the EU countries. Absolvants of FSI UNIZA occupy the job positions in the system of crisis management in state administration and self-government and also in business sector.

The interest for studying this field of study is proven by developing number of applicants for studies which has radically increased during the last two years (Figure 1). This increase is connected with introduction of faculty's new marketing strategy. FSI UNIZA made the presentation of academic study programs in faculty more attractive in 2016 by innovative instruments of marketing and newly-made information and study materials oriented on target group of secondary schools' students with the potential of studying academic study programs

in the security sector. Coefficient of attractiveness of studies (ratio of registered and accepted students) has in FSI UNIZA positive value 0, 94 (Annual Activity Report FSI 2016).

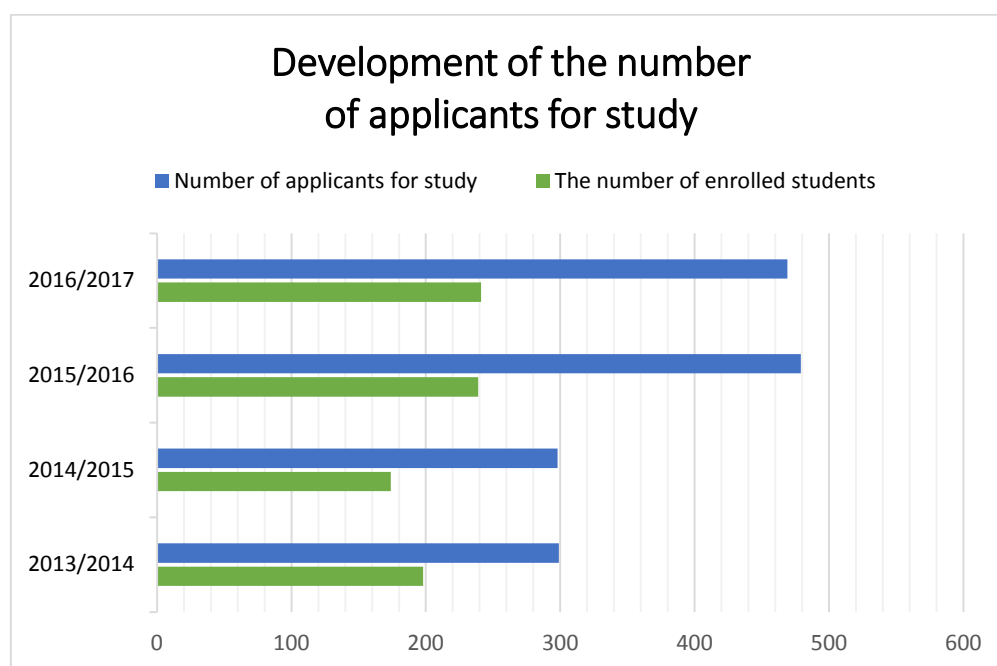


Figure.1: Progress in numbers of applicants for studies in the years 2013 – 2017
(Annual Activity Report FSI 2016)

FSI UNIZA secures academic bachelor, engineer and doctoral studies and many various forms of lifelong learning in accredited study programs in which scientific and research activity is creatively formed and its results are presented in its publishing.

Educational process is provided by these faculty departments:

- department of security management,
- department of crisis management,
- department of fire engineering,
- department of technical sciences and informatics.

Absolvent of study program “safety management” acquires knowledge in the field of theory and practice of people and property protection is able to analyse internal and external safety environment and within managing the risk to identify, analyse and evaluate risks and solve its reduction. On the basis of theoretical knowledge in the field of people and property protection cultivates intellectual abilities, practical skills and personality features which help to prepare and realize technical safety projects in his own.

Absolvent of study program “safety and protection of critical infrastructure” acquires knowledge from the theory of protection of critical infrastructure with the impact on energetics and transport. Absolvent is also able to suggest and to realize precautions, monitor and analyse the development of risk and crisis factors and prepare adequate reaction on arising crisis phenomena.

Absolvent of study program “crisis management” is able to identify risks and dangers in the natural, social, agricultural and technological processes, to analyse them and evaluate them as a complex, suggest procedures and forms of its reduction. Absolvent is able to lead complex response for occurred crisis situation and to make renewal of systems after eliminating crisis factors.

Absolvent of study program “rescue services” acquires knowledge and skills for leading rescue workers teams, assume responsibility for their activity, organize the activity during doing rescue operations by accidents, crashes, natural disasters and other extraordinary incidents. Absolvent is able to consider buildings and technological equipment with the difficult solving fire safety, knows tactical principles by doing rescue work and fire elimination.

INNOVATION OF EDUCATION IN THE FIELD OF RISK AND CRISIS WITHIN THE STUDY PROGRAM CRISIS MANAGEMENT

Long-term work in strenuous conditions restricts human awareness, increases the risk of wrong perception of the information and its misinterpretation. In order to define the necessary skills and competencies for a manager, it is important to know what is expected of them in terms of the elements of internal and external environment such as levels of management, authorities of state administration on any particular level, executive subjects of the organization, co-operating organizations, directly befallen public, general public, media or society. Risk or crisis manager solving a crisis situation, security events or problems, has, above all, these roles (Loveček et al. 2016):

- He decides about resources, tasks, particular measures, he solves arising problems quickly with the objective to eliminate the consequences of the crisis and to restart the function of the organization.
- He ensures the function of crisis information system, enables effective exchange of information inside the organization, between the co-operating elements and between management and public.
- He directs activity of all who take part in solving the crisis; decisively eliminates negative social phenomena, is responsible, consistent and decisive leader and coordinator.

One of the possible ways of how a potential crisis or risk manager can acquire generic or special competence is participation on practical occupations, exercises or workshops, development of own innate physical and mental characteristics, but especially their education, which can have different forms, content and extent (e.g. secondary education, college education or lifelong education, internal or external form of education) (Loveček et al. 2016, Moricová et al. 2016).

Study program Crisis management in the branch of study Civil security provides students of FSI UNIZA the opportunity to acquire needed knowledge for employment in the system of crisis management and management of risk in private or public sector. Study program includes various specialised subjects within which students get needed appropriate knowledge from the economics, management and theory of risks. At the beginning of the studies students need to become aware of the sphere of social life in which they would like to work and by appropriate choice of optional lessons they would develop their knowledge in this sphere such as risk management or crisis management.

The department of crisis management as the other departments of FSI UNIZA, within the preparation for complex accreditation reassessed and actualised the content of teaching specialised subjects within all accredited study programs. The aim of it was to assimilate to much more demanding in the best way given on education in the field of crisis management and risk management. Innovations are not avoided by the way of providing pedagogical process itself.

Effective solution of crisis situations requires from authorised commanding subjects except of basic leadership abilities also others which result from specificity of crisis situation. Each crisis regardless its cause involves eking, behaviour and making decisions of people. Crisis situation involves directly all control processes. Besides other things by menacing health and lives of people, their property and by that causes the feelings of uncertainty and fear, endangers working of individual systems which makes the need of urgent solving, the need of pushing or cancelling less important activities and to concentrate on basic questions.

The need of being informed is rising inside the organization and also from the side of surroundings which can start unexpected behaviour of people, panic, chaos and it requires restriction of cater of the needs of people cooperating on crisis solution and also people who are affected by crisis, it allows crossing to directive leadership and one-way communication, increases requirements for team harmony, cooperation ability and others (Mika 2010).

Specific tasks or leading of special departments need a certain modification of required qualifications. In connection with the need of solving emergency or crisis situations it is possible to delimit certain specific tasks or activities of managers in individual positions e.g. Crisis manager (manager of risk) – as one of roles of each managers (e.g. managing director or city mayor), or as specially prepared specialist for solving crisis situation in the corporation or as a leader – specialist, chairman of emergency committee, worker of crisis commanding of public administration or individual emergency subjects. He is prepared to analyse possible risks and threatens, coordinate the preparation of crisis plans, in the case of crisis situation appearance to lead effectively going of rescue operations and renewing works, to communicate wisely with people affected by disaster, with public and especially with the media (Hudáková - Lusková 2015, Mika 2013).

Recommended content and subject of study program Crisis management in the first degree of academic studies (Bc.) should contain after the complex accreditation in the study plans specific subjects providing knowledge

from the risk and crisis management as in public administration as in business activity (chosen subjects are in the Table 1) (Buganová, K. 2016).

Table 1 Choice of subjects providing knowledge in the field of risk and crisis management
(1. degree of academic studies)

1. Academic year	2. Academic year	3. Academic year
<i>Economy</i>	<i>Management</i>	<i>Crisis situations agricultural</i>
<i>Business economy</i>	<i>Risks management</i>	<i>Crisis situations environmental</i>
<i>Introduction to crisis management studies</i>	<i>Civil protection</i>	<i>Protection of critical infrastructure</i>
<i>Mathematics</i>	<i>Occupational health and safety</i>	<i>Dangerous substances and tools</i>
<i>Informatics</i>	<i>Radiation, chemical and biological protection</i>	<i>Medicine of disasters</i>
<i>Environmentalism</i>	<i>Basics of fire engineering</i>	<i>Crisis management in the public sphere</i>
	<i>Managers statistics</i>	<i>People and property protection</i>
	<i>Marketing</i>	<i>Small and middle business</i>
	<i>Finance and accountancy</i>	<i>Managers communication</i>
	<i>Personnel management</i>	
	<i>Economic analysis</i>	

Absolvents of bachelor studies in branch of study Civil safety of study program Crisis management have preconditions to work as qualified experts in the state administration or business subjects in the department of crisis management. They know principles and procedures of managerial commanding of crisis management, environment, people and property protection. In the private sector, they will use knowledge from economics, management, accountancy, statistics, personnel management, leading of small and middle business and managerial communication. Preconditions to use principles of leadership risks and agricultural crisis in business sphere provides them management of risks and crisis management (SP CP CM – Bc. 2015).

Within engineer studies students have the possibility of choosing many subjects which provide them to broaden their knowledge from the point of methods and equipment of risk management in the department of quality, finance, projects and so on. To the content of subjects Issue of risk management is needed to be integrated and to point out its possible connection with this issue.

Recommended content and subject structure of study program Crisis management in the second degree of academic studies (Ing.) are various compulsory and optional subjects (Table 2), which are useable in the field of risk and crisis management (Buganová, K. 2016).

Table 2 Choice of subjects providing knowledge in the field of risk and crisis management
(2. degree of academic studies)

1. Academic year	2. Academic year
<i>Crisis management</i>	<i>Business risks</i>
<i>Ethics of crisis situations</i>	<i>Risks of industrial processes</i>
<i>Terrorism protection</i>	<i>Crisis planning</i>
<i>Managerial methods and techniques</i>	<i>Theory, processes and methods of crisis management</i>
<i>Insurance industry</i>	<i>Legal environment of crisis situations</i>
<i>Reliability and security of technical systems</i>	<i>Economics of crisis situations</i>
<i>Management of change</i>	<i>Management of quality</i>
<i>Financial management</i>	<i>Project leadership</i>
<i>Corporation strategy</i>	<i>Prognostication and planning</i>
<i>Managerial information systems</i>	
<i>Reliability and security of technical systems</i>	
<i>World economy</i>	

<i>Psychology</i>	
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There is a line of specifically skills and specific studies existing which confirm that the often result of manager's failure is not professional competence but the fact that in workload, crisis situations proven ways of his commanding activity are failing and the manager is not able to handle this situation psychically. That is why this fact shows the need of preparation of managers for risk and crisis situations (Míka 2013).

All departments are now profiled commanding departments with the guarantee of preparing experts for risk and crisis management, rescue forces, people and property protection and protection of critical infrastructure. Coordination and solving of projects of science and research is provided by department of security research (Long-term development FSI 2014 – 2020).

Improving of risk management, crisis and security management in the private and public-sector needs:

- incessantly actualising and creating general theory in the department of safety and tools for consideration safety environment,
- complex consideration of risks, creating steps for their analysing and creating precautions of managerial and technological character in the social, business, technical, technological and natural environment,
- material, technical, financial, informational, and human resources for solving crisis situations and extraordinary events in natural, agricultural and social environment,
- optimizing of emergency planning and their ecological results,
- consideration of critical infrastructure functionality and providing its safety in crisis situations,
- solving of current tasks within integrated emergency system with the impact on effectivity of risking and tools for solving extraordinary events.

Prerequisite for raising the level of fire safety is:

- improving fire safety of buildings,
- improving the effectivity of tactics of emergency activity of fire and emergency service,
- solving of environmental impacts of emergency activity on environment,
- modelling of fire of automobiles and suggesting measures for raising its safety,
- application of fire simulating programs in the place where emergency is being held.

Effective complex people, property, information and environment protection needs:

- creating and developing the theory of safety organization management,
- development of theoretical base for criminalistics and criminology with the focus on preventive projects,
- projecting, evaluating and implementing systems for objects protection,
- evaluating the quality of safety systems and human potential in the field of private safety services,
- developing issue of the system of leading the information safety and its implementation into the practice.

Science and research on faculty are developed inwardly of academic freedom – free investigation, research, development and other creative potential. On the basis of up to now results in scientific and research activity, projects from home or foreign granted schemes, projects from structurally funds, project of University Science Park of University of Žilina, created centres of excellence is the priority way of research at faculty FSI UNIZA in Žilina, within priority ways of research at the University of Žilina it is creating of complex safety society, crisis management and people, property, information and environment protection, improving the level of critical infrastructure safety, safe and ecological traffic road and transport. Gained results of research are connected for improving education process from the point of view of content and forms of teaching.

CONCLUSIONS

Each organisation which works in the current dynamic environment should be focused on rising of security of its activities and processes. The reason for that is not only its primary effort for gaining positive agriculture results but also for its responsibility which is held by management towards all involved parties. Employees, customers, shareholders, regions, state and many other subjects have profit from results of business activity and small and middle corporations. Raising the awareness about possibilities and ways in risk and crisis management support the success rate of realised activities, development of regions and last but not least also the state. Risk and crisis management in the phase of prevention is the prerequisite of raising realised activities of organization from the point of safety of sustainable development.

The need of knowing and leadership the risk or more precisely to pretend crisis and ability to handle crisis situations requires specific knowledge not only in the field of risk and crisis management but also in the sector of risk occurrence e.g.: crisis phenomena. Each manager working with risk should be able to apply risk and crisis management principles in organization and to organise work for chosen team. He should know how to use information from the other managerial systems of organization and to know how to connect them during the prevention and reactions within leading risk or crisis.

Preparation of managers for solving crisis situations has to be understood as a multilateral process focused on forming general knowledge, for making specific commanding knowledge and skills as for forming individual skills which help the acquired knowledge and skills to be used creatively and adequate in various situations.

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INNOVATIVE TECHNOLOGIES IN EDUCATIONAL PROCESS OF TEACHING COMPUTER GRAPHICS

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ABSTRACT

The purpose of this article is to show the importance of the application and use innovative technologies in educational process. This article considers the problems of teaching 2D- and 3D-computer graphics technologies in the higher educational institutions. Support of independent works of students for project creation. The paper also presents personal original video tutorials developed in the Kyrgyz-Turkish University Manas and shares the experience of video lessons creation. However, one of the main problems at secondary schools and higher educational institutions is the lack of video lessons in the Kyrgyz language. Therefore, we use our original video tutorials and other Internet applications in classroom.

During the lesson we use Net Support School Professional, which helps to plan effective lessons and promote active learning.

INTRODUCTION

Teachers actively use innovative technologies in educational process. Information technologies (IT) are increasingly used in education all around the world. In most parts of the world, the most effective forward leap has been for applying IT in the higher education since 1990. IT includes gathering, organizing, storing, publishing and using the information in the form of sound, picture graphic, text, number, ... by using the computer and telecommunication tools... (Stensaker, 2007).

The examples of such application are massive open online courses, learning management systems, e-courses, e-books, video lectures, learning assessment tools etc.(Kazakbaeva, 2005)

Video lessons help to increase the interest of students in the subject and their activity throughout the lesson. Today video lessons are the quickest and efficient method of teaching, which leaves all other methods far behind by the price/quality criterion. It has been long ago established that textual information is digested much worse than visual information. Students usually remember only 10% of what they read, 20% of what they hear and 70% of what they participate in.

When the teaching is arranged in a video format, a student is involved and participates in it, because he can repeat all actions directly after the instructor. Students can rewind the video-teacher and listen to him as many times as necessary. They are involved in the process. All the information they see and hear can be immediately applied into practice.

Pedagogical advantages of video lessons:

- You can start watching video anytime when it is comfortable for you;
- You don't need to spend money on tutors;
- You can watch video lesson by yourself or with your classmates under teacher's control;
- In video format student can repeat all actions of teacher, who has designed the course;
- You can play forward the "Video teacher" and watch so many times as it is needed;
- You are in the process and you are watching each action (movement) and word of "video teacher";
- You can practically use all material you have learned;
- Result is well-learned knowledge, fixed skills and work experience with video material.

THE STUDY

As an example of ICT application in computer graphic lessons, we describe the lessons ("Design basics in Computer Graphics", "3D Graphics and Animation", "Multimedia Technology"), in which we address theoretical basics and practical applications of computer graphics. We describe mathematic tools and methods of

geometric modeling based on them and reproduce the best known algorithms for solving various problems of visualization and image processing. (Kazakbaeva, 2016)

Computer graphics lessons in the Kyrgyz-Turkish University Manas are conducted at two levels - user and algorithmic. The user level implies using of application software. Programming of graphics is usually done in the Visual C ++ development environment using the OpenGL and DirectX graphics libraries. (This is included as a compulsory course "Computers Graphics I, II" – 2 semesters in the 2nd year). This course further allows students to develop computer graphics design skills.

The purpose of the course "Design basics in Computer Graphics " is the familiarization of students with methods, tools, main filters and effects during processing of digitalized images. The outcomes of the course include the following skills:

- drawing trademarks and logos by following the basic laws of composition, see [figure 1];
- use of client's color preferences and advantageous coloring;
- working with the illusion of space and depth in images;
- creating specialized fonts by using texture.



Figure 1. Designing of logo and composition.

Under the agreement on scientific cooperation between the Chair of Computer Engineering of the Kyrgyz-Turkish University Manas and the "Laser Technologies Lab" of the Institute of Physical and Technical Problems and Materials Science of the National Academy of Sciences of the Kyrgyz Republic, students and postgraduates

of the University have trainings and internships at "Laser Technologies Lab" with possible subsequent employment in Companies working in the field of laser technology, see [figure 2].

Examples of using applied skills and habits, depicted in the following pictures, see [figure 1-3].

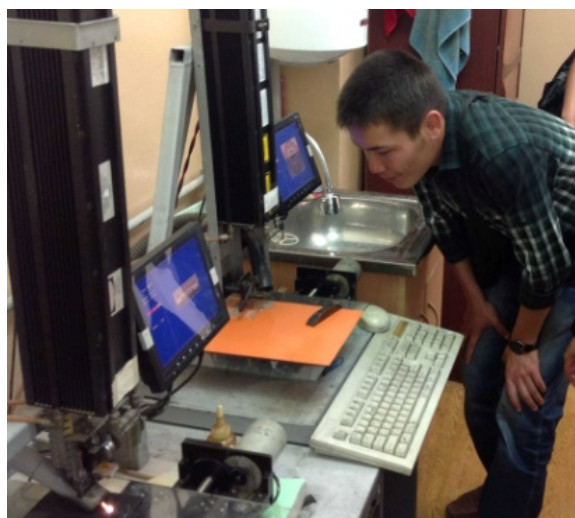


Figure 2. Practical learning of students in the "Laser Technology Lab".



Figure 3. Laser processing of material (from the left - processing and synthesis of the image on the computer; from the right - laser cutting on the skin)

The purposes of the course "3D Graphics and Animation" are:

- familiarization with the basic concepts of computer graphics and image processing of 2D and 3D graphics.
- studying the methods and means of computer graphics using the package 3D Studio Max and Autodesk Maya.
- familiarization with computer animation.
- acquisition of the skills of forming a three-dimensional image and creating animation objects.

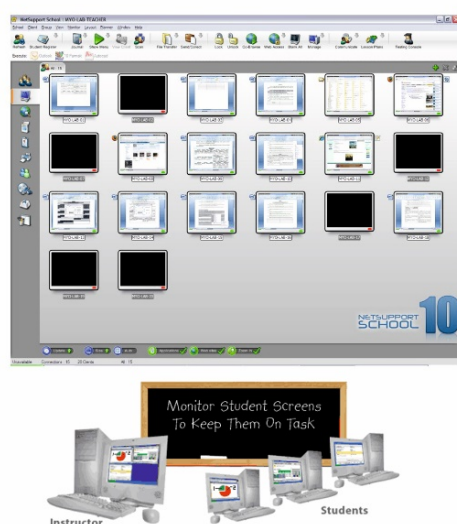
We would like to share our experience on how to make lessons interesting using special application software package and graphic suites, and demonstrate our own video courses.

In these video tutorials we share our experience connected with creation of video lessons, which will be useful for teachers. In order to prepare these lessons, we can use modern computer graphic and audio editing suites like Adobe, Corel, Sony etc. They are used for processing raster graphics, vector graphics, video, animation and multimedia. The task of every teacher is to make each lesson interesting, attractive and up-to-date.

The creating of video lesson is composed from next stages:

- information and material gathering including from book magazines, social media, web sites and other sources;
- structuring of video lesson;
- preparing of pictures (Adobe Photoshop CS6, Corel Draw X8, etc.);
- material recording and editing with using multimedia programs: audio recording, sound edition (Adobe Audition, Sound Forge Pro);
- visualization (Adobe Illustrator, Corel Draw Graphics Suite);
- animation (Autodesk 3ds Max, Autodesk Maya);
- editing of whole tools for preparing video (Adobe Premiere Pro, Camtasia Studio, Corel Capture, Power Point, etc.)

During the lectures, we actively use NetOP School – an interactive computer-based classroom management tools, which is also used for monitoring and presentation, see [figure 4].



- Demo Any Screen to Student PCs-Everyone has A Front Row Seat
- Highlight Areas of Interest-Pass Demo Control to Any Students
- Monitor Student Screens to keep them on Task
- Hand Out&Collect Coursework, Files&Tests
- Lock-Up Student PCs to get&Hold their Attention
- Chat Using Text or Audio-Even Hold Group Discussions
- Control, Log off or Shut Down Student PCs

Figure 4. NetOP School software for Networked Classrooms

CONCLUSIONS

In today's world education needs modern, moderate and simple technologies in order to meet its needs for its arrival and correct use. The article is related to the role and place of information technologies in the modern educational system.

The paper presents personal original video tutorials developed in the Kyrgyz-Turkish University Manas and shares the experience of video lessons creation. Perspective possibilities of information technologies in the modernization of the educational process of teaching computer graphics, as well as in solving number of methodological problems are discussed. The professional experience is stated in the introduction of information technologies in the educational process in the conduct of laboratory classes.

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INTEGRATED MORAL VALUES IN STANDARD-BASED ASSESSMENT: OPPORTUNITIES AND CHALLENGES OF COMPUTER-BASED TEST IN INDONESIAN NATIONAL ASSESSMENT

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ABSTRACT

The paper portrays the opportunities and challenges of the computer-based test in Indonesian national assessment. As the country holds standard-based education system, Indonesia faces the challenges, including implementation of standard-based assessment with different characteristics throughout the country. The policy of the national assessment system has been changed within several years for both solving technical and substantial problem, including cheating behavior. The computer-based test, as an innovative solution, was proposed by Board for National Standard of Education and the Ministry of Education and Culture which faced the challenges and observed the opportunities. This research employed qualitative method with observation, interviews, and document analysis as data collection. The results show that there are opportunities and challenges in the educational system, teachers' reflections, students' learning, and their moral values. The implementation of the computer-based test has been empowering students' integrity and teachers' reflections. In the educational system, it has proven significant improvement in reducing bureaucracy chain, time and cost as compared to paper-based test. However, there are challenges of technical and substantial problems including computer facilities, students' computer skills, access to remote areas, and reluctance from opponents. Therefore, the government continuously improves the national assessment system. Based on these findings, the paper delivers the future implementation of the computer-based test in Indonesian national assessment.

Keywords: standard-based assessment, national examination, computer-based test, moral values

INTRODUCTION

Developing students' moral values is the most important issue in education. The importance of moral values in education has been the focus of study for several decades ago (Sanderse, 2013; Niebuhr, 2013; Bower, 2015; Peters, 2015; and Suryadi, 2017). Essentially, the findings of these studies indicated that moral education should help students give respectable contributions to the community and the country. Therefore, educators have to inculcate moral values in their students, regardless of the subject matter. Considering the importance of moral values, it becomes one of the national education aims in Indonesia as stated in national Law No. 20, the year 2003 on National Education System, Article 3. The national educational goal is to develop students as generations and citizens who have faith and fear of God Almighty, and who are noble, healthy, knowledgeable, skilled, creative, independent, democratic and accountable. The community expects that the education can contribute positively to the students' moral education. However, the education system in Indonesia is facing the challenges of integrating these moral values in different components of education from teaching and learning to assessment.

Since 2003, the government of Indonesia has implemented standard-based education for improving the educational quality. According to Government Regulation No. 19, year 2005, the national education standard consists of eight standards which are graduate competency, content, process, assessment, facilities and infrastructure, educators and education personnel, management, and finance standards. Referring to the assessment standard, there are three types of assessment, namely, classroom assessment conducted by a teacher, school assessment conducted by schools, and national assessment conducted by the government. The assessment conducted by the government is in the form of national assessment as clearly stated in Law No. 20, the year 2003 on National Education System. The implementation of national assessment is also regulated by Ministry Decree No. 23, the year 2016 on the Assessment Standard for Primary and Secondary Education. Of the three types of assessment, the most popular issue is national assessment which is conducted in May for junior secondary schools (year 7-9) and in April for senior secondary schools (year 10-12) every year.

The primary purpose of assessment is to determine students' achievement (assessment of learning) which in a way also determines the effectiveness of programs and teaching method, therein enabling students to realize their potentials. All forms of assessment should be viewed as continuous and essential to teaching and learning (assessment for learning). It should be planned in advance and be an integral and meaningful part of the

instructional process (Mohd Noor, 2008). In the Indonesian context, the national assessment aims to measure the achievement of competency in specific subjects nationwide with reference to the standards of graduates' competencies (BSNP, 2017a). In the senior secondary schools, there are six subjects tested, namely, Indonesian language, Mathematics, English, and three subjects according to students' interest in sciences and social sciences. While in junior secondary schools, there are four subjects tested, namely Indonesian language, Mathematics, English, and Science.

National assessment questions are written in the form of multiple choices and are conducted in the form of paper and pencil based test (PBT), as well as, in the form of computer-based test (CBT). According to American Educational Research Association (2014), computer-based test or computer-administered test is a test administered by computer; that indicates test takers respond by using a keyboard, mouse, or other response devices. In broader concept, the implementation of CBT in national assessment is also seen as the means to revolutionize education and build human character (Mohd Noor, 2008). In Indonesia, the implementation of CBT in national assessment was initiated in 2015 and was expanded in 2016 onwards. Ministry of Education and Culture puts the emphasis on using CBT in the national assessment for improving the quality of education and integrating moral values through the implementation of the integrity index. Integrity index means the students' level of honesty in taking the national assessment which is measured from their response patterns in the national assessment (Puspendik, 2016). Thus, the integrity index is considered as an important component in the national assessment.

Data from Center for National Assessment (Puspendik) revealed that out of 97,000 schools with 7.6 million students had taken the national assessment in 2016. There are four categories of schools based on the national assessment results. First, about 21.16 percent of schools fell into high integrity index with high results. Second, about 50.96 percent of schools fell into high integrity index with low results. Third, about 13.61 percent of schools fell into low integrity index and results. Fourth, about 14.27 percent of schools fell into low integrity index and high results (Puspendik, 2016). This means that there is a critical issue related to student cheating behavior in national assessment as long as it is conducted in PBT.

In addition, a Program for International Students Assessment (PISA) survey in 2015 further indicated that Indonesian students had low performances in science, mathematics, and reading, as compared to the students of other countries who took part in this survey (PISA, 2016). Out of 72 countries taking part in PISA 2015, Indonesian students secured the position of 65 in mathematics, 66 for reading, and 64 for sciences. Unfortunately, this position is far behind as compared to Vietnam, which held the position of 22 in mathematics, 33 in reading, and 8 in the sciences. Meanwhile, Malaysia held the position of 44 in mathematics, 49 in reading, and 49 in the sciences. The first position in all three areas was secured by Singapore with a score of 564 for mathematics, 535 for reading, and 556 for sciences.

The above-mentioned reports clearly indicate that Indonesia faces serious internal and external challenges in term of quality education, although different approaches and policies, especially standard based education, have been implemented more than a decade ago. These challenges need to be addressed by all education stakeholders, including central government, local government, and school level. The present study was aimed to address the following research questions: (1) What are the opportunities faced in implementing computer-based test in Indonesian national assessment?; (2) What are the challenges faced in implementing computer-based test in Indonesian national assessment?; and (3) What are the solutions taken to face the challenges?

The findings of this study reveal that the policy of the national assessment system has been changed within several years for both solving technical and substantial problem, including the cheating behavior. The computer-based test as an innovative solution had successfully reduced the student cheating behavior in the Indonesian national assessment. However, there are challenges of technical and substantial problems including computer facilities, students' computer skills, access to remote areas, and reluctance from opponents. Therefore, the government continuously improves the national assessment system. Based on these findings, the paper delivers the future implementation of the computer-based test in Indonesian national assessment.

METHOD

This research employed qualitative method with observation, in-depth interviews, and document analysis as data collection. The observation was conducted during the national assessment period in the selected schools in certain provinces, such as Jakarta, East Java, West Java, Banten, South Sulawesi, and West Sumatera. The purpose of this observation was to gain information about students' behavior during the implementation of the national assessment. It was also aimed at finding out the obstacles faced during the implementation of the national assessment.

In-depth interview was carried out involving prominent figures from the Ministry of Education and Culture, school principals, teachers, and students. They were asked about their opinions on issues related to the national assessment. The selection of student interviewees in this study was based on the subject interest, namely sciences and social sciences. For interview purpose, guideline and structured questions were prepared and about 30 minutes were taken from each respondent.

The document analysis in the study included the law on the national education system, government regulations, ministry regulations, and other documents related to the national standard of education and standard operating procedure of national assessment issued by BSNP. Comparing, contrasting, criticizing, and synthesizing techniques were used for analyzing the data.

FINDINGS AND DISCUSSION

The findings of this study are presented in the following subheadings in accordance with the above-mentioned research questions. Certain issues were discussed and highlighted in relation to the current relevant research.

1. Opportunities of Implementing CBT in Indonesian National Assessment

Indonesia is well known as the world's largest archipelago, which represents more than 17,000 islands from Sabang in northern Sumatra to Merauke in Irian Jaya. Indonesia is connected with the sea with a total area of 1.910.931.32 km² and a total population of 248.818.100 and has 34 provinces (Central Board of Statistics, 2014). Besides the geographical conditions, Indonesia has around 300 ethnic groups which have different values and beliefs. In short, Indonesia is a multicultural nation and this condition has developed differences in Indonesia, including pictures of education in each area. There are about 208.965 primary and secondary schools across the country (Table 1).

Table 1: Number of schools in Indonesia based on levels and status of public and private schools

Level	Public	Private	Total
Primary School (SD)	132.609	14.904	147.513
Junior Secondary School (SMP)	22.209	14.309	36.518
Senior General Secondary School (SMA)	6.232	6.281	12.513
Senior Vocational Secondary School (SMK)	3.250	9.171	12.421
Total	164.300	44.665	208.965

Source: Ministry of Education and Culture (2015).

Data in Table 1 show that out of the total number of schools in Indonesia (208.965), the number of public schools is higher than the number of private schools with a percentage of 78.62 percent and 21.37 percent respectively. This indicates that school management in Indonesia is done by both government and private sectors including non-government organizations, i.e. Muhammadiyah, Nahdhatul Ulama, and Nahdhatul Wathan for Islamic organizations or Petra and Pangudi Luhur for Catholic schools. The number of students in those schools is shown in Table 2.

Table 2: Number of students in Indonesia based on level and status of public and private schools

Level	Public	Private	Total
Primary School (SD)	23.138.933	2.993.208	26.132.141
Junior Secondary School (SMP)	7.402.381	2.528.266	9.930.647
Senior General Secondary School (SMA) and Senior Vocational Secondary School (SMK)	4.888.851	3.554.966	8.443.817
Total	37.008.608	11.843.582	48.852.190

Source: Ministry of Education and Culture (2015).

The data in Table 2 further indicate that the number of students from primary to senior secondary school is 48.852.190. This number is considered as opportunities on one side and challenges on the other side. It is an opportunity because those young generations will continue the leadership of the nation in future if they are well educated during the school life. On the other hand, they become challenges for educators to double their efforts in nurturing and preparing them with certain competencies.

According to Law No. 23, the year 2014 about Local Governance, the management of senior secondary schools

(SMA and SMK) is under the authority of Provincial Education Offices, while the management of primary and junior secondary schools (SD and SMP) is under the authority of District Education Offices. Therefore, the national assessment is a national government responsibility, ranging from central government to local government. Coordination and united efforts are required in order to make the national assessment a success. Educational streaming consists of formal education, non-formal education, and informal education. Basic education is the compulsory education from year 1 to 9. Basic education takes the form of primary schools (SD) and secondary schools (SMP). Secondary education is the continuation of basic education. Secondary education comprises general secondary education and vocational secondary education. Secondary education takes the form of senior general secondary schools (SMA) and senior vocational secondary schools (SMK).

To achieve the national education aims as mentioned earlier, Indonesia implemented standard based education. According to Government Regulation Number 19, the year 2005, Board for National Standard of Education (BSNP) is an independent and professional agency which has full authority in developing the national standards of education, organizing national assessment, and evaluating school textbooks. Teachers are key persons in implementing the national standards of education and its curriculum as well as in conducting classrooms and school assessment. In addition to classroom and school assessment, the government also conducted a national assessment.

Until 2014, the national assessment received numerous criticisms. There were pros and cons in the existence and the urgency of the national assessment. The main criticism was that, there was students' cheating behavior during the implementation of the national assessment, especially when it is conducted in the form of PBT. Therefore, those opponents of national assessment wanted to demolish it and give the full authority of assessment to the school. Prior to 2015, the national assessment was conducted in the form of PBT across the country. However, since 2015, the government introduced the implementation of computer-based test (CBT) for the first time. This policy was clearly stated in the Ministry of Education and Culture Regulation Number 5, year 2015, about the criteria of student graduation and the implementation of the national assessment. However, due to certain circumstances, only a limited number of schools had implemented the computer-based test for the national assessment.

As shown in Table 3, about 555 schools had implemented CBT in 2015. In 2016, the number of schools implementing CBT in national assessment increased to 4,371 schools and in 2017, drastically increased to 32,221 schools (Puspendik, 2017). The increase in a number of schools implementing CBT due to the awareness among students, teachers, parents, and government authority on the importance of using ICT in classroom assessment, school assessment, and national assessment.

Table 3: Number of schools Implementing CBT in National Assessment

Level	2015		2016		2017	
	PBT	CBT	PBT	CBT	PBT	CBT
SMP/MTs	56,152	42	55,215	979	45,098	11,096
SMA/MA	20,422	135	20,556	1,292	10,905	9,652
SMK	12,131	378	12,507	2,100	2,680	9,829
Program of Package B	4,600	-	4,600	-	3,835	765
Program of Package C	4,427	-	4,427	-	3,548	879
Total	97,732	555	97,305	4,371	66,066	32,221

Source: Puspendik (2017)

As an effort to make the CBT a success, BSNP has conducted dissemination of the national assessment policy, including the need of CBT. One of the important aspects highlighted in the dissemination was the advantages of CBT over PBT. According to the results of monitoring national assessment conducted by BSNP (2016), there were certain advantages of CBT as compared to PBT.

Firstly, from the perspective of implementing committee duties and responsibilities, CBT is more efficient in terms of time, material preparation, scanning, and delivery of test results. There is no need for an auction of procurement of goods and services as the process takes two to three months. There is no need for distribution of test materials involving many parties, including the police. For the school principals as the head of the assessment committee at the school level, they do not need to take the assessment material from the place of storage at the transit point and return the test answer sheet to the District Education Office. From the observer's observation, many headmasters left home before dawn and performed the morning prayers at the transit point, because they did not want to be late to start the national assessment in their own schools.

Secondly, from the participants' perspective, the students prefer to take the national assessment with CBT rather than PBT. Students do not need to blacken the answer sheet with a pencil, but simply click the cursor on the correct option. If they want to change the answer, they do not need to delete the answer, but simply switch the cursor from the original answer to the desired answer. Similarly, students do not need to carry a lot of stationery, such as pencils and erasers. Students do not have to bother to separate the answer sheet from the questionnaire, or worry that the answer sheet of the paper can be damaged. Thus, students can focus more on answering the national assessment.

Thirdly, from the perspective of the complexity of the assessment implementation and business process, there is no shortage of assessment questions or manuscript errors as often happens with PBT, for example, the title on the envelope does not match the contents of the envelope. *Fourthly*, in terms of assessment items, PBT items can only be used once, while CBT items can be used more than once because all the questions are stored in the computer and are encrypted. Thus, the confidentiality of the assessment items in CBT becomes assured. *Fifthly*, in terms of item variation or package, item packages for PBT are very limited. So far, the item variation consisted of 20 items packages in accordance with the number of examinees in one room. Conversely, for CBT the item package is unlimited because it is a computer generated item package. The implication is, with the availability of various assessment items, CBT can be implemented at any time, in accordance with the readiness of learners.

Sixthly, in terms of CBT application used in the national assessment, CBT application is very user-friendly and simple. Those who are habitual of using gadgets like tablets and mobile phones, will not have difficulty in taking CBT. *Seventhly*, in terms of scoring, technically, the results of CBT can be obtained after the participants finished the assessment. However, given the fact that until 2017, there are still two modes of national assessment implementation, the CBT results are released along with the PBT results. Finally, in terms of integrity, it is very hard to find cheating behavior among students taking CBT because each student did unique assessment items. In contrast, PBT is still fraudulent in many ways and methods. High school national assessment results in academic year 2014/2015 show that the integrity index of schools implementing CBT is relatively non-existent (Zero). This showed that students taking the national assessment were concerned with moral values rather than results (BSNP, 2015).

From the above-mentioned description, it can be concluded that the implementation of CBT in national assessment is more effective and efficient in terms of time, cost, energy, and human resources as compared to PBT. Hence, the results of national assessment using CBT were empirically proven to be more objective, credible and acceptable than the national assessment results of PBT. In summary, the differences between PBT and CBT are presented in Table 4.

Table 4: Differences between Paper Based Test and Computer Based Test

Aspect	Paper Based Test	Computer Based Test
Assessment item	Single-use	Multiple-use
Item variation/package	Limited	Unlimited
Type of items	Checkpoint	Various items
Item administration	Fixed timetable	Flexible can be conducted many times
Bidding process for preparing assessment item	Long time (2 months) and expensive	No bidding, cheap
Item production	Long time (2 months) and expensive	Speed and cheap
Item security	Physical security and expensive	Soft copy, easier, and cheaper
Assessment invigilation	Complicated and involving many parties	Much easier and direct
Scoring process	Long time (1 month), expensive	Soft copy, easier, and cheap
Accountability	Complicated and involving many parties	More transparent
Cheating behavior	Easy and frequently happened	Difficult to happen

Source: BSNP (2017b)

Indonesian national assessment is not only aimed to measure students' performance in certain subjects but also

to analysis their integrity in completing the national assessment as part of moral education. In other words, the use of CBT is intended to inculcate moral values in term of answering the questions among students taking the national assessment. This notion is based on the evaluation done by BSNP (2016) that student cheating behavior was frequently happening during the national assessment, especially in PBT. However, it is important to note that the integrity index is not a manifestation of the whole students' integrity as it only measured students' behavior during the national assessment only.

The national assessment integrity index was introduced by the government since 2015 where CBT was initially implemented in national assessment. Since that year, the analysis of national assessment results was done not only to measure students' academic achievement but also to measure their integrity index. The National Assessment Integrity Index (NAII) was analyzed based on individual student, school level, district, provinces, and national level.

The results of BSNP Annual Report (2015) show that almost all regions indicated the occurrence of fraud in the implementation of national assessment for academic year 2014/2015, except the Special Region of Yogyakarta. In order to promote integrity in the implementation of the national assessment, the Minister of Education and Culture has announced schools with a high integrity index (≥ 92) throughout Indonesia, with a total of 503 schools, consisting of 218 SMP, 150 SMA, and 135 SMK, as presented in Table 5.

Table 5: National Assessment Integrity Index by province and school level year 2015

No.	Province	SMP/MTs		SMA/MA		SMK	
		Total	Index ≥ 92	Total	Index ≥ 92	Total	Index ≥ 92
1.	DKI Jakarta	1.323	52	533	48	597	25
2.	West Java	2.194	-	2.115	16	2.194	12
3.	Central Java	4.906	48	1.359	30	1.357	44
4.	D.I. Yogyakarta	526	23	198	8	210	15
5.	East Java	7.680	61	2.666	9	1.553	24
6.	Aceh	1.356	1	482	1	160	-
7.	North Sumatera	3.283	1	1.085	6	852	-
8.	West Sumatera	1.143	6	434	2	185	-
9.	Riau	1.597	2	601	3	225	1
10.	Jambi	960	1	379	-	136	-
11.	South Sumatera	1.621	2	703	-	218	-
12.	Lampung	1.909	4	668	2	359	-
13.	West Kalimantan	1.391	-	448	-	135	1
14.	Central Kalimantan	875	-	256	-	107	-
15.	South Kalimantan	926	-	288	8	104	-
16.	East Kalimantan	701	-	231	1	195	-
17.	North Sulawesi	727	-	226	-	152	-
18.	Central Sulawesi	1.059	1	286	-	144	-
19.	South Sulawesi	2.283	-	752	3	381	-
20.	South East Sulawesi	882	-	331	1	121	-
21.	Maluku	674	-	255	-	86	-
22.	Bali	426	6	166	6	160	5
23.	NTB	1.613	4	643	4	227	-
24.	NTT	1.446	-	408	-	167	-
25.	Papua	586	-	185	-	100	-
26.	Bengkulu	488	-	159	-	79	-
27.	North Maluku	534	-	162	-	90	-
28.	Bangka Belitung	229	-	82	-	48	1
29.	Gorontalo	389	-	84	1	47	-
30.	Banten	2.229	8	764	6	571	2
31.	Riau Islands	351	1	135	1	77	4
32.	West Sulawesi	452	-	122	-	86	-
33.	Papua Barat	271	-	101	-	42	-
34.	North Kalimantan	159	-	54	-	23	-

Source: BSNP Annual Report 2015

Data in Table 5 show very few schools for all levels achieving NAII of ≥ 92 (Very Good). This means that most

students in all school levels have a low integrity index. This is mainly due to the fact that most schools in 2015 still conducted the national assessment using PBT instead of CBT. In order to encourage schools and students to improve their integrity index, President Republic of Indonesia invited all school principals with an index of ≥ 92 to have met in the Presidential Palace on December 21, 2015. They also received a certificate of appreciation from the Ministry of Education and Culture (BSNP, 2015).

Furthermore, the findings of this study show that there are certain opportunities faced by the Indonesian government in implementing CBT for the national assessment. First and most important, based on the findings of BSNP (2015), all teachers surveyed agreed strongly that the national assessment is necessary for quality control of national education. They all believed that national assessment is an effective means of motivating teachers and students in teaching and learning process. In other words, they believed the idea of assessment for learning. The main aim of assessment for learning is to support the learning process (van der Kleij, et al., 2012). It allows achievements to be recognized and helps both teachers and learners to reflect on and review their performance and progress (Berry, 2008). However, effective teaching will not happen without assessment of learning.

From students' perspective, most students in Indonesia are ICT literate because they are accustomed to use gadgets in their daily lives. ICT lessons at schools are provided to students in an integrated learning process in the classroom. Therefore, they have no difficulty in doing CBT, either for classroom assessment or national assessment. Another opportunity is the fact that there was strong support from the relevant Directorate within the Ministry of Education and Culture in the form of computer procurement budget. Data from the Ministry of Education and Culture showed about 80,000 computers were provided to schools across the country in support of the implementation of CBT (Ministry of Education and Culture, 2016).

In addition, there is effective cooperation among stakeholders, such as Mayor or Governor in each region to apply CBT in school assessment and national assessment, which was considered as another opportunity. In 2016, Surabaya city was the only city that carried out CBT in all schools. By 2017, all schools in the Province of DKI and Province of DIY implemented CBT. The characteristic of CBT application which is called as user-friendly was also seen as a great opportunity. For this reason, students who use mobile phones will have no difficulties in taking CBT during the national assessment.

Finally, the CBT business process was found to be simple and easy because it was not conducted fully online, rather it was conducted in term of semi-online way. This means that first online conductance was done about three days before the assessment implementation to download question items from the central server to local server. At the time of CBT implementation, it was done offline because it used the local server. The second online conductance was when the proctors sent student's responses from the local server to the central server. Given this fact, there is no worry about the internet connection for CBT implementation.

2. The challenges faced in implementing CBT in Indonesian national assessment

To address the second research question: What are the challenges faced in implementing CBT in Indonesian national assessment. Interview with teachers, students, school principals, and examination authority was done. The challenges were classified into three categories, namely human resources, infrastructure, and assessment items.

From the human resources perspective, it was found that Indonesian teachers' competencies are still low because they did not meet the requirements specified in Law Number 14, the year 2005 for teachers and lecturers, that is, holding a bachelor degree (S1). Data from Center for Educational Data in the Ministry of Education and Culture (2015) show that out of 3,747,947 kindergarten and high school teachers, there are 908.933 (24.25%) people who have not met the academic qualification standard as shown in Table 6.

Table 6: Teacher Academic Qualification According to School Levels

School level	School Status				Total
	Public		Private		
	<S1	≥ S1	<S1	≥ S1	
Kindergarten (TK)	6.633	8.883	166.671	174.775	355.912
School for Students with Special Needs (SLB)	2.935	8.881	4.557	15.048	31.421
Primary School (SD)	312.342	1.324.476	56.165	149.879	1.842.862
Junior Secondary School (SMP)	66.016	483.965	54.584	191.395	795.960
Senior General Secondary School (SMA) and Senior Vocational Secondary School (SMK)	86.510	286.206	152.520	196.556	721.792
Total	474.436	2.112.411	434.497	727.653	3.747.947

Source: Ministry of Education and Culture (2015)

Data in Table 6 show that the number of public school teachers who have not met the academic qualification required by law is 474.436 (22.45%), while the number of private school teachers is 434.497 (59.71%). Teachers' low academic qualifications have an impact on their ability to write test items. The results of monitoring on teachers' quality done by BSNP (2016) showed that some problems made by the teachers are still low in quality. Teachers tend to ask questions about what they have taught in the class, rather than asking what students should master. Thus, the results of school assessment were found very high, but the national assessment results were very low. This means that there is a gap between school assessment results and national assessment results. This could happen because the national assessment measured competencies that students should have, while the classroom assessment only measured what the teachers had taught in class.

In addition, other challenges are resistant attitudes of students, teachers, principals, education officials, and parents to implement CBT in the national assessment. This is because they were worried that their assessment scores will fall because of CBT as they cannot cheat on national assessment. Similarly, they also lacked in self-confidence in taking CBT because of their limited literacy in information, communication, and technology (ICT). For these reasons, resistant attitudes were found among students to take CBT in the national assessment.

In terms of infrastructure, the challenges faced by national assessment authority are the shortage of electrical power supply, especially in remote areas. Given the fact that Indonesia is an archipelago country with more than 17,000 islands, this problem has become a national concern because of the distribution of electric power in Indonesia, which is still unevenly distributed and it has to face frequent blackouts due to the limited power supply. Even in certain areas, at the time of implementation of CBT, there is still a blackout, although the Ministry of Education and Culture has coordinated with State Electricity Company (PLN) to ensure there is no blackout during CBT implementation.

In addition, for the challenge associated with the infrastructure, it was found that the central server was down during the implementation of CBT for junior secondary schools, although, finally it was successfully resolved. Most importantly, the fact that there are still many schools that do not yet have at least 20 sets of computers. The number of computers (20) in accordance with the number of examinees in one room is determined by BSNP (BSNP, 2017a). In this context, if the principle of resource sharing is applied, where schools with less infrastructure may join schools with enough infrastructure, then this problem can be overcome. However, the implementation of resource sharing was also not easy due to the presence of schools that determine the fees charged to schools which wanted to join in taking CBT in other schools. For example, based on the monitoring results done by BSNP (2016), a school that joined other schools was required to pay for the operational cost, such as payment for electricity, committees, and computer maintenance. Due to these problems, certain schools were not willing to join other schools to implement CBT in national assessment, as a consequence they decided to implement PBT instead of CBT.

In terms of assessment questions, there are some challenges faced by the central assessment committee. First, the availability of item banking. The implementation of CBT requires calibrated items with many variations. The problem occurred in the national assessment in years 2015 and 2016, where the same assessment items were used for PBT and CBT, with different time table. Secondly, all assessment items were written in the form of multiple choices which led assessment takers to do the guessing. Thirdly, the scoring process was done using the classical theory approach. That is, the scoring method was done merely by calculating the percentage of the correct answers compared to the number of questions.

Above all, the overwhelming challenge is the fact that the results of the national assessment analysis conducted by the Center for Educational Assessment (Puspendik) have not been fully followed up by the relevant Directorates, education offices, and school units. It should be noted that every year Puspendik conducted an analysis of national assessment results. The analysis sections included students' achievement in each test subject based on schools, regional and national units. Unfortunately, the planning units of the Directorates or sectors, have not been fully addressed to the results of the national assessment analysis, when they prepared the yearly action plans. In short, as Hamilton (2003) said, the decision makers should consider national assessment as instruments for promoting educational changes.

3. The solutions taken to face the challenges

In this section, solutions to the challenges faced in implementing CBT in Indonesian national assessment are highlighted. These solutions are classified into policy decision making, assessments, technical aspect categories.

In relation to policy solutions, the Government, in this case, the Ministry of Education and Culture and BSNP has to establish a national assessment system for both short and long term by empowering the present institutions, both BSNP and Center for Educational Assessment (Puspendik) to be an assessment authority. The institution, as Umar (2008) proposed, should be equipped with personnel whose competencies should be in three things, namely assessment methodology, assessment technology, and assessment management. In addition, the institutions should be equipped with enough facilities needed for an assessment institution. Therefore, there is a need to do benchmarking to other assessment institutions in other countries, such as University of Cambridge Local Examinations Syndicate (UCLES) in the United Kingdom, CITO in Netherlands, Malaysian Examinations Syndicate (MES) in Malaysia, or Australian Council for Educational Research (ACER) di Australia. In addition, the government has to prepare a road map for CBT implementation in national assessment. The roadmap is operationally defined into technical matters and activity programs. Furthermore, both the Ministry of Education and Culture, as well as, BSNP have to socialize the road map to educational stakeholders, from the central government to the regions. Thus the national assessment as an annual activity can be clearly understood from the beginning by the stakeholders. Within feasible limits, the relevant technical information is made available so that those involved in policy decisions may be fully informed.

The teacher's low competence can be overcome in two ways. First, teachers in service positions are asked to continue further studies to complete the undergraduate program. The government needs to allocate scholarships for them. Secondly, by providing in-service training to teachers, then they have to take a competency test and those who pass the test are given recognition certificate for their competencies, which is the recognition that they have equalized an undergraduate degree. The importance of teacher training and capacity building has been pointed out by Stigler & Hiebert (2009) who said that school learning will not improve markedly unless teachers are given the opportunity and support they need to advance their craft by increasing the effectiveness of the methods they use. In addition, to be effective teacher training, school leaders need to use a combination of transformational leadership behavior to improve teaching and learning (Thoonen. et al., 2011).

As said earlier, there was resistance from students, teachers, principals, education officials and other parties to the use of CBT in national assessment. Research has found evidence that computer anxiety is negatively related to such variables as attitudes towards computers. A study by Wiechmann & Ryan (2003) revealed that resistance to computers can be due to resistance to change, fear of the unknown, and most likely due to a lack of exposure and experience with computers. This challenge can be overcome by providing comprehensive information on the importance of CBT in national assessment. This can be realized through discussions, dialogues, or brochures about CBT. The main goal is to make a change of mindset for those who are resistant. Students who are currently in schools are called as Y-generation who are characterized by ICT literacy (Suryadi, 2015). Therefore, assessment techniques for them also need to use ICT, instead of paper and pencil test.

With regard to infrastructure issues, particularly related to power supply shortage, the government should provide enough power supply throughout the nation. So far, the power supply is still concentrated in Java Island. In addition, personal computers (PC) used for national assessment are recommended to be equipped with UPS or by using a laptop instead of a PC. In case of power outage, UPS or laptop battery can still function for two or more hours. Thus, students can still do the national assessment without any interruption. Similarly, the government also has to allocate specific budgets for investment in providing more credible central servers to accommodate the need of CBT in nationwide coverage.

Furthermore, the implementation of CBT in national assessment needs to be improved, especially the availability

of national assessment items and timetable. First, since the implementation of national assessment is done in two patterns, namely PBT and CBT, it is necessary to have different assessment item packages; one item package for CBT and another item package for PBT. Secondly, the implementation of CBT in national assessment can be done at different times, unlike PBT which is done simultaneously and massively. Therefore, the availability of assessment questions becomes very important to ensure that the national assessment can run smoothly. In this context, it is important to take into account what American Educational Research Association (2014) stated that in developing the test, there are four standards of test design and development as a basic requirement to fulfill. These are the standards for test specification, item development and review, developing test administration and scoring procedures, and for test revision. If these standards are firmly followed and satisfactorily done by the Center of National Assessment, Ministry of Education and Culture, the future of Indonesian national assessment is promising in improving the quality of national education.

Finally, the results of the national assessment analysis done by Center of Educational Assessment, Ministry of Education and Culture, have to be followed up by stakeholders such as educational directorates, provincial and regional education offices, and school units. In this case, national assessment analysis was done in terms of item difficulty which is classified into low, middle, and higher order thinking skills. If the results of this analysis are made as a reference in designing annual programs and activities of the Directorate in the Ministry of Education and Culture, there will be alignment between program designs and the result of national assessment analysis. When examining the use of national assessment, it is critical to take into consideration the purpose of the testing system. Hamilton (2003) noted three broad purposes for the large-scale-achievement tests: (a) assessment to assist learning also called formative assessment; (b) assessment of individual achievement, also called summative assessment, and (c) assessment to evaluate the quality and effectiveness of educational programs. This means that CBT is considered as the effective way to build up teachers' capacity in conducting classroom and school assessment. The increasing number of schools implementing merely CBT is not meaningful if it is not followed by the improvement of teaching and learning process.

CONCLUSIONS

Standard based education with its supporters and opponents has played important role in improving educational quality in Indonesia. The numerous challenges in Indonesia have provided opportunities to the government for implementing the policy. The national assessment as a standardized test implemented every year in Indonesia has faced challenges, not only the students' achievement but also students' integrity. The policy of CBT in national assessment has stimulated students' awareness of their competence and integrity. This policy has also increased the credibility, accountability, and acceptability of the national assessment. If they can't be honest in taking national assessment, it will be difficult for them to integrate the honesty in their lives. Putting the achievement as main priority has led to students' cheating in the national assessment. Thus the policy of analysis of index integrity and implementing the computer-based test as a system has led to the change for national assessment scoring and portray the systemic integrity. This could only be implemented in the Indonesian context within its characteristics and could not be implemented in other countries. The data have shown the changes in this context of moral values in character education. However, Indonesia is still facing the challenges in implementing standard based education, especially in national assessment with the computer-based test. In responding to these challenges, the Indonesian government has to put efforts to improve the educational quality within standard-based education system. Most importantly, within feasible limits, the policy makers should make reasonable efforts to satisfy and follow the standards and should encourage others to do so.

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INTEGRATING ASSESSMENT FOR LEARNING STRATEGIES INTO ONLINE LEARNING ENVIRONMENTS: A CASE STUDY OF TEACHING SECONDARY ICT

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ABSTRACT

Research findings show that Assessment for Learning (AfL) have great potential in regard to teaching and learning (Assessment Reform Group, 1999, 2002). On the other hand, Lai and Ng (2010, 2011) confirmed that Web 2.0 tools such as wikis can facilitate different forms of feedback and self- and peer-assessment, in addition to multidimensional assessment methods that are advocated in AfL. These online tools allow students to work together outside school hours in order to explore common interests and feed back to each other regarding their experiences. On a practical level, teachers hope to discover how Web 2.0 tools can make AfL strategies applicable to learning activities. This study aims to explore the ways in which AfL strategies can be integrated into wiki-based learning activities for teaching ICT in secondary schools. By the end of the study, guiding principles for using AfL in wiki-based activities will have been developed. The research design and implementation will be able to provide an exemplar of good practice of e-learning implementation in schools.

INTRODUCTION

Research findings also show that Assessment for Learning (AfL) have great potential in regard to teaching and learning (Assessment Reform Group, 1999, 2002). On the other hand, Lai and Ng (2010, 2011) confirmed that Web 2.0 tools such as wikis can facilitate different forms of feedback and self- and peer-assessment, in addition to multidimensional assessment methods that are advocated in AfL. These online tools allow students to work together outside school hours in order to explore common interests and feed back to each other regarding their experiences. On a practical level, teachers hope to discover how Web 2.0 tools can make AfL strategies applicable to learning activities. Furthermore, although AfL and Web 2.0 are recognized as two promising tools for enhancing teaching and learning, very few empirical studies on such interdisciplinary study can be found. It would be interesting to investigate the synergistic effect of Web 2.0 in education and AfL. This study aims to explore the ways in which AfL strategies can be integrated into wiki-based learning activities for secondary school students. By the end of the study, guiding principles for using AfL in wiki-based activities will have been developed. The research design and implementation will be able to provide an exemplar of good practice of e-learning implementation in schools.

LITERATURE REVIEW

Information Technology (IT) for Learning in a New Era: Five-Year Strategy 1998/99 to 2002/03 was published in November 1998 and marked the beginning of the first phase of structured development of IT in education in Hong Kong. Learning to Learn: The Way Forward in Curriculum Development suggested that “schools should put more emphasis on assessment for learning, a process in which teachers seek to identify and diagnose student learning problems, and provide quality feedback for students on how to improve their work” (Curriculum Development Council, 2000).

Learning and assessment have traditionally been treated as two separate issues; the latter is conducted after the former in order to evaluate what learners have imbibed, thereby enabling instructors to accurately rank their ability. However, assessment is one of the basic components of a curriculum and is often used for more than one function. Additionally, assessment should be designed to support learning rather than to select learners, and be embedded in the learning process with formative feedback (Berry, 2008; Biggs, 1996; Black et al., 2003, 2004; McInerney, Brown, & Liem, 2009; Morris, 1995). Morris (1995) further explains that teachers often require information from their pupils on an immediate basis, which aids them in planning their lessons and, consequently, in obtaining rapid feedback on their pupils’ learning. Similarly, Berry (2008) points out that the fundamental principle of assessment for learning is making a strong connection between

assessment and learning. She also suggests that assessment should be used to promote, induce, and reinforce learning.

Self-assessment and peer-assessment also attract attention in higher education (Falchikov & Boud, 1989; Falchikov & Goldfinch, 2000). Peer-assessment is recognized as a meaningful process through which to foster learning effectiveness and develop learners' sense of ownership (Orsmond, Merry, & Reiling, 2000). Well-constructed self-assessment and peer-assessment exercises also have the potential to provide valuable learning experiences and encourage lifelong learning (Berry, 2008). On the other hand, feedback, questioning, dialogue, and the sharing of successful criteria are also considered to be characteristics of AfL (Hodgen & Webb, 2008; Spendlove, 2009; Swaffield, 2008). It was also pointed out that, if teachers are to raise the standards of their students, they should make Assessment for Learning (AfL) an essential component of classroom work (Assessment Reform Group, 1999, 2002; Berry, 2008; Black et al., 2003, 2004; Black & William, 1988; James, 2008; Marshall & Drummond, 2006). The capability and potential possessed by IT undoubtedly fits the requirements of providing timely feedback. Indeed, the effectiveness of conducting peer-assessments online has been examined in detail and subsequently analyzed and confirmed by various studies. These studies show positive results for online collaborative assessment (Buchanan, 2000; Kwok & Ma, 1999; Thelwall, 2000).

Web 2.0 concepts have led to the development and evolution of many web-based communities and hosted services, including weblogs (blogs), wikis, podcasts, Really Simple Syndication (RSS), and social networking sites (O'Reilly, 2005). Although huge numbers of people are informally involved in various Web 2.0 communities and many researchers believe that these communities provide invaluable research opportunities, in reality, only a handful of researchers have conducted verified small-scale research in this area (McLoughlin & Lee, 2007). Lai and Ng (2010, 2011) have conducted studies examining the extent to which Web 2.0 provides a good environment for fostering learning and teaching. One of the studies involved two classes of student teachers giving virtual presentations of their final assignment in video or in any another preferred digital format, as an alternative means of assessment. The majority of student teacher participants expressed their enthusiasm for this new experience and affirmed that they did not encounter any obstacles in creating a virtual presentation (Lai & Ng, 2010). Another case study, which examined student teachers' learning and assessment using wikis, involved an empirical study on the applications of Web 2.0 in teacher education. The results of the study uncovered the potential of using wikis to develop student teachers' knowledge and skills in several areas: IT skills, organization skills, collaboration skills, knowledge of subject contents, knowledge of pedagogy, and assessment skills (Lai & Ng, 2011). The findings of their studies stated that, on one hand, new assessment strategies for online learning environments need to be explored. On the other hand, Web 2.0 features, such as wikis, can facilitate different forms of feedback and self- and peer-assessment, as well as multidimensional assessment methods that are advocated in AfL. In summary, it is worthwhile for educators to further explore how to integrate AfL strategies in wiki-based learning activities at the school level, especially if AfL is one of the focuses of curriculum reform.

RESEARCH METHODOLOGY

There are not many empirical studies that investigate the synergistic effect of online learning environments and AfL. Therefore, the aim of this study is to explore how to integrate AfL strategies into a selected online learning environment. In our case, the study focused on wiki-based learning activities at the school level. The following research questions are posed:

RQ1: What kind of Assessment for Learning (AfL) strategies can be effectively integrated into wiki-based learning activities?

RQ2: What kinds of learning models are suitable for Web 2.0 tools such as wikis?

Approach and study design

This study was a design-based research study (DBR) that adopted a mixed method approach; the qualitative data will be triangulated by the quantitative data collected. DBR is characterized as a research paradigm that blends empirical educational research with the theory-driven design of learning environments (Design-Based Research Collective, 2003; Bell, 2004). Barab (2006) points out that DBR is less a method than it is a collection of approaches that involve a commitment to researching activity in naturalistic settings. DBR

usually involves multiple iterations or progressive refinement, and each design cycle includes *design*, *implementation*, *analysis*, and *re-design*. Four design cycles were conducted in this study in order to produce sharable theories that had implications for practitioners and designers, with a focus on design in authentic settings (Collins, Joseph, & Bielaczyc, 2004; Strobel, Jonassen, & Ionas, 2008). Mixed methods were used; in each design cycle, both qualitative and quantitative data have been collected. Robson (1993) argues that one important benefit of multiple methods is in the reduction of inappropriate certainty. Multiple methods in investigation also allowed us to perform triangulation.

In this article, a case study on teaching Information and Communication Technology (ICT) in senior forms will be discussed in detail. In this case, qualitative data sources were extracted from dialogue exchanges and contents constructed on the wiki platform, focus group interviews of sample students for tracking attitudes towards the new teaching approach, and reflections from teachers. The quantitative data sources also included the log data on the wiki platform, such as the number of comments posted and the media elements uploaded by the students. These data will be used to triangulate the qualitative data for examining the effect of AfL on teaching and learning. Based on the findings in the first cycle, the AfL strategies applied in the second cycle were refined. The same process was repeated for the next cycle. By the end of four design cycles, an attempt to answer RQs and develop a basic model for integrating AfL in wiki-based learning activities was made. Figure 1 shows the conceptual framework for each design cycle of the study.

For the entire project, the research team extended the study to four primary and four secondary schools, once the project had been completed. The scale was justified by the funding to be claimed and the time span of the proposed project. The richness of data produced should be able to answer the research questions.

Participants

This reported case is to demonstrate the design and implementation of the new teaching approach in secondary sector. A class of students took part in a wiki-based learning activity in each cycle. As the design aimed to improve the learning model that will be applied to wiki-based learning activities, there was no need to ask the same class to undergo four design cycles. Furthermore, it would not have been a practical arrangement in local secondary schools. Thus, the class chosen depended on the teaching duties of the project teacher. The study has been run for two school years and four design cycles have been performed. At the beginning, the project teacher was required to attend professional development workshops on using online learning environments in teaching and learning and about AfL strategies in classrooms.

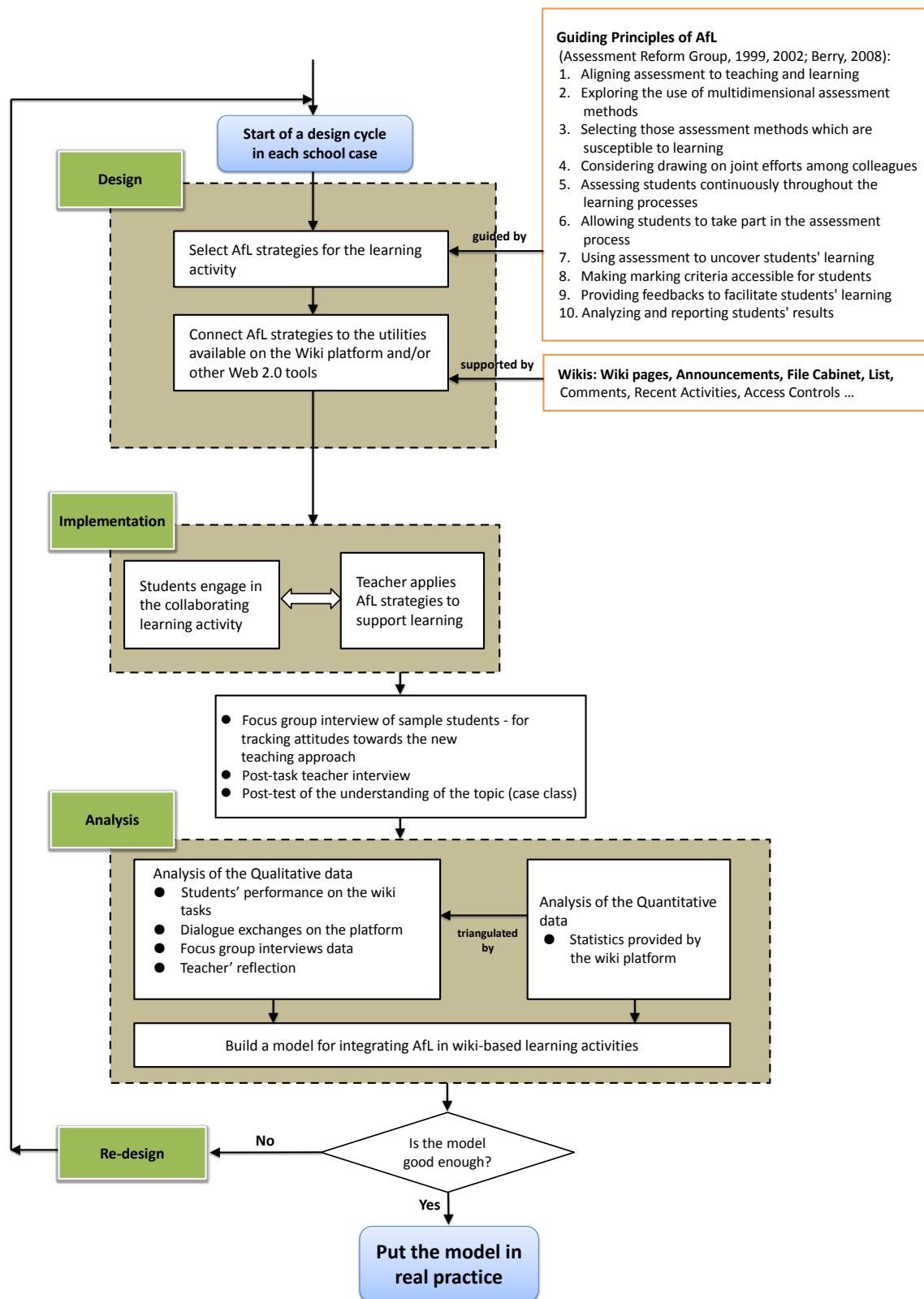


Figure 1. Conceptual Framework of the Study for each design cycle

IMPLEMENTATION

The DBR plan consisted of four cycles. In each cycle, a class of students taught by the teacher was required to complete an online learning activity. The project teacher was an ICT teacher, so the topics for the learning activities were selected from the senior form ICT curriculum. At the design stage, the project teacher was also required to decide which topics would be more appropriate for conducting learning activities on wikis. As “Google sites” is a free wiki service and easy to use, it was adopted for the study. In each task, the students were required to work in groups and complete a wiki-based learning activity designed by the teacher. In each cycle, the project teacher was asked to find out how to integrate appropriate AfL strategies into the online tasks. The strategies were adopted from the ten guiding principles of AfL proposed by Berry (2008):

1. Aligning assessment to teaching and learning;
2. Exploring the use of multidimensional assessment methods;
3. Selecting those assessment methods which are susceptible to learning;
4. Considering drawing on joint efforts among colleagues;
5. Assessing students continuously throughout the learning processes;
6. Allowing students to take part in the assessment process;
7. Using assessment to uncover students’ learning;
8. Making marking criteria accessible for students;
9. Providing feedbacks to facilitate students’ learning;
10. Analyzing and reporting students’ results;

The framework of the wiki project had been set up by the project teacher. Further guidelines and feedback were given by the teacher during the project period. Each design cycle in the case included four stages: design, implementation, analysis, and re-design. In each design cycle, two types of data were collected: qualitative and quantitative. The qualitative data included the students’ performance in regard to the wiki tasks, the dialogue exchanges on the platform, the focus group interviews of case classes, interviews of sample students for tracking attitudes, and teachers’ reflections. This enabled the researchers to explore how to connect AfL with the wiki-based learning activities. Statistics provided by the wiki platform also allowed the researchers to triangulate the findings from the qualitative data. The findings from first design cycle enabled the researchers to adjust the AfL strategies in wiki-based learning activities. The steps of analysis for the first design cycle have been repeated for the next cycle, and so on.

In the following sections, the researchers will illustrate how the project teacher attempted to integrate AfL strategies into wiki-based learning activities. The first design cycle was a simple introduction for the project participants, while the fourth design cycle showed an improved design for the learning model. In the next section, a summary of the four design cycles shows the major AfL strategies used and the refinement for each cycle.

The First Design Cycle

Subject: Senior Form ICT

Topic: ISP

Purpose

This cycle aimed to help the project teacher learn how to design wiki-based learning activities and integrate appropriate AfL learning strategies into the learning activities.

Learning Objectives

After completing the learning activity, the students should be able to:

1. Describe the services provided by Internet Services Providers and understand the cost of acquiring services from these providers;
2. Select appropriate service plans offered by ISPs.

Design and Implementation of the Learning Activity

In each learning activity, the students were encouraged to work in groups as follows:

- Forming a group of three to four students;

- Searching for information on the assigned topic;
- Consolidating the collected information and presenting the findings on the project wiki through collaboration;
- Inviting classmates from other groups to comment on the wiki;
- Reviewing and giving comments on the reports of other groups.

Every group had the responsibility of adding appropriate and updated contents to the wiki project. All project participants were also encouraged to give encouragement to their peers and write constructive comments on their work. In order to achieve the learning activities, the teacher tried to align the learning activities with the assessment and objectives. He divided the learning activities into four parts and the students were required to complete the following learning tasks:

Part 1

- (1) List out your current ISP, service plan, and price.
- (2) Take a photo of your ISP modem and upload it to your own page.

Part 2

- (1) Browse your ISP homepage and list out all the service plans under your own page.
- (2) If there are add-on services or gifts provided with the basic plan, please state them as well.

Part 3

- (1) Use the OFTA (Office of the Telecommunications Authority)'s speed testing tool (<http://speedtest1.ofta.gov.hk/speedtest.php?lang=trad>) to test your broadband speed.
- (2) Is the speed the same as your current plan? If not, what is a possible reason for that?

Part 4

- (1) Compare your current service plan with your ISP promotion. Would you still choose it? Why?
- (2) Compare your current service plan with other students' ISP promotions. Which one will you choose? Why?

As this was the first cycle, it aimed to help the project participants understand the underlying principles and the learning activity was kept as simple as possible. The teachers created a wiki site using Google Sites for the project, which enabled the participants to browse and create their own wiki pages. The learning tasks were uploaded to the wiki and the students were asked to follow the guidelines to complete the assigned tasks (see Figure 2).

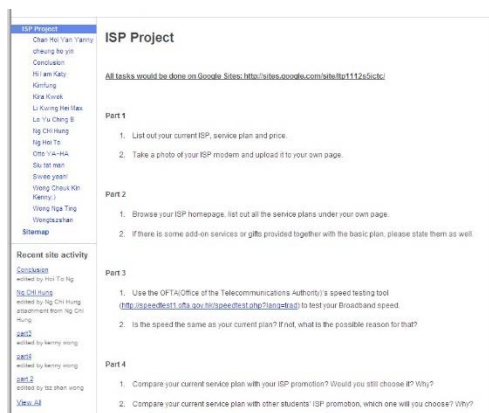


Figure 2. Wiki-based learning activities designed by the project teacher

Student Performance

As the project wiki were constructed with Google Sites, the participants could be assigned different roles within the learning activities. For each learning activity, the teacher was the owner of the wiki site and could assign different roles to their students: *owner*, *collaborator*, or *viewer*. In order to facilitate peer-assessment activities, all students were assigned a collaborator role. They were allowed to create their own pages and edit the pages in the project wiki. Additionally, the students were able to post their responses on any pages

under the project wiki. For each part of the wiki-based learning activity, the students did not seem to have any difficulties in completing the tasks on the new learning platform. They were able to post replies, diagrams, and charts to the project wiki. Table 1 summarizes the students' participation in the learning and assessment activities.

Table 1. Students' participation in the learning and assessment activities

Learning activity	Total number of replies	Diagrams uploaded	Charts created on the pages
Part 1	15	15	/
Part 2	10	/	20
Part 3	7	6	/
Part 4	6	/	/

Assessment for Learning Strategies

In the first design cycle, the teacher attempted to integrate some simple AfL strategies into the wiki-based activities. In designing the activities, he tried to align assessment, learning activities, and the learning objectives. The contents, learning tasks, and the assessment activities were closely related and cross-referenced. The teacher also attempted to use multiple ways of assessing the students' achievements. Thus, the students were required to complete a number of assessment tasks. Furthermore, the teacher sent a questionnaire to his students in order to collect more information about their understanding of the topic, once they had completed all the tasks on the wiki (see Figure 3). In summary, the following AfL strategies were explored by the project teacher:

- Aligning assessment to teaching and learning;
- Exploring the use of mulita-dimensional assessment methods;
- Using assessment to uncover students' learning.

Conclusion

Conclusion on ISP Project

More understanding to the HK ISPs.
*必填

After the project, which ISP would you choose? *

☐ Netvigator (PCCW)
☐ HKBN
☐ i-Cable
☐ HGC

After the project, which way will you consider to choose an ISP first? *

(1 is the most important, 5 is the least important)

	1	2	3	4	5
Monthly Fee	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local Upload / Download Speed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Add-on service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Customer service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contract length	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Promotion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

提交

Figure 3. Questionnaires for uncovering student learning

Conclusion for the First Design Cycle

The purpose of this cycle aimed to enable the project teacher to learn how to design and implement wiki-based learning activities. It also allowed the teacher to explore how to integrate AfL strategies in the learning activities. Meanwhile, it also allowed his students to become familiar with the new learning platform and teaching approach. The design of the learning activities was kept as simple as possible and the project team

did not plan to collect too much data in this piloting cycle. In summary, after completing the learning activity, the students were able to create and edit their own wiki pages, upload photos, and use advanced formatting features to present their ideas. The platform also provided a convenient means for promoting peer learning and conducting peer-assessment activities.

The Fourth Design Cycle

Subject: Senior Form ICT

Topic: Data Control

Purpose

This was the last design cycle of the study. The project teacher tried to apply the knowledge and skills learnt from the previous cycles and integrate more applicable AfL strategies into the wiki-based learning activity.

Learning Objectives

After completing the learning activity, the students should be able to:

1. Briefly describe the important features of data control.

Design and Implementation of the Learning Activity

As in the previous three design cycles, the teachers created a new project wiki with Google Sites, to be used for conducting learning activities. The teacher still assigned a collaborator role to each student. This enabled them to create and edit their own wiki pages. Details and guidelines of the learning tasks were uploaded to the wiki and the students were asked to follow the instructions in order to complete the assigned tasks. In this design cycle, the students still worked in groups. Eight small groups were formed and tasked with preparing reports for eight different topics. The topics assigned to the groups were as follows:

- Group 1 Data Verification
- Group 2 Field Presence Check
- Group 3 Field Length Check
- Group 4 Range Check
- Group 5 Fixed Value Check
- Group 6 Format Check
- Group 7 Type Check
- Group 8 Check Digit

In order to complete the assigned tasks, the students were required to collect relevant information, including photos and videos, from the internet. Since the students were assigned collaborator roles in the wiki, they were allowed to create their own wiki pages and edit any pages under the same wiki. By the end of the activity, each group was able to create their own pages to present their findings. In order to gain an in-depth understanding of the new pedagogy, four students were interviewed together, in order to probe their views on the learning process as a whole.

Student Performance

In tackling the tasks, the students were allowed to present their findings in their own way. It could be observed that some groups attempted to use media elements to enrich their reports. In addition to using text, four groups also used photos to illustrate their findings. One group also attached a document to their report page as supplementary information. Figure 4 shows the page created by the Group 4 students. They were able to present their findings in appropriate text format and use photos to show two examples of a check digit.

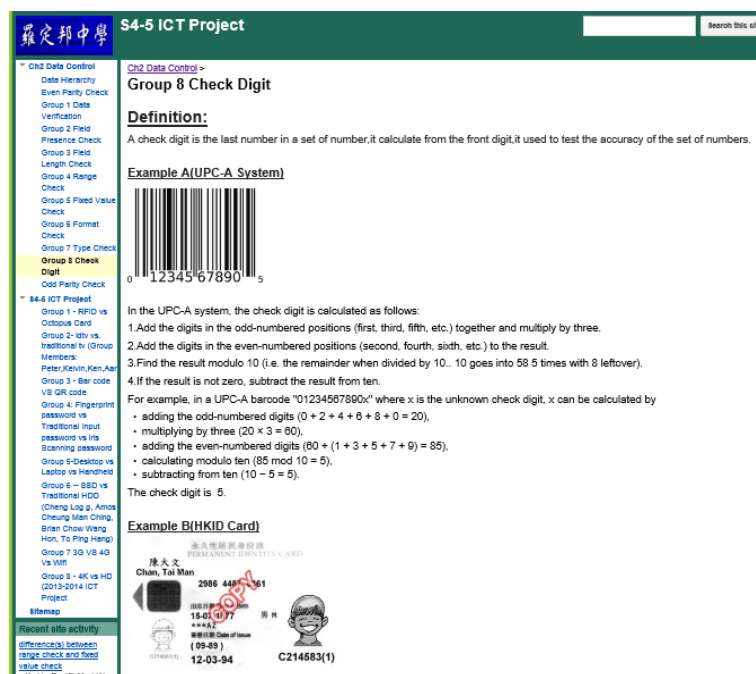


Figure 4. Students' wiki pages, presenting their report on an assigned topic

Assessment for Learning Strategies

In comparison to the previous example (the first design cycle), the project teacher here tried to refine the peer-assessment activity. At the beginning of the activity, he also posted the assessment criteria of the project (see Table 2), in order to make it accessible for students. The rubrics were used for assessing the ICT projects in the peer-assessment activity, meaning that the students were encouraged to actively participate in the assessment process. After students had completed their own pages, peer-assessment activities were conducted among groups. In this cycle, the students were required to give responses to the comments from other groups and conduct a presentation to the class. Table 3 summarizes the students' participation in the peer-assessment activity. The students were eager to give comments and suggestions to their peer groups; they showed no reluctance in making negative comments on others' work. Furthermore, the teachers continuously monitored the whole learning process and gave comments on the students' work when needed. In summary, the following AfL strategies were applied to the wiki-based learning activity:

- Aligning assessment to teaching and learning;
- Exploring the use of multidimensional assessment methods;
- Assessing students continuously throughout the learning process;
- Allowing students to take part in the assessment process;
- Using assessment to uncover students' learning;
- Making marking criteria accessible for students;
- Providing feedback to facilitate students' learning.

Table 2. Criteria for peer-assessment: Rubrics for assessing the ICT projects

Criteria		Level 0	Level 1	Level 2	Level 3
Knowledge and Understanding (30%)	<ul style="list-style-type: none"> • Introduction to your topic. • Explain how it works. 	<ul style="list-style-type: none"> • No explanation of your topic. • No explanation of your items. 	<ul style="list-style-type: none"> • Simple explanation of your topic. 	<ul style="list-style-type: none"> • Brief explanation of your topic. 	<ul style="list-style-type: none"> • Detailed explanation.
Thinking	<ul style="list-style-type: none"> • Show 	<ul style="list-style-type: none"> • No examples. 	<ul style="list-style-type: none"> • One 	<ul style="list-style-type: none"> • Two to three 	<ul style="list-style-type: none"> • More than

and Inquiry (30%)	<i>examples to explain its usage.</i> • <i>Introduction to the examples about the topic in a real situation.</i>	• No explanation.	example with explanation.	examples with explanations.	three examples with explanations.
Communication (20%)	• <i>Comment on the other group's content and improvement.</i>	• No comment given.	• At least one suggestion for improvement made.	• At least two suggestions for improvement made.	• At least three suggestions for improvement made.
Conclusion (20%)	• <i>Conclusion of the topic.</i>	• No conclusion given.	• Brief conclusion.	• Conclusion but not focusing on the main theme. • No more than five wrong spellings.	• Conclusion and presentation are well-organized. • A clear comparison is seen.

Table 3. Students' participation in the peer-assessment activity

Group	Total responses made by the group members	Types of responses					Teacher's feedback for the group
		<i>Positive feedback</i>	<i>Negative feedback/suggestion</i>	<i>Positive/negative feedback or suggestion</i>	<i>Query</i>	<i>Feedback on feedback</i>	
1	18	0	4	10	4	0	0
2	21	3	6	10	2	0	0
3	16	4	1	10	1	2	1
4	16	0	7	9	2	1	1
5	19	3	0	16	0	0	0
6	18	0	16	2	2	0	2
7	18	2	8	8	0	0	1
8	15	6	2	6	2	2	2

Conclusion for the Fourth Design Cycle

This was the last design cycle of the study. The project teacher and the students were familiar with the learning platform and the teaching approach adopted by the teacher. It could be observed that the project teacher was able to apply the knowledge and skills learnt from the previous cycles. More appropriate AfL strategies were applied to the design of the wiki-based learning activity.

As the second and third design cycles were quite similar, they will not be discussed in detail. In the next section, there will be a concise summary of the major components of the four design cycles.

Summary of Findings

Table 4 shows a summary of the details of each design cycle. The project attempted to align the leaning objectives, learning activities, and AfL strategies in each design cycle. It can be observed that more and more AfL strategies were applied to the wiki-based learning activities.

Table 4. Summary of the four design cycles

Design Cycle	Topic	Objectives	Learning Activities	AfL Strategies
1	Understand Services Provided by ISPs	<ul style="list-style-type: none"> Describe the services provided by ISPs and understand the cost of acquiring services from these providers. Able to select appropriate ISP service plans. 	<ul style="list-style-type: none"> The teacher gave instructions on the project wiki. Ask students to present their answers on the wiki. Students' presentations can be in text, diagram, or chart form. 	<ul style="list-style-type: none"> Aligning assessment with teaching and learning/ Exploring the use of multidimensional assessment methods. Using assessment to uncover students' learning.
2	ICT Computer System Project	<ul style="list-style-type: none"> Understand and compare the features of different types of computers. Able to select appropriate computer systems for different situations. 	<ul style="list-style-type: none"> The teacher posted a task on the project wiki. The students were required to complete the task in groups and conduct peer-assessment activities. 	<ul style="list-style-type: none"> Aligning assessment with teaching and learning. Exploring the use of multidimensional assessment methods Allowing students to take part in the assessment process. Using assessment to uncover students' learning. Providing feedback to facilitate students' learning.
3	Understand New Mobile Technologies	<ul style="list-style-type: none"> Understand new mobile technologies through learning some new ICT terms. 	<ul style="list-style-type: none"> Students worked in groups. Different groups were assigned different tasks. They were required to collect relevant photos, videos etc. on the internet. After students had completed their own pages, peer-assessment activities were conducted among the groups. The students were required to make a presentation to the class. 	<ul style="list-style-type: none"> Aligning assessment with teaching and learning. Exploring the use of multidimensional assessment methods Allowing students to take part in the assessment process. Using assessment to uncover students' learning. Making marking criteria accessible for students. Providing feedback to facilitate students' learning.

4	Data Control	<ul style="list-style-type: none"> • Understand the important features of data control. 	<ul style="list-style-type: none"> • Students worked in groups. • Different groups were assigned different tasks. • There were required to collect relevant photos, videos etc. on the internet. • After students had completed their own pages, peer-assessment activities were conducted among the groups. • The students were required to give responses to the comments from other groups. • The students were required to make a presentation to the class. 	<ul style="list-style-type: none"> • Aligning assessment with teaching and learning. • Exploring the use of multidimensional assessment methods • Assessing students continuously throughout the learning process. • Allowing students to take part in the assessment process. • Using assessment to uncover students' learning. • Making marking criteria accessible for students. • Providing feedback to facilitate students' learning.
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Student Interviews

Except from during the first design cycle, several students were invited to attend a focus group interview after completing the learning activity in each cycle. This helped the researchers probe the students' views on the learning process as a whole, in addition to their attitudes towards the new learning approach. Here are some advantages and drawbacks about using wikis and the new design of learning activities, as pointed out by the students:

Advantages:

- Multiple approaches to learning
 - Student 1: *We can learn new knowledge through the internet.*
 - Student 3: *We are required to do hands-on work searching for information on the internet. This can complement the information we have learnt from others' presentations. The process helps me learn a lot.*
 - Student 4: *Since I need to search for information from the internet, consolidate the collected information, and present findings on the wiki, this let me learn a lot during the process. Learning in wiki-based learning activities is more convenient and efficient than just reading books.*
- Wikis are a convenient and efficient learning platform.
 - Student 1: *I can share my work through the project wiki during the class. It allows every participant to see my post immediately and there is no need to make printed copies for sharing. Furthermore, we can review our work at home after school.*
 - Student 4: *I feel happy with the platform as it allows me to amend my work without any delay.*
- The wiki platform facilitates peer-assessment activities.
 - Student 1: *Sometimes, we feel more comfortable communicating with others on the platform than using a face-to-face mode. It seems that we have no reluctance to give negative comments to our peers and even criticize their work.*

Drawbacks:

- Internet access is vital for participating in the wiki-based learning activities.
 - S03C2S1: *We cannot participate in any online activities if we do not have internet access.*
 - S03C2S3: *If the home computer is not available for me, I cannot respond to others' questions immediately.*

Conclusions and Limitations

The main objective of the study was to examine how to integrate AfL strategies in wiki-based learning activities and then develop a feasible model for designing and implementing these kinds of activities with Web 2.0 tools. The findings led to answers to the study's two research questions.

RQ1: What kind of Assessment for Learning (AfL) strategies can be effectively integrated into wiki-based learning activities?

From the findings of the four design cycles (see Table 4), the following AfL strategies have been identified:

- Aligning assessment with teaching and learning;
- Exploring multi-dimensional assessment methods;
- Selecting assessments susceptible to learning;
- Assessing students continuously;
- Allowing for students' participation in the assessment process;
- Using assessment to uncover learning;
- Making marking criteria accessible;
- Providing feedback.

The study confirmed that these are applicable to the wiki-based activities and the students agreed that these types of learning activities are efficient for acquiring new knowledge. It can be observed that two guiding principles proposed by Berry (2008) cannot be tested in this case study:

- (1) *Drawing on joint-efforts amongst colleagues* – This AfL strategy could not be applied in the study as only one project teacher was involved in the study. However, this also reflects the practical situation in teaching secondary schools. There may be only one senior form ICT teacher in most secondary schools.
- (2) *Analyzing and reporting results* – As the duration of each cycle was short, the researcher did not track the teachers' work after the work was completed. However, the teacher reported that he would retain the wiki site for further analysis when he had more free time.

RQ2: What kinds of learning models are suitable for Web 2.0 tools such as wikis?

With reference to the implementation details, a simple workflow model has been built. This model can be used as a guide for integrating AfL strategies into wiki-based learning activities (see Figure 5).

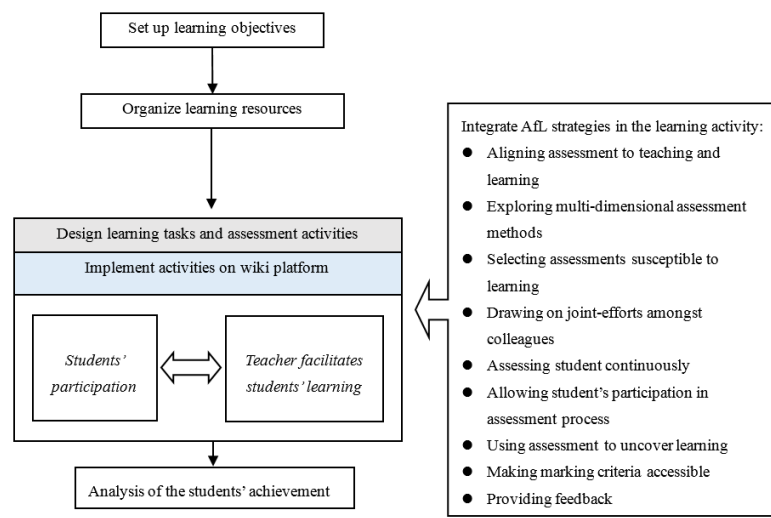


Figure 5. Workflow model for integrating AfL strategies into wiki-based learning activities

In the study, the researchers have performed some important ground work for the interplay of AfL strategies and Web 2.0 tools. However, there are still a lot of unknowns requiring further investigation. The guiding principles will be better formulated if more and more cases can be carried out in the future. This will also help refine the learning model, which can be applied to different subjects and different Web 2.0 tools.

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INTEGRATING SOFTWARE DEVELOPMENT COURSES IN THE CONSTRUCTION CURRICULUM

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ABSTRACT

Researchers have largely revealed the importance of ICT/Software in changing the economy of a nation and achieving sustainable goals. The present youth population are a result of the computer/internet age and these characteristics should be harnessed. The study examined the integration of software development courses in the construction curriculum, specifically in the business of resource management. The study employed the use of a cross-sectional survey design using the instrument of questionnaire to obtain data. A total of thirty (30) educationist in the built environment participated in the study and were selected randomly through a convenient sampling method. The data obtained were analyzed using SPSS v21.0. Descriptive and Inferential statistics test of Factor Analysis, One-way ANOVA and Kruskal wallis were conducted. Results revealed that the factors that engender learning of software development courses in the construction curriculum are grouped into three (3) namely teaching support factors, learning Support factors and the regulatory support factors. The study revealed that poor delivering method, poor internet connectivity and low patronage of indigenous software are significant barriers to the integration of software development courses in the construction curriculum. In conclusion, there was no significant difference among construction professionals on the benefits of integrating software development courses in the construction curriculum. The study recommended the speedy integration of software development courses in the construction curriculum, carefully aided with adequate teaching and learning facilities. In addition, government should support and patronize locally developed software in order to aid the growth of the industry in the sub Saharan Africa.

Keywords: Construction Education, Teaching support, Resource Management, Software development, Learning methods.

INTRODUCTION

A surgical look at the revolutionary impact of the internet and the advent of online applications in social media and e-commerce or e-business makes it important to consider what it could do to the business of construction and other professions. The construction sector has been seen as the provision of shelter and infrastructure rather than been seen as this and much more. The business side of the construction sector must be critically examined. Not seeing the construction sector as a business would largely affect time, cost and the quality requirements of a building. Yagmuroglu, Gunaydin and Arditi (2009) asserted that contractors fail because they lack business knowledge of construction projects. Every contractor's aim is to make profit, by this he/she employs the construction professionals to achieve this purpose. But, sadly to infer, construction professionals have not judiciously helped contractors and investor to achieve this sole purpose.

In recent years, the construction industry has been using many softwares on construction project in preparing construction time and cost needs. But, this has not led to project success on many construction projects in Nigeria. The high incidences of cost overrun, time overrun, abandonment of projects, large piles of construction waste, delay, non-payment of workers etc. have marred the image of the Nigerian construction industry. This has led to adversarial relationship between many investors, clients and contractor/construction professionals. This can be largely attributed to contractor/construction professionals' neglect of controls and quality (Bamisile, 2004). The argument may be that most of the construction softwares are not developed by construction professionals and therefore makes it hard to incorporate certain controls.

But how can construction softwares measure quality? It is opined that when construction softwares are used to prepare construction documents, it is for the plan that is set in the future. Nevertheless, there is need for controls to be set in place. Yagmuroglu *et al.* (2009) argued that construction managers are meant to make plans and assess the status of the plans thereafter. Plans are activities set for the future, while controls are set to cope with the changes

that will invariably occur in the actualization of these plans. Bamisile (2004) referred to this as having a progressing system for the resource conversion process. Jimoh (2012) explained that this is the act of checking, measuring and recording of progress in comparison with planned requirements. Construction softwares can help to ensure quality of attaining cost and time requirements which are of enormous benefits to all stakeholders in the construction industry. This can be achieved by measuring plans, controls and the changes that occur eventually. Construction softwares that helps to put controls and ensure quality are either scarce, not user friendly or not available in the Nigerian context.

Lately, the Nigerian curriculum has receive some bashing from different quarters for its rigidity and not been able to measure with the needs of the times (Asaolu, 2012). There is need for the Nigerian curriculum to adapt to the new trends and sustainable goals of modern society. Studies of curriculum development such as introduction of sustainability in construction education, entrepreneurship, video learning, occupational health and safety, OSHA etc. shows that if well implemented, can lead to a better performing construction industry. Therefore, the study aims to examine the integration of software development courses in the area of resource management in the construction curriculum. The following research questions would form a guide for this study;

- What factors engender learning of software development courses in the construction curriculum?
- How significant are the barriers to the integration of software development courses in the construction curriculum?
- Of what benefit is the integration of software development courses in the area of resource management in the construction curriculum?

RESOURCE MANAGEMENT

Resource management is the soul and heart of any construction project. According to Ziaidoostan, Ghaneh, Amanin and Gholipor (2013), no task or activity in the construction industry can be performed without various construction resources. Nagaraju, Reddy and Chaudhuri (2012) defined resources as an entity that contributes to the fulfillment of project assigned tasks such as manpower, material, money, equipment, time or space. While management involves planning, organizing, commanding, coordinating and controlling. Simply put, resource management is the process of using management skills and techniques in planning, organizing, commanding, coordinating and controlling of resources.

The construction industry is known to consume large amount of resources and energy (Ekanayake and Ofori, 2000; Nagaraju *et al.*, 2012). These resources makes the major cost of construction projects. It is worthy to note that these resources have their own inherent high risk and uncertainties, which makes it necessary to manage them well. According to Mendoza (1995), manpower, equipment and materials are important project resources which requires close management attention in order to ensure a satisfactory conclusion to a construction project.

The Nigerian construction industry has exhibited attributes of large amounts of waste (Enshassi 1996; Garas, Anis, and Gammal, 2001), delays (Odeh and Battaineh, 2002), cost overrun, time overrun, poor productivity (Hai, Yusuf, Ismail and Wei, 2012), conflicts and dispute (Okoye, Ngwu and Ugochukwu, 2015) etc. which are major characteristics of mismanagement of resources and adds no significant value to the client or investor. Apart from mismanagement, other negative aspects which affects construction projects in terms of its resources are unavailability of resources, theft and vandalism, use of sub-standard resources, delivery of wrong quantities. These undesirable qualities can invariably cripple contractors and construction firms. In Nigeria, there are two main categories of construction firms; the few multinationals and the indigenous firms (National Bureau of Statistics, 2013). These multinationals which controls large chunk of the mega projects engage the use of some prime foreign or in house developed ICT tools in carrying out its business of resource management and as thus realized great gain from it (Jimoh, 2012).

According to Jimoh (2012) executing construction projects are becoming more complex and challenging by the day. Effective resource management is the key to construction project success which can largely be achieved through the integration of information and communication technology in its diverse phases (Haddad, 2015). In spite of the growing problem and the implications of poor construction resource management, most indigenous construction businesses still manage these critical resources—and all of the data surrounding them—with nothing more than spreadsheets, paper forms and human memory. As a result, these organizations are incurring unnecessary costs and taking on risks that are impeding their ability to grow and compete in an industry where there is very little room for

error. The areas in resource management are wide, ranging from material management, money management, human (manpower) and non-human (equipment) management, time management and space management. Material management alone, can be broken further into Material estimation, budgeting, planning & programming, Scheduling, purchasing & procurement, Receiving & inspection, Inventory control, storage & warehousing, Material handling & transport and Waste management (Thomas, Riley and Messner, 2005; Stukhart, 2007). These are areas burgeoning the need for further ICT and software development.

SOFTWARE DEVELOPMENT IN DEVELOPING ECONOMIES

Information is an asset. Information and Communication technology has been identified as a key driver for the socio-economic development of developing economies like Nigeria (Soriyan, Mursu, Akinde and Korpela, 2001; Misra, 2015). Olaore (2014) stated that it can engender global competitiveness and national development. According to Okonta (2006) investment in ICT is able to create wealth to an ailing economy. Countries such as Japan, India and Israel are major exporters of software technology as a primary product in its economy (Momodu *et al.*, 2007). Therefore, ICT should be high priority sector to aid any economy's plan of diversification (Soriyan *et al.*, 2001).

Presently, some Nigerian institutions have incorporated the use of ICT into their curriculum. The aim was that when students grow up in an ICT environment, they may gain many hours of experience using ICT facilities (Olaore, 2014). Even though the institutional framework for the adoption of ICT has been there since 1989 by the Nation University Commission, Idowu and Esere (2013) noted that the adoption has been slow due to resistance to change, inadequate ICT infrastructure and lack of qualified personnel.

ICT is taking over the construction process, right from the inception to the completion (Onyegiri, Nwachukwu and Onyegiri, 2011). This arose from the need to be more client oriented, large data being transferred and the competitive nature of the industry (Weippert, Kajewski and Tilley, 2003; Peansupap and Walker, 2005). Apart from the hardwares, internet and the World Wide Web (WWW) been used by the Nigerian construction industry, some commonly used softwares include Autocad, Archicad, Studiomax 3D, Revit, BIM, Primavera and Microsoft Office programs (Onyegiri *et al.*, 2011). Other innovative tools have been developed but are not frequently in use in the industry. For example, Menzel *et al.* (2006) developed an innovative tool of e-resource sharing tool for sharing idle resources among construction companies. Appropriate software packages and organizational information systems for African settings must thus be developed locally, even if a foreign package can be used as a starting point for adaptation (Heeks, 1999). The huge nature of the industry calls for more indigenous software applications and web based technologies to tackle the challenges facing the Nigerian construction industry from design to the construction phase.

According to the United Nations Educational, Scientific and Cultural Organization, UNESCO (2003) education helps in developing the knowledge and skills needed for a sustainable future. Therefore, the built environment education required for the management and administration of the Nigerian construction industry in the twenty-first century calls for diverse skills required in achieving optimum goals (Ameh *et al.*, 2010; Afolabi *et al.*, 2016). Skills emphasizing entrepreneurship, workplace skills, competency skill, softs skills (Chapman, 2004), craftsmanship, occupational health and safety administration, OSHA (Afolabi *et al.*, 2016) and ICT skills can help satisfy the needs of the industry. The effective management of construction projects calls for continuous improvements of skills required such as software development. Construction students can be armed with programming skills with the knowledge of the construction process to produce cost effective, user friendly construction softwares.

Momodu *et al.* (2007) defined the software industry as a relatively low-investment, environmentally friendly, high-growth global industry. Osofisan and Osunade (2005) noted that the Nigerian software development sector of the ICT sector is on the rise. But, a huge gap still exist due to the dependence on foreign softwares used in different Nigerian industries (Asaolu, 2012). According to Misra (2015) apart from the local consumption that can be provided for by indigenous software development, Nigeria can become a Global Software Development (GSD) location due to its language, high youth population trained in IT disciplines and the reduced cost of producing software products. Momodu *et al.* (2007) opined that if the industry is properly managed it can result in economic boom and engender sustainability for the nation. It is hoped that in the years to come, Nigeria will become an offshore software outsourcing destination (Osofisan and Osunade, 2005; Momodu *et al.*, 2007; Misra, 2015). This can be achieved through proper funding/management, staff training, curriculum review, student involvement and academia-industry cooperation (Asaolu, 2012).

METHODOLOGY

The empirical nature of the study employed the use of a cross-sectional survey design using the instrument of questionnaire to obtain data. The study location was carried out in Lagos state, which is one of the most technologically advanced cities in Nigeria. Lagos State also has the largest ICT (hardware and software) market domiciled in Ikeja referred to as Nigeria's Silicon Valley. Through a convenient sampling method, a sample size of sixty (60) educationists comprising of architects, builders, quantity surveyors and civil engineers in the built environment were contacted for the study. However, a total of thirty (30) questionnaires were returned and carefully scrutinized that they did not have any form of error. Non probability convenience sampling method was adopted; this is a sampling method according to Teddlie and Yu (2007) and Collins *et al.*, (2007) that involves choosing from a sample that is not only accessible but the respondents are willing to take part in the study. The data obtained were analyzed using SPSS v21.0. Descriptive and Inferential statistics test of Mean, Factor Analysis, One-way ANOVA and Intra-Class Correlation coefficient were used for the study.

FINDINGS AND DISCUSSION

In this section, the study examined the factors that engender learning of software development courses in the construction curriculum, examined the significant barriers to the integration of software development courses in the construction curriculum and identified the benefits of integrating software development courses in the area of resource management in the construction curriculum.

Factors that engender learning of software development courses in the construction curriculum

Literature identified nineteen (19) factors affecting the learning of indigenous software development in construction education and thus assessed by the use of Component principal analysis (CPA) also called factor analysis. From the analysis as shown in Table 1, the KMO and Bartlett's test of sphericity show good factorability features.

Table 1. KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.217
Bartlett's Test of Sphericity:	
Approx. Chi-square	517.282
Degree of freedom	190
Significant level	0.000

The Bartlett's test of sphericity gave a chi-square value 517.282 at 190 degree of freedom, significant at 5%. This shows correlation among the identified factors, hence a supportive criterion for factorability. CPA indicates 6 components (out of the 19 possible components) with Eigen value of at least 1. The first component has an Eigen value of 7.827 while the sixth has 1.073. These are the variation each of the linear components can explain. The percentage of variance explained by each of these components is given in the third column while their cumulative is in the fourth column. The first component explained the highest variation of 41.197% while the last explained 5.646%. Altogether, the sixth explain 86.774% variation by their linear components.

Table 2. Total Variance Explained before and after rotation

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings(a)
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	7.827	41.197	41.197	7.827	41.197	41.197	6.503
2	2.661	14.003	55.200	2.661	14.003	55.200	5.215
3	2.160	11.368	66.568				
4	1.483	7.804	74.372				
5	1.284	6.755	81.127				
6	1.073	5.646	86.774				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Kaiser's criterion suggests the extraction of 6 factors, but 6 factors are too many given the communality of the components. However, scree plot was resorted to and rotated 3 factors with point of inflection showing Eigen values of above 2.

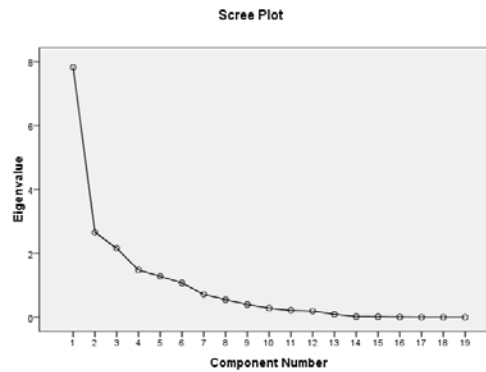


Figure 1. Scree plot

The items are loaded at different degree on each of the variables, but item(s) with high loading is/are considered (item with highest coefficient and those close to that with same theme).

On the first component, academic management support, software development trained personnel and training software packages were highly loaded while on the second component, availability of internet connection, availability of personal computers and teaching methods were highly loaded. On the other hand, funding, government support and curriculum review responsibilities were the highest loading co-efficient on the third component. The highest loading items on the same components therefore suggests factor's name to be given to such component, and in line with this, the three components obtained in this analysis are named thus; 1) Teaching support factors, 2) Learning support factors, 3) Regulatory support factors.

Table 3. Rotated Component Matrix

	Component		
	1	2	3
Academic management support	.904		
Software Development trained personnel	.892		
Training software packages	.850		.329
Student involvement	.818		
Knowledge of the construction process	.745	-.390	
Interest of Construction Students	.733	.302	
Academic-Industry cooperation	.727		
Programming language to be used	.692	-.360	
Needs of the construction industry	.681	-.437	.330
Funding	.575		.533
Construction curriculum review	.572	-.365	.496
Curriculum Regulators	.520	-.504	
Availability of Internet connection	.666	.675	
Availability of Personal Computers	.319	.638	
Teaching methods	.499	.544	
Increased patronage of few local software	.323	-.418	
Foreign software	.475		-.655
Previous ICT skills of students	.441		-.635
Government Support		.386	.486

Extraction Method: Principal Component Analysis.

a. 3 components extracted.

The three (3) main factors derived for Table 3 are discussed;

Factor 1: Teaching Support factors – The teaching support factors are defined as those factors necessary to aid the teaching delivery methods to the students either via the lecture environment or lecture instruments to be used. Factors such as academic management support, software development trained personnel and training software packages are considered under this category. The academic management support could come in form of well-equipped computer laboratories, provision of up-to-date training software packages and trained personnel. The trained personnel must be up-to-date in the knowledge of recent software packages. Idowu and Esere (2013) stated that most institutions lack computer literate teachers and ICT experts that would support and manage the internet connectivity and/or application of computing in the teaching-learning process. Having a suitable teaching support system would help ensure that the students adequately grasp the concept of software development in the higher institution environment. In addition, the limited training software suitable for this climate is a factor that should be considered. Aduwa-Ogiegbaen and Iyamu (2005) noted that due to the differences in education standards and requirements, the foreign softwares do not integrate into curriculum across countries. Software that is appropriate and culturally suitable to the Nigerian education system is in short supply. There is a great discrepancy between relevant software supply and demand in developing countries like Nigeria (Aduwa-Ogiegbaen and Iyamu, 2005).

Factor 2: Learning Support factors – The second category of supporting factors engendering learning of software development courses in the construction curriculum are based on the variables such as availability of internet connection, availability of personal computers and teaching methods. These are facilities that aid the student in learning of software development. According to Oyovwe-Tinuoye and Adogbeji (2013), in Nigeria, most ICT facilities are not sufficient to enhance quality education to learners and teachers, even where it exists there are not sophisticated enough to stand the test of time like the ones acquired in developed countries. Nwosu and Ugbomo (2012) stated that problems of quality and lack of resources are compounded by the new realities faced by higher education institutions battle to cope with every increasing student's numbers.

Factor 3: Regulatory Support factors – This category comes about from the variables of funding, government support and curriculum review. Essentially, it requires the collaboration of the academic institution and the government through the national commission to ensure the take-off and the continuity of the programme. Software development is heavily capital intensive in the short term and therefore the issues of funding needs to be adequately catered for. According to Uzodinma (2015) experts have argued that emerging indigenous software companies are not effectively being encouraged. They believe that the government must guarantee their survival by charging them with the responsibility of either coming up with their own solutions or demonstrating that they can develop or implement software solutions proposed by the government. The overall educational system is under-funded (Taiwo, 2004) therefore available funds are used to solve more urgent and important survival needs by the institutions. Oyovwe-Tinuoye and Adogbeji (2013) suggested that funding and maintenance of the ICT tools should not be neglected or politicized. The institutions management must be interested and fully involved in implementation and maintenance of ICT equipment and the Internet connectivity. Idowu and Esere (2013) opined that adequate funding is necessary for tertiary education in general and development of ICT in particular. To this end, government should increase funding for the entire educational sector. Government can play several roles in support of the development of software exports and in the application and diffusion of software or ICT in private sectors of the economy. For example, Momodu et al. (2007) suggested that government can create of a supportive regulatory environment for telecommunication and internet; protection of intellectual property rights; targeted investments in software education and research; and broad promotion of ICT literacy programmes and action that would promote long-term progress in both domestic and export activities.

Barriers to the integration of software development courses in the construction curriculum

A one-way between-groups analysis of variance was conducted to compare the means between the four (4) groups used in the study on barriers to the integration of software development in construction education. The test was to examine the effect of each group on the listed barriers. The decision rules that when p value < 0.05 , the listed variable(s) is termed significant and vice versa. Table 4 revealed the ANOVA results on barrier to the integration of software development in construction education. This is inferred from their p -value which is less than 0.05 (5% level of significance), signifying they are significant. From the twenty-three (23) variables identified in literature, the variables of poor delivering method, poor internet connectivity and low patronage of indigenous software are

significant. In Nigeria, there are few Internet providers that provide internet gateway services to Nigerians. According to Aduwa-Ogiegbaen and Iyamu (2005), many of these companies provide poor services to customers who are often exploited and defrauded with the few reputable companies, which render reliable services charging high fees thus limiting access to the use of the Internet. Uzodinma (2015) argued that a serious problem affecting the Nigerian software industry is the lack of believe in locally made software in that government and IT companies have not done much to show they believe in the ability of their citizens. For instance the Chinese government hires local citizens to build alternative to expensive unaffordable software systems, aiming to produce a cheaper one for its citizens. This raises the morale of the youths who are in the industry or aspiring to join the industry as they are certain there is an available job and market for them. Kwacha (2007) noted that, the most common problems associated with the effective implementation of ICT are lack of qualified ICT personnel, cost of equipment, management attitudes, inconsistent electric power supply, inadequate telephone lines, particularly in rural areas and non-inclusion of ICT programmes in teacher's training curricula and at the basic levels of education. Pelgrum (2001) stated that the obstacles for ICT implementation include the following: Insufficient number of computers, teachers' lack of ICT knowledge/skills, difficult to integrate ICT to instruction, scheduling computer time, insufficient peripherals, not enough copies of software, insufficient teacher time, not enough simultaneous access, not enough supervision staff and lack of technical assistance. In addition, Lewis and Smith (2002) summarized these barriers as limited equipment, inadequate skills, minimal support, time constraints and the teacher's own lack of interest or knowledge about computer. Majorly, it is evident that the tools and the encouragement is lacking in the system which are major barriers to the integration of software development in the construction education.

Table 4. ANOVA results on barrier to the integration of software development in construction education

		Sum of Squares	df	Mean Square	F	Sig.
Low interest from students	Between Groups	.833	3	.278	.609	.615
	Within Groups	11.867	26	.456		
	Total	12.700	29			
Inadequate curriculum to cover the area	Between Groups	.933	3	.311	.436	.729
	Within Groups	18.533	26	.713		
	Total	19.467	29			
Lack of software development trained staff	Between Groups	.183	3	.061	.171	.915
	Within Groups	9.283	26	.357		
	Total	9.467	29			
Lack of tools and practical facilities	Between Groups	.983	3	.328	.711	.554
	Within Groups	11.983	26	.461		
	Total	12.967	29			
Low commitment from stakeholders	Between Groups	2.633	3	.878	1.324	.288
	Within Groups	17.233	26	.663		
	Total	19.867	29			
Insufficient time to acquire knowledge	Between Groups	1.683	3	.561	.366	.778
	Within Groups	39.817	26	1.531		
	Total	41.500	29			
Poor funding	Between Groups	1.933	3	.644	1.855	.162
	Within Groups	9.033	26	.347		
	Total	10.967	29			
Emphasis on Theory	Between Groups	3.000	3	1.000	1.408	.263
	Within Groups	18.467	26	.710		
	Total	21.467	29			
Inability to communicate skills to the students	Between Groups	2.583	3	.861	1.557	.224

	Within Groups	14.383	26	.553		
	Total	16.967	29			
Inability to quickly grasp the knowledge	Between Groups	3.833	3	1.278	1.255	.310
	Within Groups	26.467	26	1.018		
	Total	30.300	29			
Tedious nature of programming	Between Groups	3.533	3	1.178	1.204	.328
	Within Groups	25.433	26	.978		
	Total	28.967	29			
Inability to understand its importance	Between Groups	2.200	3	.733	1.771	.177
	Within Groups	10.767	26	.414		
	Total	12.967	29			
Epileptic power supply	Between Groups	3.250	3	1.083	2.757	.063
	Within Groups	10.217	26	.393		
	Total	13.467	29			
Low patronage of Indigenous softwares	Between Groups	3.567	3	1.189	5.330	.005
	Within Groups	5.800	26	.223		
	Total	9.367	29			
Insufficient book materials on programming	Between Groups	.933	3	.311	.488	.693
	Within Groups	16.567	26	.637		
	Total	17.500	29			
Poor internet connectivity	Between Groups	9.733	3	3.244	4.190	.015
	Within Groups	20.133	26	.774		
	Total	29.867	29			
Dominance of foreign softwares	Between Groups	7.333	3	2.444	1.890	.156
	Within Groups	33.633	26	1.294		
	Total	40.967	29			
Low government support	Between Groups	.633	3	.211	.236	.870
	Within Groups	23.233	26	.894		
	Total	23.867	29			
Poor ICT skills of students	Between Groups	.283	3	.094	.106	.956
	Within Groups	23.183	26	.892		
	Total	23.467	29			
Lack of personal computers	Between Groups	6.983	3	2.328	1.755	.180
	Within Groups	34.483	26	1.326		
	Total	41.467	29			
Rigidity of the Construction curriculum	Between Groups	4.983	3	1.661	1.281	.302
	Within Groups	33.717	26	1.297		
	Total	38.700	29			
Insufficient knowledge of the construction process	Between Groups	4.533	3	1.511	.930	.440
	Within Groups	42.267	26	1.626		
	Total	46.800	29			
Poor teaching delivering methods	Between Groups	8.733	3	2.911	3.772	.023
	Within Groups	20.067	26	.772		
	Total	28.800	29			

Benefits of integrating software development courses in the area of resource management

This section identified benefits of integrating software development courses in the area of resource management. The variables identified includes increase self-employment of students, boost self-sufficiency and self-reliance of students, increase the knowledge of construction process to the students, improve process of resource management, improve employability of students, higher productivity of the construction industry, diversification of the nation's economy, enrich the construction curriculum, reduce reliance on foreign softwares, increase entrepreneurship instincts, sustainability of the construction industry, improve supervision on construction sites, increase business opportunities, technological Improvement, increase Innovation and creativity, increase accountability and transparency in resource management and reduce waste generated during resource management. The study tested the hypothesis;

H_0 : there is no significant difference about the benefits of integrating software development in the construction education.

H_1 : there is no significant difference about the benefits of integrating software development in the construction education.

Kruskal wallis was used to test the significance difference of professional background on benefits of software development in construction education as presented in Table 5.

Table 5. Kruskal Wallis test for difference about the benefits of integrating software development

Benefits of integrating software development	
Chi-square	3.589
Df	3
Asymp.Sig	0.309

The table shows that there is no significant difference among construction professionals on the benefits of integrating software development measures at 95% confidence level. This implies that educationists in the fields of civil engineering, building technology, architecture and quantity surveying have the same perception about the benefits integrating software development in the construction education. Where p value > 0.05 . Thus, the null hypothesis which states that there is no significant difference about the benefits of integrating software development in the construction education is accepted and the alternative hypothesis is rejected. According to Uzodinma (2015), in every nation, the importance of computer software industry in the development of the nation cannot be overemphasized. The fact that 70% of world's programmers are below 35 years shows that the youth are very important in this industry. Improving the quality of education and training is a critical issue, particularly at a time of educational expansion. ICTs can enhance the quality of education in several ways; by increasing learner motivation and engagement, by facilitating the acquisition of basic skills, and by enhancing teacher training (Haddad & Jurich, 2002).

CONCLUSION AND RECOMMENDATION

The aim of the study was to examine the integration of software development courses in the construction curriculum. The study revealed that the factors that engender learning of software development courses in the construction curriculum can be categorized into three (3) main factors namely teaching support factors, learning Support factors and the regulatory support factors. The teaching support factors are factors such as academic management support, software development trained personnel and training software packages while the learning support factors are availability of internet connection, availability of personal computers and teaching methods. The regulatory support factors were from the variables of funding, government support and curriculum review. The study revealed that poor delivering method, poor internet connectivity and low patronage of indigenous software are significant barriers to the integration of software development courses in the construction curriculum. The study revealed that there was no significant difference among construction professionals on the benefits of integrating software development courses in the construction curriculum. All professions require one software or the other to function. The level of ICT development has found its way to all spheres of life. Therefore, the dire need to tap into the unlimited resources of software development especially the indigenous one. The study recommended the speedy integration of software development courses in the construction curriculum, carefully aided with adequate teaching and learning facilities. The study posits that with the internet age students it may be easier to grasp the knowledge of coding, programming and software development in that may be applicable to the area of study or profession. In addition, government should support and patronize locally developed software in order to aid the growth of the industry in the sub Saharan Africa.

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Integration of Landscape Analysis and Assessment Methods, into Vocational Education Processes of Design and Planning Disciplines, by using R & D Projects

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ABSTRACT

It is becoming increasingly important to support undergraduate and graduate levels of vocational disciplines with research projects that have the design and planning authority related to the environment such as Landscape Architecture, Landscape Planning, Architecture, Interior Architecture, Urban and Regional Planning. Particularly, these disciplines, which will have a role in design, planning and management processes of rapidly changing landscapes, need to educate their students who can approach realistic problems with current technology and methods. The acquisition of this properties is possible by integrating both individual and institutional research projects into the education system.

In this study, two research projects titled "Istanbul-Besiktas District an Ecological Planning Approach for an Urban Landscape Plan and Implementation Strategy", related to an urban landscape and "Generating Strategies for Assessing Natural and Cultural Structure Potentials of Bilecik Province, Osmaniye District" focused on a rural landscape, were evaluated in this context. Firstly, analysis and evaluation methods and outputs of these projects were shared with students by organizing workshops, course presentations and conferences. Thereafter the effect of the educational process was discussed.

As a result, findings from the research projects have made it possible to discuss basic concepts such as sustainability, holism, interdisciplinary study, public and stakeholder participation through real problems and transfer them to undergraduate and graduate level students. This approach shows that it is likely to improve the quality of education in institutions that provide vocational training for environment-related practice.

Keywords: *Design education, Holistic approach, Sustainability, Transdisciplinary process, Applicable recommendations, Research- and development- projects*

INTRODUCTION

Balances established in ecosystems over a very long time, seem to deteriorate very fast and are sometimes difficult to recycle because of interventions for use. These deteriorations are not only aesthetic overall, but also cause serious problems economically and threatens human health. Since environmental problems have reached a globally influencing dimension, "Environment" and "Sustainability" are the main agenda items of support programs of the European Union and the United Nations. From this point, it is a national even international responsibility to taking into consideration environmental potentials in the direction of sustainability principles (Aksu, 2014). Moving on from this responsibility, there is a need for handling the concept of sustainability versatile and to incorporate it into the education model, especially into design education. Therefore, the concept of "sustainability" has been considered as a general framework in the research.

Design is a concept that comes to mind in many places. As it is used in scientific or artistic fields such as architecture, industrial design, landscape architecture, painting, sculpture; it is also pronounced in everyday life. Design action is a plan, a fiction, a preliminary work to be carried out later (Aybar, 2003). Design, is a dynamic process. Shaped by real sustainable systems; design has the potential to change functions of buildings, communities and societies. Design has the power to meet needs and to add value (Williams, 2007).

Design is the deliberate shaping of matter, energy, and process to meet a perceived need or desire. Design; is a link that inevitably links cultures and nature through the exchange of materials, energy flows and land-use preferences. When assessed from many different perspectives, it can be said that the environmental problem is actually a design problem. It is a result of how things are made, how buildings are built, how landscapes are used. Design reveals culture and culture is based on what is believed to be true about the world. Current agriculture, architecture, engineering and industrial styles derive from the theory of design knowledge, which is incompatible with nature. A blind design concept wastes energy and resources. A blind design concept is polluting is exaggerated and extremely dangerous. Unfortunately this understanding is spreading (Van der Ryn and Cowan, 1996). Miller et al. (1998) point out that the most complex challenge is to make social and cultural frameworks that allow people to optimally meet their needs without introducing social and environmental challenges for the future.

When design is considered from this point of view, it should not be evaluated independent from the environment. The design concept can be summarized as a change of environment in direction of certain purposes and environmental components should not be ignored for the sake of pure aesthetic purpose. Also sustainability is not an approach which tries to correct the deteriorated relations of an environment by design. It is of utmost importance that this awareness is placed on the educational approaches of the undergraduate level design disciplines in which these seeds are introduced. "The design itself must be sustainable." Prior to intervening in an environment, the natural-cultural components of that environment must be considered, and the components that come to the forefront in determining the identity values of that environment must be examined in a holistic approach.

In this context, a contemporary concept of design is evolving to meet the problems and needs of current usages. According to Yeang (2012), ecodesign is able to fill important gaps in protection-utilization relations. Ecological design or eco-design is to design the built environment and lifestyles in a harmonious and perfectly integrated manner in accordance with ecological design principles and strategies, to integrate the natural environment in which the biosphere is located that hosts all the life forms on earth.

Taking into consideration these features it can be said that design education needs real problems for applicable design solutions, reasoning, a holistic view, and actual information about design processes.

To make designs applicable and to be able to evaluate relations between the space and ecological - sociological structure in a sustainable way, there is a need for holistic approach tools. It has to be known how a holistic approach can affect designs (Aksu, 2014).

As a pioneer landscape planner Ian McHarg (1992) stated his opinion as follows: "There is a creative - suitable - healthy environment available. What are its components? All these must be known to design a city for human". Zev Naveh (2001) identifies 'Multifunctional Landscapes' considered as 'Gestalt Systems' interacting in a concrete, complex, natural, and cultural sense. They need to be studied, upscaled, managed and evaluated with the biperspectivable systems view, from the smallest mapable ecotope to the global ecosphere landscape.

A holistic design approach can only emerge in the context of sustainability. The Brundtland Report (WCED, 1987) 'Our Common Future' was defining Sustainable Development as: 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' and the three components of sustainability are Ecology (Environment), Sociology (Society) And Economy (Resource).

Holistic approaches show that the sum of the components of the systems is more than the whole system (Bailey, 2002).

When the basic components of sustainable development are matched with a holistic design approach, it can be seen that the relationships and interactions occur around an environment, society, and space triangle (Figure 1).

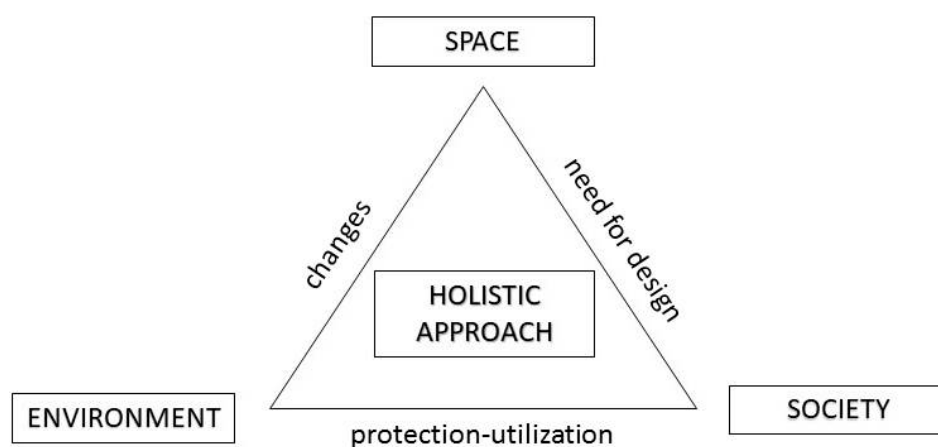


Figure 1: Holistic approach components and interactions.

Space – Environment relations give outputs about the changes in space, Environment – Society relations are important to interpret the protection-utilization balance, and Space – Society relations are important to find out the needs for using the space also the need for design.

Figure 2 shows the environment, which is the subject of planning and design in a transdisciplinary manner, and is located at the intersection of natural, social, and applied sciences.

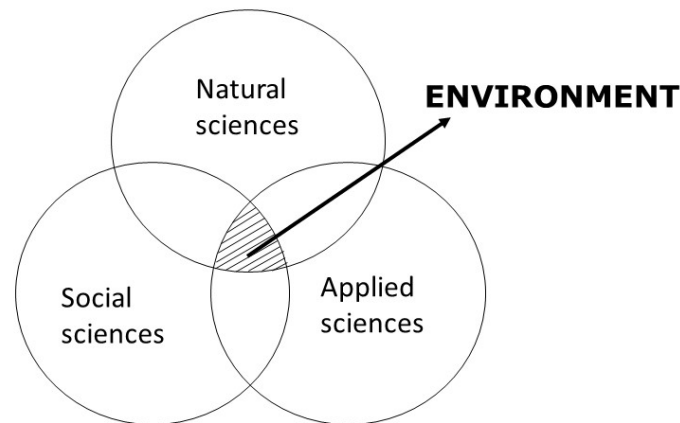


Figure 2: The environment is located at the intersection of natural, social, and applied sciences.

Depends on research topics and goals, many disciplines like landscape planning, sociology, ecology, history, biology, wildlife management, geography, urban planning, architecture, geomatic engineering etc. can be involved in this structure. The environment should be considered as a transdisciplinary object and this approach ensures that findings are deeper and more comprehensive.

The holistic and interdisciplinary sustainable design approach, which is very important in terms of protection and healthy use of the environment, needs to be transmitted and made into a habit while still at the undergraduate level. In order to ensure this flow, especially in applied courses, it is important for students to meet with defined areas in terms of their natural-cultural values. This meeting allows the design question to be interpreted and addressed within the framework of the approaches mentioned above. The presence of research and development projects focused on the analysis, planning and management of the environment being considered facilitates the selection of areas that may be design subjects.

The aim of this research is to examine the consequences of a holistic and interdisciplinary educational approach that focuses on sustainability issues for students at undergraduate level in environmental design and related professions. This article focuses on the contributions of two research and development (R&D) projects, on undergraduate degree design studios of Architecture and Interior Architecture departments of the Istanbul Commerce University, Faculty of Architecture and Design. One of the projects focuses on urban and the other one on rural planning and management subjects. The research question is: “How can the interaction between R&D projects and undergraduate design studios affect the quality of education?”

MATERIAL

The outputs of two R&D projects are reflected into undergraduate-level design studios.

1- Urban Area (Istanbul-Besiktas): “Istanbul-Besiktas District an Ecological Planning Approach for an Urban Landscape Plan and Implementation Strategy”

Goals of the project:

- To put forth the landscape pattern and spatio-temporal landscape changes,
- to determine the green system and inconveniences,
- to identify important species living in an urban area,
- to identify important urban habitats, to find out relationships between the effects of urbanization on the user profile and the historical and cultural structures.
- implementation of strategies and design proposals based on the relationship of artificial surfaces to living environments like green bridges, vertical gardens, biological ponds, sustainable urban equipment, and furniture's

- the establishment of an «Urban Landscape Plan» as a result of the evaluation
- to promote environmental awareness
- to create material for environmental education
- to contribute public participation

Contributing proficiencies:

- Landscape Planning,
- Geomatic Engineering,
- Architecture,
- Interior Architecture and Environmental Design,
- Ecology and Wildlife Management,
- Urban and Regional Planning,
- Geography,
- Forestry

This transdisciplinary approach has ensured comprehensive information about the research area.

2- Rural Area (Bilecik-Osmaneli): “Establishment of Strategies for Assessing Cultural and Natural Structure Potentials in Osmaneli District of Bilecik City”

Goals of the project:

- To define cultural heritage and cultural assets,
- to identify natural values,
- to identify socio-economic structure,
- to determine socio-cultural characteristics,
- to evaluate natural and cultural potentials,
- to determine sustainable tourism strategies that will play a role in the local development
- to define strategies to promote and share the results achieved by the project

Contributing proficiencies:

- Landscape Planning,
- Architecture,
- Interior Architecture and Environmental Design,
- Ecology and Wildlife Management,
- Urban and Regional Planning,
- Geography,
- History,
- Archeology,
- Meteorology and Climatology,
- Forestry

METHOD

To evaluate the urban and rural landscapes in a holistic and sustainable manner a set of multi-componential methods are used for the R&D projects. Figure 3 shows the framework.

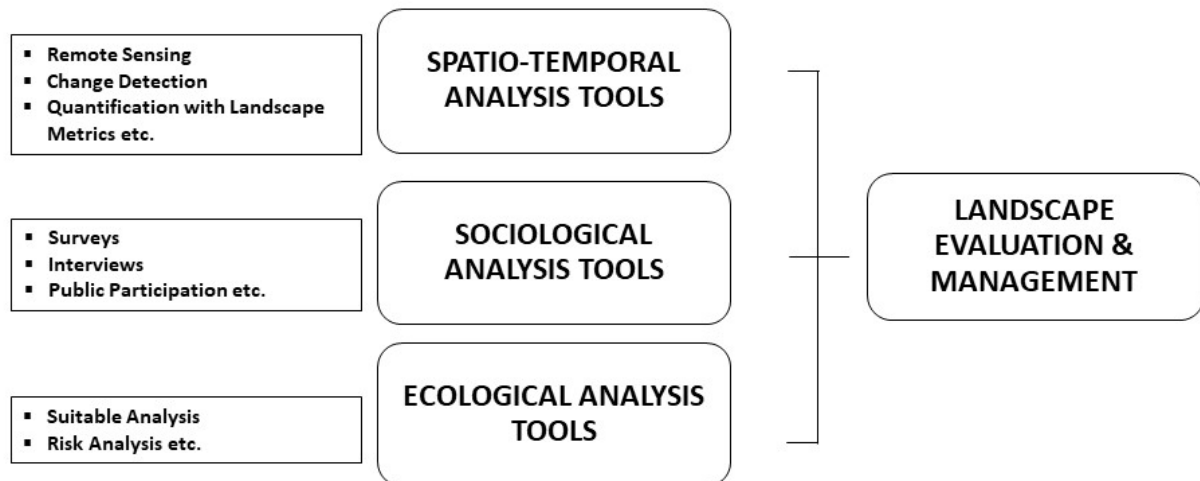


Figure 3: The framework of the methods of R&D Projects (Berg, 2001; Collins et. al, 2001; Darmstad et. al, 1996; Farina, 1998; Forman and Godron, 1986; Haines-Young, 2005; Harker and Vargas, 1987; Kutzenberger, 2001; Leitao et. al, 2006; Li, 1989; McGarigal, 2002; Turner et.al, 2001).

By using this multi-componential research technique, the research areas with their specific natural and cultural characteristics could be considered, and the components constituting the 'Identity Values' of the settlement were able to be described in detail. The outputs of these transdisciplinary, holistic planning and development projects have been used for design studies of undergraduate architecture and interior architecture and environmental design programs.

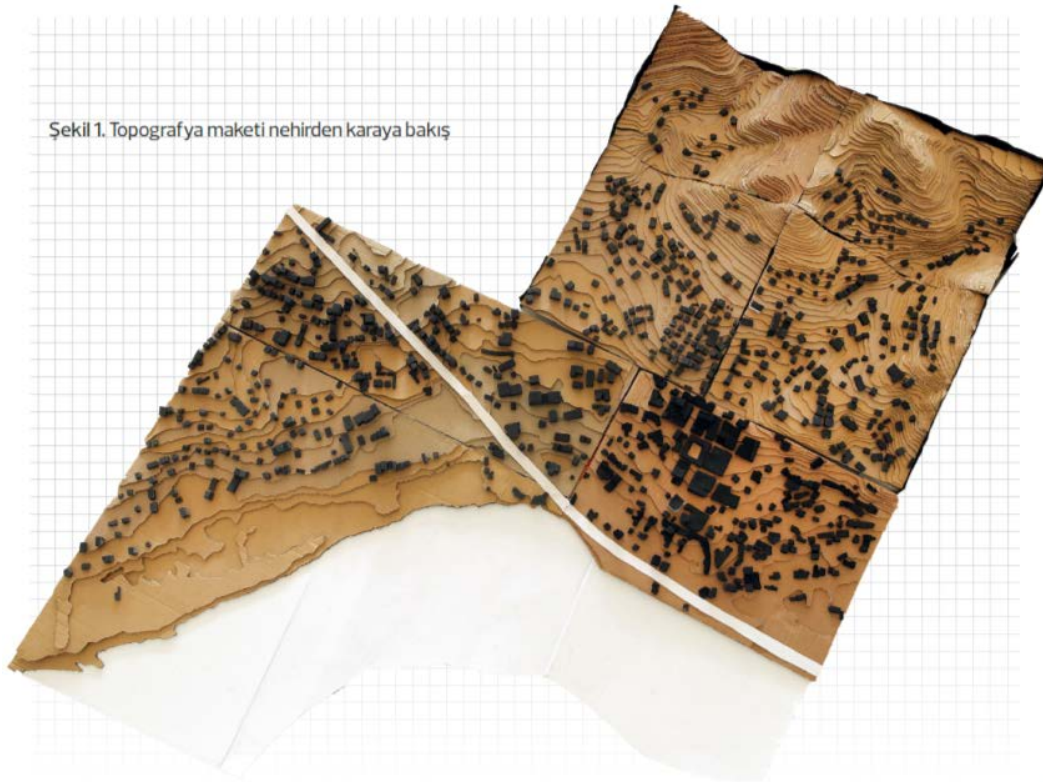
The database accessed through the R&D projects is shared with the students for different scopes in related courses. The researchers involved in the R&D projects shared the research findings by giving conferences as well as they participated in field surveys of the students and guided them. In addition, the initiatives established between researchers and the local administrations have provided sponsorships for student studies, such as accommodation and/or transportation. Through on site surveys, students were able to find out about the on-site investigation of the research area and to ascertain real problems from the authorities.

Undergraduate Design Studies Related with the R&D Projects (Figure 4):

- Design Studio 2
- Interior Architecture Studio 2
- Interior Architecture Studio 3
- Interior Architecture Studio 5
- Diploma Project
- Architecture Project 5
- Landscape Design Theories
- Landscape Planning
- Sustainability and Ecology
- Accessibility in Design
- Illumination Design



(a)



(b)

Figure 4: (a) The working group which is planning a recreation area for the Osmaneli Sakarya River side, in the scope of the Landscape Planning Course. (b) Osmaneli district centre land model built within the scope of the Design Studio 2 Course (Photo by Ersin Alok).

Workshops Related with the R&D Projects (Figure 5):

- Urban equipment that contribute sustainability
- Steps to introduce the city
- First step to urban identity



Figure 5: (a,b) Jury performance of working groups of “Urban equipment that contribute sustainability” Workshop. (c,d) Design recommendations of the “First step to urban identity” Workshop.

FINDINGS

- Research outcomes as well as design course studies were published as reports and books and presented for interested people (Aksu, 2015-a; Aksu, 2015-b; Aksu, 2015-c; Aksu, 2017-a; Aksu, 2017-b).
- Real problems have been reached by contacting the local government and the public.
- Comprehensive data sets have been achieved through On-site research
- Students have been integrated into the R&D projects.
- Under graduate students of design disciplines like landscape architecture, architecture, interior architecture, and industrial design, have had the opportunity to create holistic, realistic and applicable solutions to real problems by exploiting the research outputs.
- The students could examine the test area in different ways and assess the whole. They became familiar with the holistic approach by this means.
- Real user needs were achieved through stakeholder meetings, surveys and interviews conducted within the scope of the project.
- These outputs have contributed the production of realistic design solutions.

CONCLUSION

Considering the same area within the scope of the various courses ensured that more qualified and detailed data was attained, a healthy data source was established and so the analyses and evaluations became more realistic and applicable. This framework, contributed to the ability of students to incorporate reasoning skills into the design process and to make it easier to construct cause-effect relationships.

The holistic approach allows defining the identity values of the research area and gives important clues. The applicability of design decisions related to the holistic view is higher.

It is possible to obtain in-depth findings following an interdisciplinary approach.

It is much easier to bring the stakeholders involved in the field covered by a research project and it is more effective to imagine applications for design, such as workshops and design studios, by ensuring stakeholder participation.

Elbow contact with decision makers facilitates the flow of work.

Findings obtained by the research project will serve as a basis for design education as well as the design applications will put forward the research process. There is a mutual benefit.

Instructors who support their studies with research projects are more likely to transfer more current and realistic data to the design training.

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INTEGRATION OF SOCIAL INNOVATION CREATION IN HIGHER EDUCATION: CASE STUDY OF LATVIA

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ABSTRACT

The paper describes the role of social innovation in modern economies and presents a study of social innovation development in Latvia. The aim of the paper is to analyse opportunities how the creation of social innovations could be enhanced through higher education institutions to eliminate existing social problems and achieve higher standard of living in Latvia. The current research employed monographic method, analysis and synthesis as well as scientific induction and deduction methods to summarize the theoretical findings and basic guidelines of strategic documents. Extensive in-depth interviews with different areas social innovation implementers were conducted to promote a discussion on the problems how to integrate solving of social problems in higher education study programmes. The current research is a continuation of several related research projects implemented in scope of Latvian National Research Programme 5.2. EKOSOC-LV. The study shows that Latvian population is not ready to use opportunities of bottom-up approach giving preference to top-down approach, thus relying rather on the public participation scenario than on self-initiated scenario of social innovation creation. Interview results emphasized the need to integrate social awareness in higher education by strengthening the collaboration among universities, state institutions and enterprises, thus more efficiently involving students in searching solutions to currently existing social problems in Latvia.

INTRODUCTION

During the last decade, extensive discussions on social innovation initiatives and their enhancing in the EU Member States have taken place at the European Commission level. Social innovation has been promoted as the solution to the growing social needs, and as an innovative solution for those issues that require structural changes to promote the welfare of the population and more efficient use of financial resources. Although scientific literature analysis reflects many different views on the definition of the term “social innovation”, its role is gradually growing in the discussions on the EU policy priorities. This is evidenced by the fact that social innovation is one of the “Europe 2020” strategy’s seven flagship initiatives that the European Commission has drawn up to determine the national, European and international measures that would be implemented in the field of innovation in order to achieve the goals set by the “Europe 2020” strategy. Moreover, special attention to the social innovation is provided in scope of the European Union’s initiative “Innovation Union”, which emphasizes the need to incorporate social innovation support measures for the European Social Fund programmes in 2014-2020 (Dobele, Grinberga-Zalite, Kelle, 2015).

In 2014, researchers from several Latvian higher education institutions were involved in a national research project “Involvement of the Society in Social Innovation for Providing Sustainable Development of Latvia (EKOSOC-LV)”. This project was aimed to elaborate appropriate methodology and fundamental basis for conducting the empirical research to identify the specifics of social innovation processes in public for further development of a model that would enhance the involvement and collaboration of social players in social innovation. In the project, active collaboration of four important social innovation parties – society, policy makers, entrepreneurs and higher education institutions. In the phases of the project, the project researchers conducted studies on the development of social innovation in various industries, on promotion models of social innovation and conducted benchmarking studies on successful innovation development abroad as well as the role of higher education institutions (HEIs) in enhancing social awareness that is an important prerequisite for the developing social innovation in Latvia. The aim of the research was to analyse the problems of integration of social innovation creation in higher education studies. The specific research tasks were: 1) to reveal the importance of social

innovation for the overall economic development; 2) to describe the problems of society's passiveness for social innovation creation in Latvia; 3) to analyse opportunities for integration of social innovation in higher education based on the example of Latvia University of Agriculture.

The research employed monographic method, the methods of analysis and synthesis, for the theoretical discussion. The empirical research data were obtained by conducting a public survey of social project implementers in Latvia (n=104).

THE STUDY

Social innovation is innovative activity and /or service, motivated by goal – to meet a social need. The main difference between commercial innovation and social innovation lies in the fact that behind commercial innovation there is always a concrete target and profit oriented investor, whereas the beneficiary of social innovation is the society as a whole. If the main aim of innovation is not the welfare of society, then it cannot be regarded as social innovation. Moreover, the promotion of social innovation is much more complicated as it requires different and diverse set of support resources, including policy makers' recognition and support, and often volunteering and charity (Mulgan, Landry, 1995).

Sometimes social innovation occurs unplanned as a consequence of scientific and technological progress (e.g. worldwide web, open source software), but sometimes it can even result of violence acts (e.g. Amnesty International). However, nowadays social innovation mostly occurs due to necessary changes in developed societies. Modern society alongside with increasing welfare standards and overall economic development are exposed to various negative side-effects of modern capitalism. For instance, technology-related side effects of progress, i.e. unemployment and social exclusion. Today in many spheres of our life technology can replace human labour, thus innovative solutions how to retain workplaces and socializing of people become a problem that needs to be solved. Also obesity is mostly the problem of developed societies – the abundance of food and lack of physical activities owing to comfortable lifestyle have caused growing numbers of health problems. Thus, healthy food production and consumption nowadays is also a huge social problem, which requires multi-dimensional approach to this problem. At the individual's level, we can also mention public psychology problems in the developed societies (mental health), which are often caused by consumerism culture. Also these problems cannot be solved solely by individuals themselves. Moreover, such global problems as racism, culture clash and immigration today are social problems that cannot anymore be solved within the community, country or even a region – they need completely new, socially innovative solutions at a global scale.

The concept social innovation is closely linked with the social economy development, which is defined as a third sector among economies between the private and public sectors, which is based on democratic values, and seeks to improve social, economic and environmental conditions in a given society (Lukjanska, Cirule, 2014). In the European Union, the development of social economy is facing a number of challenges. Firstly, it is necessary to update the legislative enactments and regulations accordingly. Secondly, society and businesses still lack comprehension about the core idea and functioning of social innovation, thus there is low social recognition of this form of economic activity. Therefore, the European Commission has developed a number of policies, programmes and initiatives that have contributed to empowering citizens and organisations to address social issues (Social Innovation, s.a.), policy-makers explore ways to foster social innovation in order to achieve economic growth. The new European strategic framework for 2014-2020 focuses on intelligent, durable development, favourable to inclusion. This can be achieved by target-oriented state policy aimed at supporting social innovation because the main initiator of social innovation promotion is government that ensures particular support instruments (financial, legal, informative etc.) for promoters and implementers of social innovation (Dobele L., Grinberga-Zalite G., Kelle L., 2015).

Lately in Latvia, higher education institutions actively get involved in solving social and economic problems; and in authors' opinion, they already now have all the necessary resources and experience for creation of social innovation – intellectual capital and facilities. Liliana and Florina (2015) emphasize that educational system directly supports the creation of social innovation. The analysis of economic history gives evidence that the nations that meaningfully invested in their education system by broadening the access to preparation and by improving their educational and professional training standards have over time obtained the most spectacular and the most durable economic growths. This finding suggests that social awareness of each society individual is closely linked with higher education development and creation of social innovation. Consequently, higher education institutions today cannot be regarded just as isolated institutions that aggregate and transfer knowledge to students, but rather

the agents of changes (Liliana D., Florina, 2015; Dobeles, Grinberga-Zalite, 2016).

Hence, in author's opinion, the current model of education in Latvia only partly ensures the transformation of intellectual and creative potential of humanity into such products that ensure the development of national economy. In the current model of education, the main focus is put on individual of society. It is positive that by shaping his/her abilities, the individual is able to independently and critically think, be creative, collaborate and adapt to various circumstances. However, in such model individual's social awareness turns out to be very low. The evidence for this assumption was also obtained in the public survey that was conducted in January 2017 in Latvia and involved 104 implementers of social innovation projects. As revealed in Figure 1, the main obstacle for society's involvement in social innovation creation was mentioned passiveness of society individuals and NGOs. Such attitude gradually can result in situation when the central values of the young generation are only associated with their personal success, welfare and self-actualization, which is achieved by accumulating wealth and getting power over others. However, today it is more important than ever to enhance young generation's social awareness of necessity to create such products and services that are needed in our society and are not in conflict with the principles of business ethics and sustainable development. Today sustainable development is connected not only with sustainable production issues but also with sustainable consumption, which is often less attractive for young generation as it does not give instant gratification compared with conventional products.

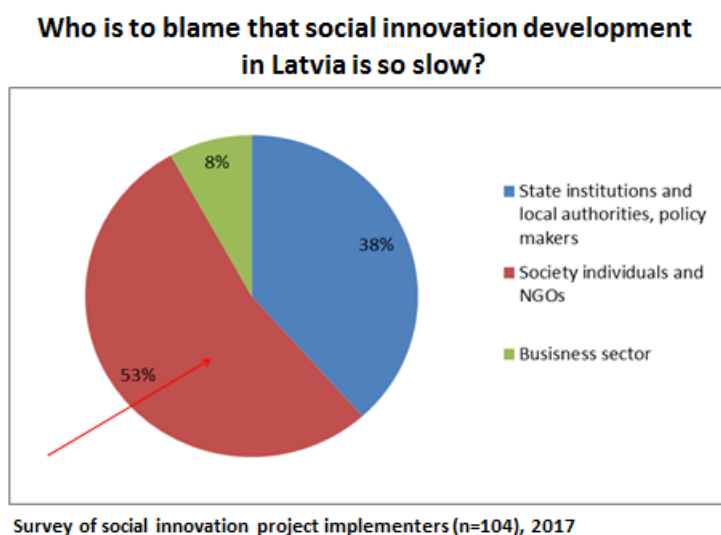


Figure 1: The reasons for low society's involvement in social innovation creation in Latvia

Source: authors' construction

Therefore, the task of higher education institutions is to develop and integrate in to study programmes such study courses that convince students of the topicality of corporate responsibility, increase their social awareness and responsibility for their country's overall development and welfare (Figure 2).

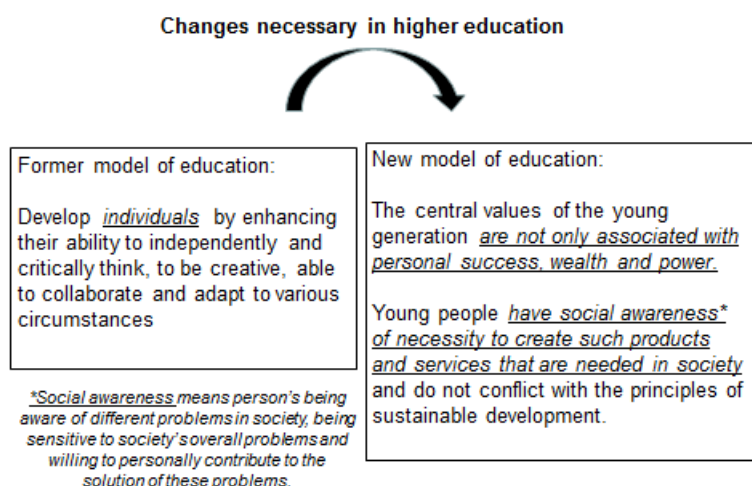


Figure 2: Changes necessary in the model of higher education in Latvia

Source: authors' construction

In higher education institutions, the one can often observe that first year students tend to replicate the viewpoints of their opinion leaders (family, friends etc.). Unfortunately, often the main interests of the becoming accountants are primarily focused on issues how to legally avoid taxes, while the becoming pharmacists are not interested in taking holistic care for peoples' health, but rather in becoming sales managers of pharmacy corporation and making profit for them thus earning good financial benefits for themselves. The becoming engineers and building constructors, in their turn, are not interested to stimulate building of safe and sustainable public buildings but to get high posts in public authorities to be able to make top deals with private sector and show personal power. Also in the eyes of becoming entrepreneurs and economists, participation in social projects is often not prestigious and is not taken seriously as a good practice. Thus, due to such attitude, social innovation development in Latvia is one of the lowest in the European Union (Dobele, Grinberga-Zalite, 2016).

In author's opinion, often students lack social awareness because they have not received a comprehensive and agile explanation of social innovation with convincing examples, case studies, and results. Due to the fact that commercial innovation offers instant gratification, often the benefits of social innovation just fade away. Moreover, social innovation attempts to replace undesirable behaviours with behaviours that require more effort, are less pleasurable or even unpleasant – reduction of personal benefits, increase in personal costs and achieve a social benefit, from which a person often receives no direct benefit. In order to better understand the passiveness, everyone should consider if we ourselves are ready to change our behaviour in such aspects as our comfortable lifestyle (e.g. reduce thermostat settings for saving electricity; give blood as a donor), spend more money on eco products (e.g. recycled paper), give up our personal leisure time (e.g. by working as a volunteer at animal shelter). There will be a number of justifications and excuses why we will not be able to do these things. Therefore, all social innovation projects should first of all be organized in such a way that they are fun, easy, and popular (Lee, Kotler, 2011). This regards also social innovation integration in higher education. In order to create a challenge and excite students with social innovation projects, first of all it is necessary to enable problem based learning approach. Problem-based learning (PBL) is a student-centred pedagogy in which students learn about a subject through the experience of solving an open-ended problem found in trigger material. Even though PBL does not always bring a clear and defined solution to the problem, it allows for the development of desirable skills and attributes (Schmidt et al, 2011). The personal experience of the authors shows that it is highly necessary to organize field work studies (e.g. visiting neglected areas, meeting with referent social groups), which requires additional financial resources (e.g. transportation facilities to the research objects are necessary). Moreover, it is highly advisable that students can practically meet with other already successful social entrepreneurs, which we are sorely lacking in Latvia. Unfortunately, currently for academic teaching staff it is much easier to teach

traditionally as except personal self-actualization, they often have no other motivation to be engaged in the process of enhancing social innovation creation (Grinberga-Zalite, Mazure, 2017). The case study of social innovation creation in Latvia gives evidence that in Latvia stakeholders of social innovation (Figure 3) use wait and see tactics, expecting a push from somebody else – local municipality, relevant ministry, Latvia Investment and Development Agency etc.

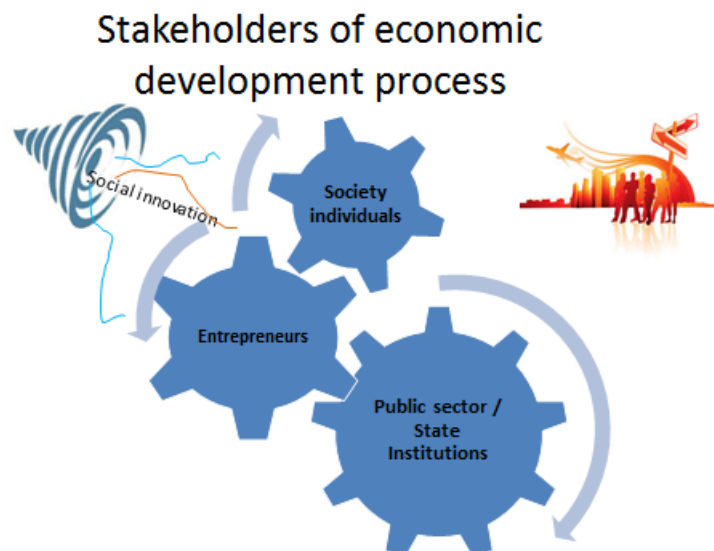


Figure 3: Collaboration of social innovation stakeholders for enhancing of economic development
Source: authors' construction

In order to enhance the comprehension of the role of social innovation, several HEIs in Latvia have already started to introduce in their study programmes such study courses as Social Entrepreneurship, Social Innovation, Social Marketing, Business Ethic, Bio-economics, Sustainability Studies etc. In all of these courses, problem based learning with case studies and field work is highly advisable and helps to better understand the topicality of the course subject. At Latvia University of Agriculture, social innovation issues are already integrated in all the above mentioned study courses that are included in bachelor and master's level studies. The first outcomes of the social innovation projects are successfully defended master's thesis "Opportunities of Social Marketing for Solution of Society Aging Problems in Latvia" and "Social Marketing Opportunities for Development of Socially Innovative Latvian Ethnography Souvenirs for Their Promotion in Jurmala Cultural Events", in which the main focus was put on searching for innovative ideas for social problems in Latvia.

CONCLUSIONS

Currently, there is low level of social awareness in Latvia and society lacks comprehension of the role of social innovation creation. The survey of 104 social innovation project implementers revealed that individuals of Latvian society and NGOs are the ones to be blamed for so slow development of social innovation in country. In authors' opinion, higher education institutions are important intermediaries between the business and public sector, which can enhance social awareness of the young generation by integration of solving social problems into such study courses as Social Entrepreneurship, Social Innovation, Social Marketing, Business Ethic, Bio-economics, and Sustainability Studies. However, although the role of teaching staff to enhance the creation of social innovation is highly important, currently it would be more topical to develop appropriate financial and information support tools for social innovation promoters and implementers in Latvia, which would motivate them to cooperate and make this cooperation process standardized.

Since the Ministry of Economics of the Republic of Latvia is the relevant state administration institution in the field of economic policy as well as in implementing and developing of innovation policy in the country, it should uptake the initiative to create the legislative framework for promoting social innovation in Latvia.

In authors' opinion, further research works should focus on conducting students' surveys to find out how they themselves evaluate their practical experience in working in social projects during their study time.

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INTERACTION AND COMMUNICATION IN EDUCATION AT THE UNIVERSITY: TEMPORAL ASPECT OF EDUCATIONAL COMMUNICATION AND ACTIVITIES AND FORMS OF COMMUNICATION

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ABSTRACT

The paper describes the interaction and communication in teaching in higher education. In the introduction, the author briefly justifies the choice of the problem, presents the research methodology, and then presents partial results of a research and especially the temporal aspect of educational communication in university teaching and applied activities and forms of communication. These results were obtained through qualitative research strategy and by realizing videostudy at nine university teachers of field of Study for secondary schools.

Key words: Educational communication and interaction, organizational forms and teaching methods

INTRODUCTION

Educational communication in education at the university:

Educational education, as a process of interactions between individuals in a specific educational environment, has a target group. Educational communication is an important means of pedagogic interaction. Educational communication is a communication between participants in educational and teaching processes which serves to reach education-related goals (Mareš, Křivohlavý, 1995). Educational communication may take place in various environments, but as Průcha (2009) states, the most remarkable type of educational communication is a communication in school class environment. Given the fact that we only monitor communication which takes place between the teacher and pupils during a school class, we prefer the term educational communication (Šed'ová, Švaříček, Šalamounová, 2012). Educational communication is thus understood as an exchange of messages between the teacher in the scope of one teaching time-unit. Higher education is, in its conception, different from the conception of education at secondary (or primary) level of education.

Nowadays, as the sector of higher education transforms, a lot of educational questions arise. They are concerned with the quality of education (what is the equality of higher education, how to assure it and how to evaluate it (Roskovec, 2009)), the new curriculum design, functioning forms and methods of education, evaluating processes, etc. Transformations of educational context and requirements for the quality of education are now in the direct relation to the emphasis to professional education of main figures in this field - the teachers. This profession is one of the most monitored professions in the Czech Republic and the preparation for this profession is located in the point of intersection of many views of both theoretical and theoretic-empirical approaches (Kasíková, 2015). There is also certain kind of criticism of higher education. It is, among other things, concerned with the characteristics of education of future teachers which is often labelled as non-functioning. The standpoints are being made towards the research of education of teachers at higher education institutions (it tends to be attributed with high level of inconsistency and low level of interconnectedness of the changes of pedagogical practice in primary education with the processes in university education (Lukášová, 2009).

Currently, there are discussions on the topic why teachers from primary schools and from secondary schools teach in traditional way. The researches (Šed'ová, Švaříček, Šalamounová, 2012) that were carried out prove that at elementary schools, there is traditional IRF structure (the absence of the active communication on the side of the pupil). Thus, do future teachers have experience with other type of education? The experience with communication that students gain during pre-gradual preparation is crucial and in particular within the framework of subject curriculum (joint courses). At the university, students of teaching should obtain education of high quality, for two fundamental reasons: in order to study effectively themselves and to experience the model of education that positively affects their future professional life (Kasíková, 2015).

So, what does take place at faculties of universities? In which models of teaching and education do students of teaching find themselves? How well will future teachers be prepared for constructivist teaching? Do the students have experience with dialogical teaching?

METHODOLOGY

In the introduction, we already mentioned that in relation to the variable of higher education sector, a number of pedagogy-related questions arise, and one of them was concerned with assurance of functioning forms and methods

of work. The aim of the research is to describe, what the interaction and the communication taking place in higher education is like and to what extent the students participate in education process. However, within the scope of this contribution, we will not present the answer on the main research question, but we present constitutive results of the research. These are related to following questions:

What is the teacher's and students' time during education at the university like?

What are the activities and communicational forms during education utilized at the university?

Before we will get to the presentation of constitutive results itself, the methodology of the research will be introduced. The answers on the important research are searched for via qualitative research strategy. The legwork took place in the course of the year 2015/2016 with participation of four faculties of Moravian universities. Individual faculties were contacted with a request for collaboration on the basis of selection of the field of study Secondary School Teachers' Training which is offered on the faculties. Subsequently, individual teachers were contacted with a request to participate in the research. Given the selection of a given field of study, Secondary School Teachers' Training, we selected teachers teaching the courses from so-called joint courses. By that, we could achieve quite high level of uniformity of selected courses at various faculties. And the reason for such limitation was an assumption that communication in different subjects could be influenced by their content. Especially General didactics, Pedagogical diagnostics, Pedagogy and psychology, Pedagogical psychology, Personality psychology, etc. For the realization of the research itself, seminars concerning these subjects were selected.

We got nine teachers to participate in the research. In all cases, they are university teachers teaching students of Master's degree in the field of Secondary School Teachers' Training. We very appreciate the teachers' willingness and courage to participate in the research as well as the students'. In the course of the research, we chose a number of data-collecting methods. These were videostudies, direct observation and in-depth interviews with teachers towards the end of the research survey. In the contribution, we will focus primarily on videostudies which were crucial for the below mentioned constitutive results of the research survey. We video-taped the lessons with two video recorders and the method was the same as the one used by Šedřová, Svařiček, Šalamounová (2012). We video-taped two lessons delivered by each teacher, with exclusion of lessons that take place in the beginning and the end of the semester when organization matters are negotiated, and we chose lessons in the middle of the semester. Altogether we recorder 18 video tapes which were subsequently transcribed. In the research, we gained the data which were possible to analyse both qualitatively and quantitatively. The quantitative analysis was focused on gaining the descriptive picture about communication structures, especially for the needs of this contribution, and about what is teacher's and student's time like during education at the university and which communication forms are used in education.

RESULTS

In the following part of the contribution, we will focus on the presentation of constitutive results of the research survey which are fundamental characteristics of educational communication in education at the university. We will focus on, firstly, the proportions, which means what is teacher's and students' time like in education at the university, and secondly on the question of communication forms utilized in education.

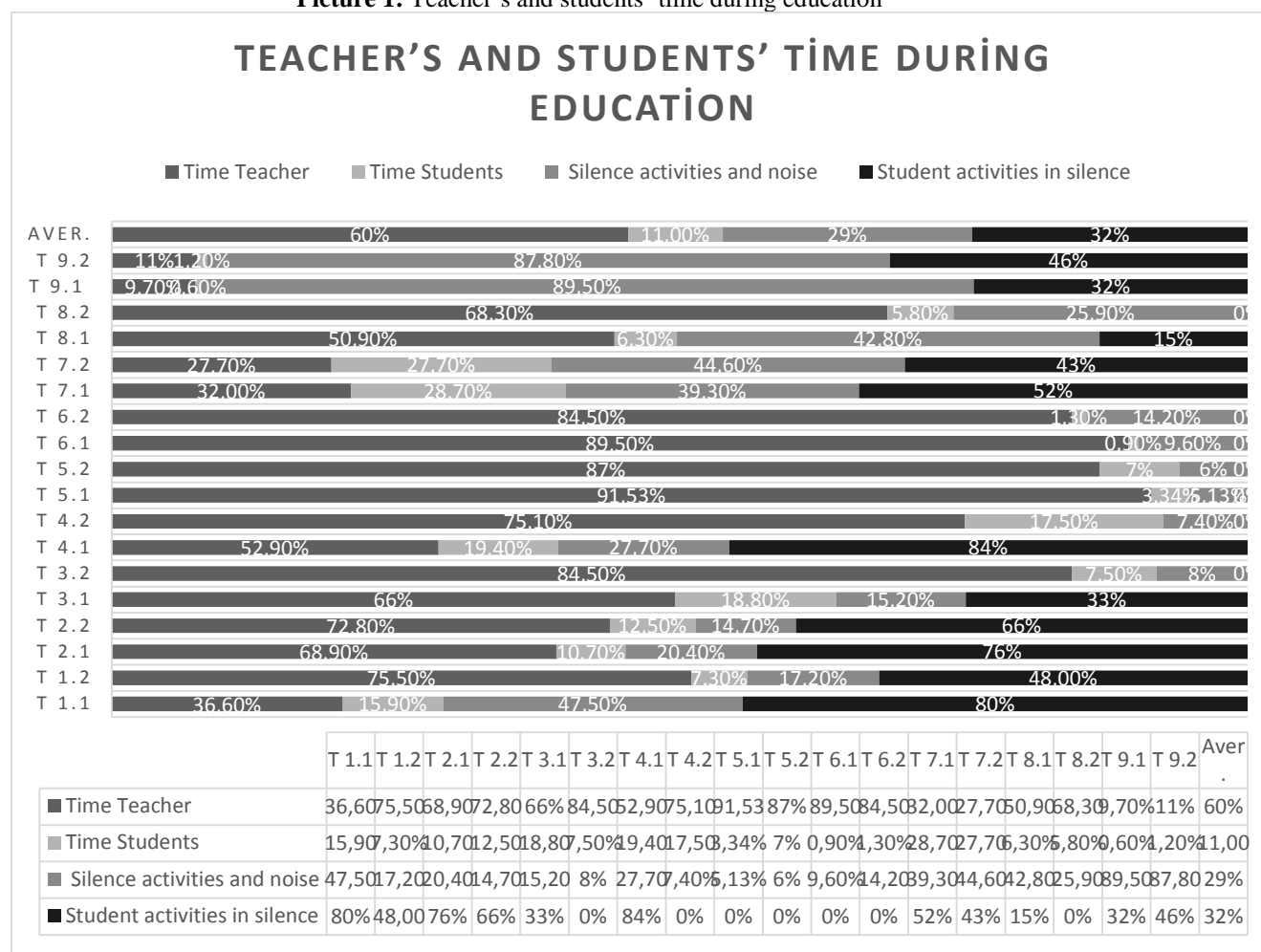
We have to mention that this is the primary view into the issue and individual phenomena are still under more and more detailed analysis, given the fact that the data collection was finished at the end of the academic year 2016 and the analysis of the selected data was, thus, extremely time-consuming.

Teacher's time during the education at the university

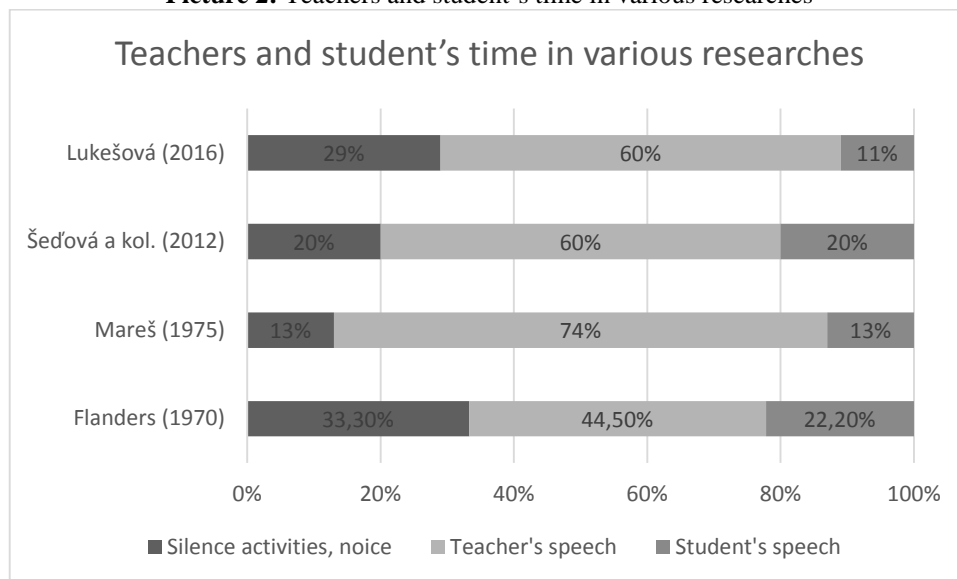
The question of temporal perspective of the educational communication was focused on by, for example, Mareš, Křivohlavý (1995) who discussed a number of obstacles which can influence for how long students talk during education and for how long the teacher talk during education. The first obstacle lies in the difference between the planned and the actual time span spent for education. For many reasons, the part of the lesson is excluded, so the actual time span is shorter than the time set by the study plan and curriculum. The second obstacle can be in the curriculum which is to be communicated about, itself. The curriculum can be remarkably extensive for example, very extensive in relation to set time span. The curriculum can be appropriately demanding, but badly structured, some relations in it are omitted. And the final obstacle can lay in selected organization for and utilized teaching methods. Collective education with usual repertoire of teaching methods often transfers to the traditional type, so-called heterogenous lesson, during which the teacher's speech dominates and pupils' expression in terms of talking is very limited (Mareš, Křivohlavý, 1995). So, do have both teachers and students at the university enough time for educational communication?

The results gained through analysis of video tapes of education at the university shows that 71% of the time of seminars is devoted to talking. Out of this period, 60% is the teacher speaking, while 11% represents pupils' speaking. Silent activities and noise (especially students' group work, individual work and writing, etc.) take 29% of the time span of a lesson. Similar data are shown in Picture 1.

Picture 1: Teacher's and students' time during education



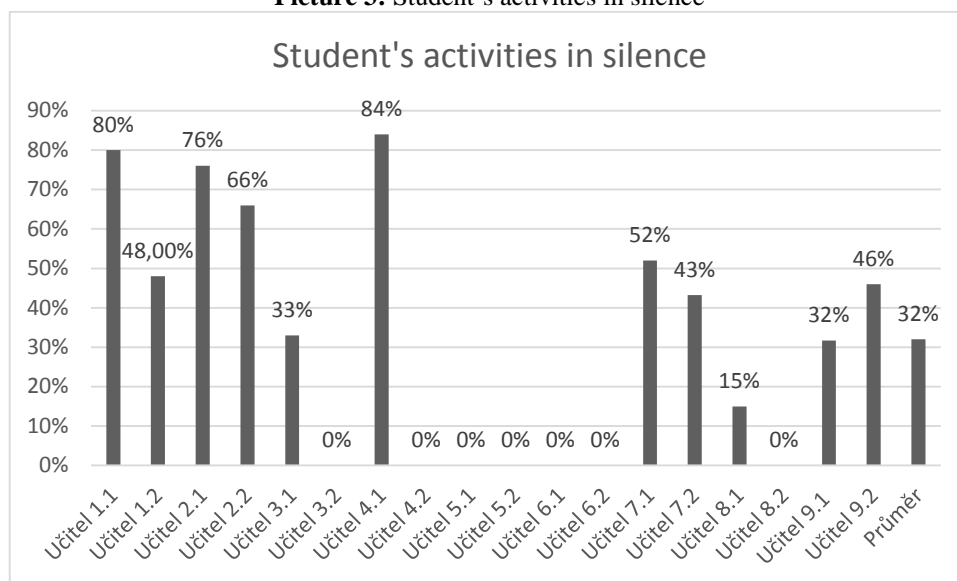
The time span of students' talking, is very short. When compared with various researches (see Picture 2) realized at diametrically different level of education, the time for students to talk is the shortest. It is not our goal to compare one phenomena in various levels of education, but to discuss the facts that are known in this field.

Picture 2: Teachers and student's time in various researches

The time of students' speaking is relatively low, however, the time which is devoted to the student during education is extended by particular activities which take place in silence. Mainly, it is students' group work.

In the following table (see Picture 3), we can see that out of activities which are carried out in silence, or when there is, possibly, a silence in the class, 32% of the total time is dedicated to student's activities. Of course, numbers mentioned above represent statistical average and do not reflect the situation of all observed lessons. The reason being that this situation is very variable. The highest share of students' activity represents 84%, the lowest 15%, of the activity does not occur at all and the teacher's monologue dominates.

Students' group work has a crucial position in education at the university. Mareš a Křivohlavý (1995) mention that the way of division of the students can influence the effectiveness of communication. Smaller group creates the base of independent organization form - collective education. According to Kasíková (2015), group forms of education were never omitted in the topics of didactics in last few years. The theory of teacher's education works with the definition of collective learning vs. cooperative learning with more detail and foreign researches of cooperative approaches in education at the university prove that their effectiveness in the support of cognitive processes, social learning and mental health. That is why we will focus on this phenomena in greater detail.

Picture 3: Student's activities in silence

Activities and communication forms in education at the university

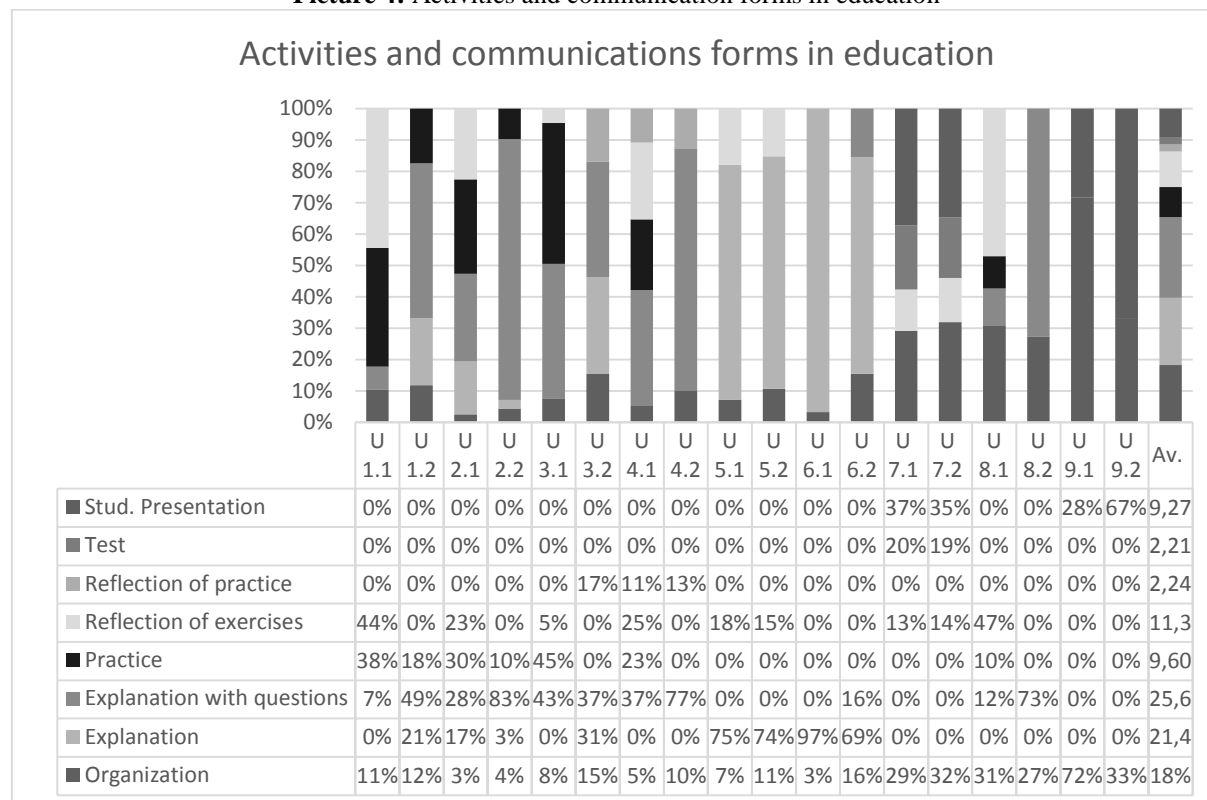
Further constitutive part of the results of the research that we will present in our contribution are activities and communication forms in education at the university. Among fundamental forms of education are, among other things, a seminar that serves to strengthen one's knowledge gained from lectures and independent studying. In seminars, active participation of students is theoretically and methodologically developing and strengthening one's knowledge from courses. (Rohlíková, Vejvodová, 2012) Because of the fact that the author deals with communication and interaction at the university, she picked the form of seminars in which she made video tapes. From the data collected, we can derive that 18% of each lesson is concerned with organization matters. The biggest share of time in a lesson (48%) takes the teacher's lecture which is organized as a monologue (22%) or as a lecture with questions (26%).

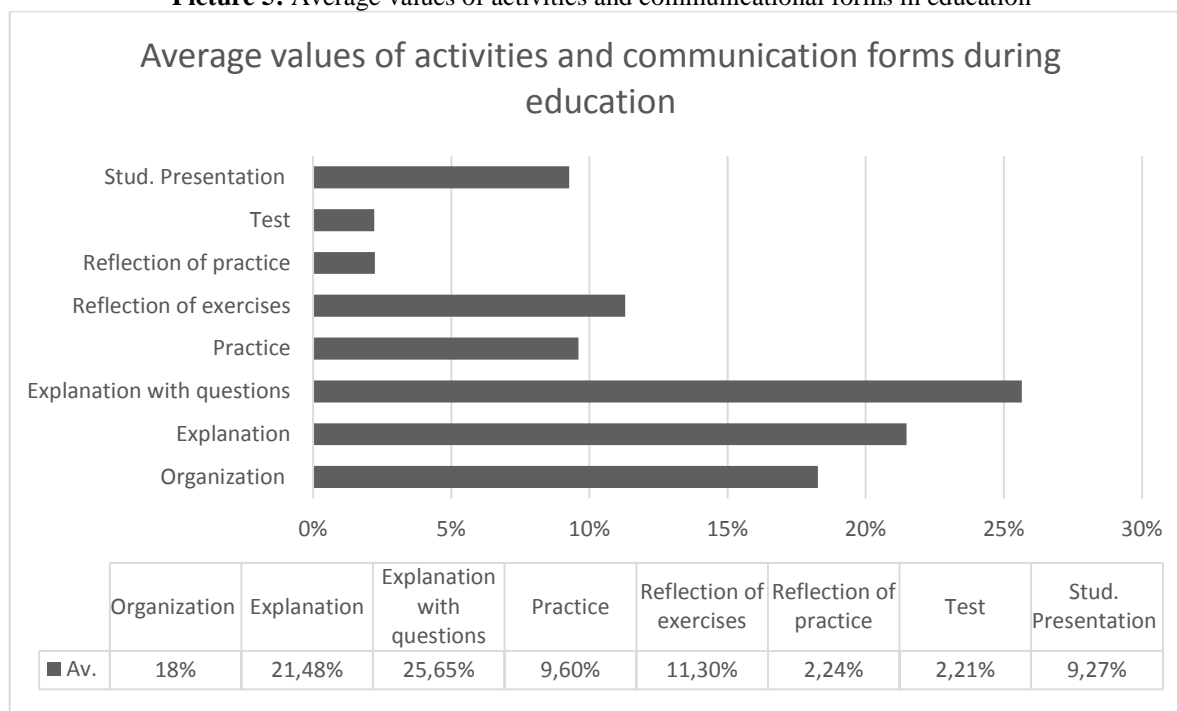
Other possibilities which take place in education is practising (10%). Reflection of practising with a teacher takes approximately 11%. These are sequences when the teacher assigns students with collective work which they complete independently and then reflect it with the teacher or this task is realized together with the teacher. These activities will be subjected to more detailed analysis because we are interested in which organizational forms practising takes place, which communication structures occur and which communicational methods are used within their scope.

Student's presentations is another activity which occurs in education at the university. It might seem that it is another method which will be occurring quite often in seminars, nevertheless, in our research sample, it takes only 9%. It is statistic average and we have to point out that this activity occurs only with two of the teachers. With one teacher, we also detected the method of revision. Precisely, it was a test (2,2%) which was supposed to detect present knowledge of the students. None of the rest of the teachers used communicational form of revision, written or spoken.

Given the fact that we realized the research in education in the field of study of Secondary School Teachers' Training, it is no surprise that in education of the teachers, although of only two (2.2%) of them, occurred an activity which reflected professional practice of students. The teacher dedicated some time to students and asked them about experiences gained from their sitting in on classes which they visited. Detailed listing of percentage distribution of individual activities can be found in the Pictures 4 and 5.

Picture 4: Activities and communication forms in education



Picture 5: Average values of activities and communicational forms in education

CONCLUSION

The goal of this contribution was to present constitutive results of the research survey, especially what is the temporal perspective of educational communication at the university education, and activities and communication forms used by the teacher. The share of communication activities of the teacher and students is not distributed evenly. On the basis of the research, we found out the proportion of communication activity of the teacher and students. The teachers' share of the overall time of talking during a lesson takes 60%. Only 11% is left for the students, which is the share smaller than that which was stated in other researches (but at different levels of education). It does not mean that teachers' monologue is uninterrupted, because interactive communication forms prevail. The time of students' speaking we detected is short. Nevertheless, to state conclusions that university students do not have enough space to express in education is, in the beginning of our research, quite premature, given the fact that we want to continue working with the data and look more closely to the issue of collective education whose position among monitored cases is significant. Teachers usually choose so-called heterogenous classes which include introduction, discussion on organizational matters, lecture, practising of new topic, or assignments and explanation of individual work to students. We can notice that each teacher chooses the same repertoire of organizational forms and teaching methods repeatedly and that they have their own stable plan of lessons. The teaching method we just mentioned will be continuously analysed and the findings will be presented in the future.

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INTERACTIVE EFFECTS OF ENGLISH PROFICIENCY AND MATERIAL PRESENTATION MODE ON ENGLISH LISTENING COMPREHENSION AND COGNITIVE LOAD IN MOBILE LEARNING ENVIRONMENT

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ABSTRACT

The present study was to explore the effects of English proficiency (low vs. high) and material presentation mode (single channel vs. dual channel) on English listening comprehension and cognitive load in a mobile learning environment. The results revealed that (a) high English proficiency learners had significantly better English listening comprehension and lower intrinsic and extraneous load than low English proficiency learners; (b) both high and low English proficiency learners learning with dual channel had significantly better English listening comprehension; (c) for learners learning with single channel, low English proficiency learners had significantly higher extraneous load than high English proficiency learners; and (d) for low English proficiency learners, learners who learned with dual channel possessed significantly lower extraneous load than learners who learned with single channel.

Keywords: English comprehension; English proficiency; Presentation mode; Cognitive load

INTRODUCTION

Listening comprehension is crucial to language learning (Vandergrift, 2007), so having good listening comprehension is a key for non-native English speakers study English. Although auditory input is a main stimulus for listening comprehension, many researchers try to add text messages as visual input to enhance participants' listening comprehension in their studies. For example, studies by Markham (2001) and Bird and Williams (2002) supported that captions (text messages) can facilitate learners' listening comprehension. Captions are usually presented and supported by multimedia. Although there are many relevant studies about learning with multimedia, the impact of multimedia on learning still remains inconclusive (Bhowmick, Khasawneh, Bowling, Gramopadhye, & Melloy, 2007).

According to the working memory model proposed by Baddeley (2000), working memory can receive information coming from various sources, such as visual and auditory input. Information that is received from different inputs is processed by different units in a human brain, so the efficiency of the working memory, as well as the learning performance, can be enhanced. However, Kalyuga, Chandler and Sweller (2000) showed that synchronous text and spoken messages during learning can negatively affect learning performance due to cognitive load. Furthermore, most researchers hold experimental learning activities regarding listening comprehension in traditional classrooms and do not take students' English proficiency into account when designing learning activities (Winke, Gass, & Sydorenko, 2010).

In order to get rid of learning barriers faced by English as a foreign language (EFL) students during their learning, multimedia and mobile learning activity should be implemented into instruction because the multimedia and mobile learning environment facilitate learning performance and learning motivation (Liu & Chu, 2010). Therefore, the study aimed to examine the effects of English proficiency and material presentation mode on listening comprehension, cognitive load and learning attitude in a mobile learning environment. The research questions include: (1) In the mobile learning environment, will different English proficiencies (low vs. high) and different material presentation modes (single channel vs. dual channel) interactively affect English listening comprehension? (2) Will different English proficiencies (low vs. high) and different material presentation modes (single channel vs. dual channel) interactively affect cognitive load?

METHOD

Participants

Participants were 162 students majoring in applied foreign language in a technology university in Taiwan. An orientation for the use of PDA and an introduction of ubiquitous learning were provided to the participants. The participants' English proficiency was determined by the General English Proficiency Test (GEPT). The GEPT is

a newly developed test of English phased in by the Language Training and Testing Center in Taiwan. The participants in each group were then assigned randomly into two different material presentation mode groups, one was single channel (spoken messages only) and the other was dual channel (text and spoken messages).

Experiment

The mobile learning activity in the study was animal observation held in the Taipei Zoo. Students in both groups learned with a PDA and an audio guide. However, students in the single channel group learned through spoken messages only, whereas students in the dual channel group learned by text and spoken messages. The system led students to target animal areas by GPS. When students arrived in the target area, the system would display its material automatically by GPS and students were required to click the play button for an audio guide to be played. When the audio guide was playing, the PDA screen in the dual channel group showed captions simultaneously, and the PDA screen in the single channel group only displayed a remaining time of spoken messages. After listening to the audio guide, the student must click the next page to take the listening test.

Instruments

There were 20 multiple-choice questions in the test. Each passage contained five multiple-choice questions for examining participants' listening comprehension. The test possessed a good overall item discrimination (0.33), item difficulty (0.52) and internal consistency (0.80). A rating scale, called the Subjective Cognitive Load Rating developed by Paas and van Merriënboer (1994), was given for each passage for measuring participants' level of intrinsic and extraneous load toward each passage. The reliability coefficient of the measures of cognitive load was .912, as measured by Cronbach's α .

RESULTS

Effect on English listening comprehension

Shown as Table 1, the result of two-way ANOVA revealed that the interactions of material presentation mode and English proficiency for English listening comprehension were insignificant. The main effect of material presentation mode for English listening comprehension was significant ($F_{(1, 113)} = 22.773, p < .05, \eta^2 = .168$), meaning that in English listening comprehension learners receiving dual channel significantly outperformed learners receiving single channel ($M=10.66 > M=8.50$). The main effect of English proficiency for English listening comprehension was also significant ($F_{(1, 113)} = 16.957, p < .05, \eta^2 = .130$), implying that high English proficiency learners obtained significantly higher scores in English listening comprehension than low English proficiency learners ($M=10.53 > M=9.59$).

Table 1 Two-way ANOVA summary on English listening comprehension

Source	SS	df	MS	F	Effect Size
Presentation mode	126.817	1	126.817	22.773 ^a	0.168
English proficiency	94.431	1	94.431	16.957 ^a	0.130
Presentation mode * English proficiency	0.000	1	0.000	0.000	0.000
Error	440.477	113	3.898		

^a $p < 0.05$

Effect on cognitive load

Shown as Table 2, the results of two-way MANOVA revealed that the interaction of material presentation mode and English proficiency for the extraneous load aspect was significant ($F_{(1, 113)} = 4.011, p < .05, \eta^2 = .034$). The main effect of material presentation mode was insignificant. The main effect of English proficiency was significant for all the aspects (intrinsic load: $F_{(1, 113)} = 11.261, p < .05, \eta^2 = .091$; extraneous load: $F_{(1, 113)} = 13.855, p < .05, \eta^2 = .109$), implying that low English proficiency learners obtained significantly higher scores on intrinsic load ($M=4.82 > M=4.35$) and extraneous load ($M=4.81 > M=4.29$) than high English proficiency learners.

Table 2 Two-way MANOVA summary on cognitive load

Source	Aspects	SS	df	MS	F	Effect Size
Presentation mode	Intrinsic	0.077	1	0.077	0.134	0.001
	Extraneous	0.350	1	0.350	0.635	0.006
English proficiency	Intrinsic	6.479	1	6.479	11.261 ^a	0.091
	Extraneous	7.630	1	7.630	13.855 ^a	0.109
Presentation mode *	Intrinsic	1.300	1	1.300	2.259	0.020
English proficiency	Extraneous	2.209	1	2.209	4.011 ^a	0.034
Error	Intrinsic	65.018	113	0.575		
	Extraneous	62.230	113	0.551		

^a $p < 0.05$

Shown as Table3, the simple main effects of material presentation mode and English proficiency on the extraneous load showed that English proficiency had a significant effect on the extraneous load aspect among learners in the single channel group ($F_{(1,56)} = 15.948, p < .05, \eta^2 = .222$). Low English proficiency learners had significantly higher score on extraneous load than high English proficiency learners ($M=4.99 > M=4.21$) in the single channel. On the other hand, material presentation mode had a significant effect on the extraneous load among low English proficiency learners ($F_{(1,56)} = 4.382, p < .05, \eta^2 = .073$). Learners learning with single channel had significantly higher score on extraneous load than learners learning with dual channel in low English proficiency learners ($M=4.99 > M=4.61$).

Table 3 Summary for simple main effects on the aspect of extraneous load

Group	Source	SS	df	MS	F	Effect Size
Single channel	English proficiency	8.954	1	8.954	15.948 ^a	0.222
	Error	31.442	56	0.561		
Dual channel	English proficiency	0.821	1	0.821	1.519	0.026
	Error	30.787	57	0.540		
Low level	Presentation mode	2.141	1	2.141	4.382 ^a	0.073
	Error	27.364	56	0.489		
High level	Presentation mode	0.404	1	0.404	0.660	0.011
	Error	34.866	57	0.612		

^a $p < 0.05$

DISCUSSIONS AND CONCLUSIONS

According to the study results, material presentation mode and English proficiency had impacts on English listening comprehension in the mobile learning environment, as the aforementioned findings done in traditional classrooms. Firstly, learners learning with dual channel significantly outperformed learners learning with single channel. This result confirmed the study done by Markham (1989) that regardless of English proficiency, captions were important to learners in listening comprehension because learners learning with captions outperformed learners learning without captions. Second, high English proficiency learners obtained significantly higher scores on listening comprehension than low English proficiency learners. This result can be explained by arguing that high English proficiency learners have more prior knowledge about English.

In the mobile learning environment, material presentation mode and English proficiency also affected learners' cognitive load on English listening. Firstly, low English proficiency learners had significantly higher intrinsic and extraneous load than high English proficiency learners. High English proficiency learners have strong background in English, which helps them to connect old information to new materials and therefore lowers their intrinsic load. Second, for learners learning with single channel, low English proficiency learners had higher extraneous load than high English proficiency learners. Since single channel presentation mode does not provide learners sufficient time to process language, low English proficiency learners will have hard time to absorb what they have learned from the learning activity. Third, for low English proficiency learners, learners learning with

dual channel had lower extraneous load than learners learning with single channel. It seems that dual channel presentation mode helps low English proficiency learners to lower their extraneous load and enhance their listening comprehension.

In sum, regardless of English proficiency, captions or dual channel (text and spoken messages) can enhance learners' listening comprehension and learning attitude in the mobile learning environment. Dual channel presentation mode is also beneficial to low English proficiency learners in lowering their extraneous load. Therefore, the study result supported that learning with dual channel is helpful to English listening comprehension in the mobile learning environment. Instructional designers and educators should keep the study findings in mind when designing mobile learning activities for learners with different English proficiencies.

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INTERACTIVE LITERATURE MAPS: A LEARNING TOOL TO EDUCATE NON-EXPERT ABOUT NATURAL RESOURCES DEVELOPMENT

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Indonesia has many kinds of natural resources from renewable and non-renewable resources. In some case, natural resources in Indonesia just being processed in a tedious way, even though there are many kinds of literature about the various way of natural resources utilisation. This issue happens due to the level of literacy in Indonesia is very low. Therefore, Indonesia needs innovation in information media to resolve this problem. The literature needs to be processed into another interesting form, so as to increase the reading interest. The interactive application is one of many media that can easily grab attention from the reader. This paper contains the study and plan about application framework of the information repackaging for natural resources processing. The main concepts of this information repackaging are collecting, clustering, and visualising to the interesting interactive application. Accordingly, this information repackaging can increase the desire of reading and also can be used to be a learning tool to educate everybody includes non-expert people about the variety of natural resources utilisation.

INTERCULTURAL PECULIARITIES OF MODERN AMERICAN MOVIE TRANSLATION

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ABSTRACT

The focus of interest in this research paper is on the intercultural peculiarities of American modern movie translation and language teaching through the translation. It is necessary to note that investigation of the feature film is a rapidly growing area in our country. Scholars have concentrated both on film translation problems and teaching language through films. Numerous films contain excellent examples of communication which is inherent to this or that culture. It's very interesting to note that the feature film is a kind of mass communication which is closely interconnected with culture as a whole, and secondly, films are the reflection of cultures. While watching films we are exposed to the way native English people actually speak. Moreover, films vividly represent misunderstandings which can occur due to the abundance of multifarious linguistic units existed in the English language which cause obstacles in film translation. Such linguistic units as realia, slangs and clichés are directly bound to the concept of cultural untranslatability. This concept is extremely important for translation between languages with a great cultural difference. The target-language-culture-oriented translation of feature films can be considered as one of the most important requirements of the film translation.

INTRODUCTION

Nowadays a feature film has been promoted to be one of the dominant forms of culture in modern society. Moreover the feature film can be used as an effective tool in teaching intercultural communicative and translation skills. In this study the term "movie" is also used as the research analysis is based on modern American movie and it is the most common term in the United States of America. This research paper is focused on translation peculiarities of various culture-bound words from English into Russian on the basis of modern American movie and language teaching through translation. To analyse the aforementioned research problems the following objectives are set: to identify the most useful translation methods of culture-bound words in modern American movies; to investigate project-based learning as a dynamic classroom method in teaching language through translation movies.

LITERATURE REVIEW

No doubt due to the fact that a movie is studied from different angles. Film critics analyse and evaluate it as a cultural phenomenon, scholars investigate its linguistic and translation peculiarities, teachers use it as an effective classroom method. Connor (2000), the linguist and the literary critic from the Oxford University, describes the film translation as historical and cultural phenomenon. Stempleski and Tomalin (2001) design the film-based classroom activities from elementary to advanced levels for teaching English as a second or foreign language. Szarkowska (2005) draws her attention to general information about the film translation, classification, history and regional distribution of the film translation, however, the study has purely theoretical character, and no any practical recommendations are provided. Unlike the aforementioned research Díaz Cintas and Anderman (2009) investigate the film translation more widely, considering general features of film translation, and its separate types. The definite chapter of the book is focused on the theories and methods of the film translation teaching. Until now, many studies have been concentrated on the analysis of subtitling and dubbing as main types of film translation. Thus, Rader, Neuendorf & Skalski (2016) examine differences between subtitled and dubbed versions of the international film content and their impact on audience recall and enjoyment. In Kazakhstan and Russia literary critics, linguists and translators also draw much attention to the cultural and historic peculiarities of the film, issues of the film translation, teaching language through films, linguistic features and discursive characteristics of the film as a multicomponent unity (Fillipov, 2006; Slyshkin & Yefremova, 2004; Zhumaliyeva 2014, 2016).

METHODOLOGY

This research paper describes how different translation methods are used in transferring culture-bound words from English into Russian on the basis of modern American movies. Scholars of translation propose different translation strategies for cultural translation (Diaz Cintas and Remael, 2007). Vinay and Darbelnet (1995) divide translation procedure into direct and oblique, which correspond to literal and free method of translation. Venutic (1992) proposes two basic translation strategies: domestication and foreignization. This current research is based on the strategies suggested by Chesterman (1997). Chesterman's model of strategies consists of the three main

translation strategies: syntactic (literal translation, calque, transposition etc.); semantic (synonym, antonym, hyponymy, and other semantic changes) and pragmatic (cultural filtering, explicitness change, information change and other pragmatic changes). Chesterman (1997) points out that this model may be extended to include other syntactic, semantic and pragmatic changes. This factor provides the efficient use of Chesterman's model of translation strategies, which can be regarded as an "open system". Consequently, transcription/transliteration, substitution, functional analogue, contextual and pragmatic equivalencies are defined as translation methods of the syntactic, semantic and pragmatic translation strategies in this study. The transliteration/transcription, lexical substitution, functional analogue and contextual equivalence belong to the semantic strategy, the grammatical substitution refers to the syntactic strategy and the pragmatic strategy includes the pragmatic equivalence respectively. To differentiate the use of the proposed translation strategies it is necessary to define the translation methods. Thus, the substitution is one of the most useful translation methods, which includes lexical and grammatical types. The form of words, the parts of speech, members of the sentence can be substituted in translation procedure (Barkhudarov, 1975). The functional analogue is a type of rendering culture-bound word of the source language by means of target language units which is used in the absence of lexical correspondence in the target language (Fedorov, 2002). Unlike the functional analogue, the contextual equivalents convey the content of culture-bound words by the contextual correspondences, which are used to translate a source language unit in a particular linguistic content (Vlakhov & Florin, 2009). The pragmatic equivalence refers to words and phrases in both languages, which have the same effect on audience in both languages (Komissarov, 1990). The transliteration is rendering the orthographic form of words of the source language by letters of the target language, while the transcription is rendering the pronunciation of the source language words by letters of the target language (Fedorov, 2002). It should be noted that the following culture-bound words as clichés, slangs and realia are analyzed in this research. The cliché is understood as an overused expression, something that is said a lot that has become some common, the slang is a language and culture-bound word and frequently particular to a certain subculture, realia are words and expressions for culture-specific material elements (Djachy & Pareshishvili, 2014; Santiago Araújo, 2004; Stolt, 2010).

The subject matter of this study lies also in the investigation of project-based learning activities through a feature film. It is necessary to mention, that three projects are used in teaching the subject "Translation Theory". They are as follows: Film translation project, Research Glossary Project and Research Paper Review. Practical recommendations on these three projects are analyzed in the second part of "Research Analysis".

RESEARCH ANALYSIS

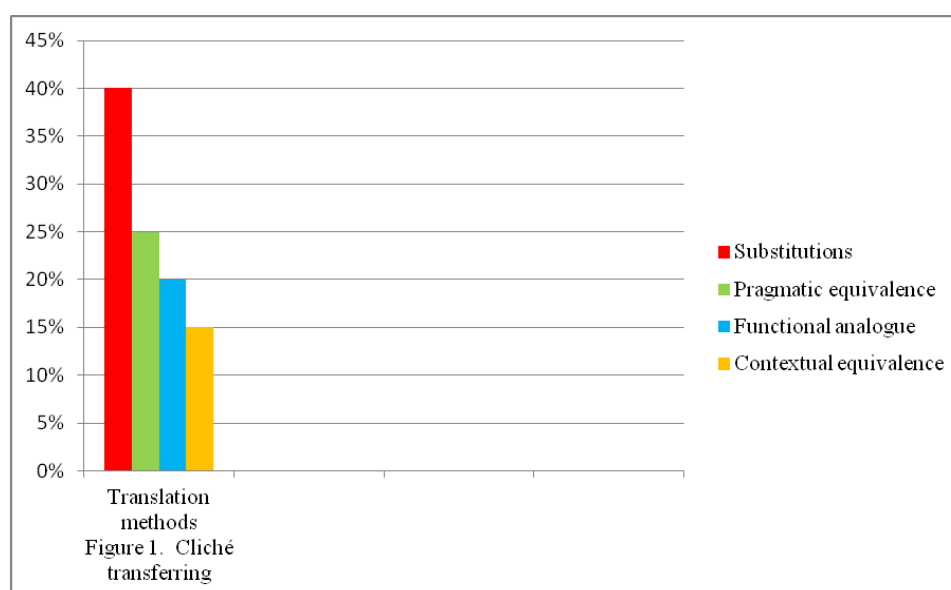
The research analysis includes 2 parts. The first part is focused on translation peculiarities of culture-bound words (cliché, slang, realia) from English into Russian. The second part is dealt with the project-based learning in teaching film translation. Regarding the first part it is essential that in general 100 culture-bound words are analyzed on the basis of 20 modern American movies of different genres. The most widespread culture-bound word in modern American movies is cliché (61%). It can be seen from the Table 1 where some examples of the most popular and overused clichés are provided with translation.

Table 1. Translation methods of clichés

#	The Source Text	The Target Text	Method of Translation/ Transformations	Extracted from (Movie Title)
1	Think it's gonna mess up your scam, but don't blame me, okay? <i>It's the timing.</i>	Думаю, это расстроит ваш план, но меня в этом не вини, ладно? <i>Так совпало.</i>	<i>Substitution (grammatical and lexical)</i>	Life of Crime (2013)
2	And legally, he's not supposed to deal with extortionists. So he's <i>in the free and clear.</i>	И по закону он не должен иметь дело с вымогателями. Так что он теперь <i>вольная птичка.</i>	<i>Substitution (lexical)</i>	Life of Crime (2013)
3	-Tom will be alright, but you gotta make things right with Murph. -I will.	Том то переживет, но ты должен все объяснить Мерф. -Я все улажу. - <i>Не давай обещаний,</i>	<i>Substitution (grammatical)</i>	Interstellar (2014)

	-Without making promises you don't know you can keep.	которые не сможешь сдержать.		
4	Learned a lot. In the end though, <i>I kind of screwed it up.</i>	Я многому научилась. Правда, <i>под конец дала маху.</i>	<i>Pragmatic equivalence</i>	The Devil Wears Prada (2006)
5	<i>A million girls would kill for this job.</i>	Миллионы девушек мечтают об этом.	<i>Functional analogue</i>	The Devil Wears Prada (2006)
6	You don't conform, <i>your mind works in a million different ways.</i>	Вы не умеете подчиняться, нестандартно мыслите.	<i>Functional analogue</i>	Divergent (2014)
7	I just wanted to say that I'm sorry. I... <i>I don't know what's wrong with me.</i>	Я хочу извиниться. Я не знаю, что на меня нашло.	<i>Contextual equivalent</i>	Divergent (2014)

According to the research results the following translation methods are used: Substitutions - 40%; Pragmatic equivalence - 25%; Functional analogue - 20%; Contextual equivalence - 15%. The translation methods applied in cliché transferring may be observed on the Figure 1.



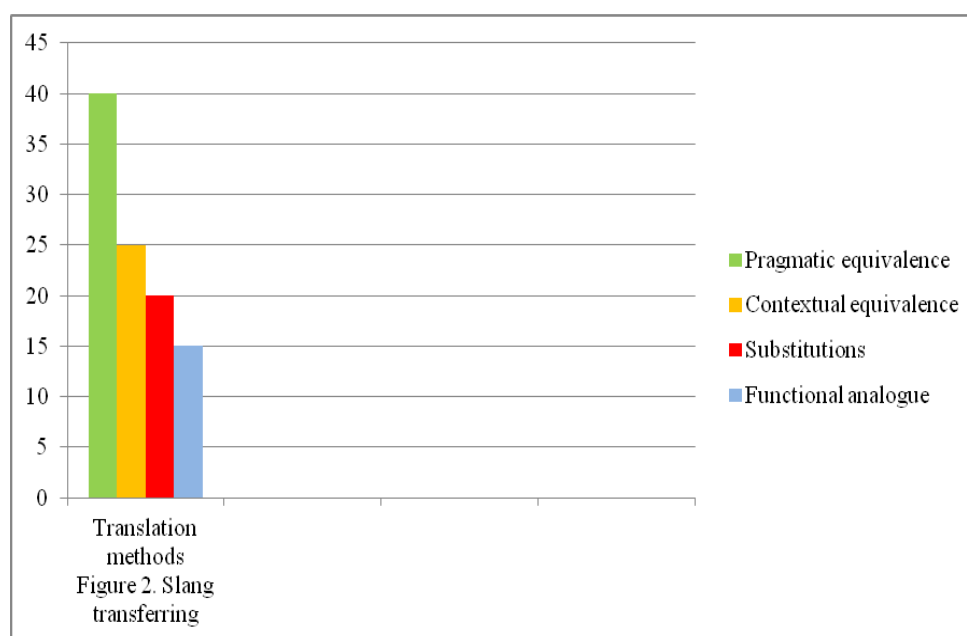
The next culture-bound word which is often used in modern American movies is slang (35%). The examples of some slang terms are given in the Table 2.

Table 2. Translation methods of slangs

#	The Source Text	The Target Text	Method of Translation/ Transformations	Extracted from (Movie Title)
1	I mean, they might be <i>bluffing</i> .	Они могут <i>блефовать</i> .	<i>Pragmatic equivalence</i>	Life of Crime (2013)
2	This is <i>bullshit</i> .	<i>Бред</i> какой-то.	<i>Pragmatic equivalence</i>	Life of Crime (2013)
3	<i>Grind it!</i>	<i>Смелее!</i>	<i>Contextual equivalence</i>	Interstellar (2014)

4	You got the makings of a real <i>man cave</i> .	Вы готовились стать <i>холостяком</i> .	<i>Contextual equivalent</i>	Gone Girl (2014)
5	<i>Are you nuts?</i>	<i>Ты спятила?</i>	<i>Substitution (grammatical)</i>	The Book Thief (2013)
6	-This is my wife's office. Amy's office. -Wow. Impressive <i>gal</i> .	-Это кабинет моей жены. Кабинет Эми. -Ух ты, образованная у вас <i>жена</i> .	<i>Substitution (lexical)</i>	Gone Girl (2014)
7	Revolutions, you <i>follow</i> ?	Круговорот, <i>ты сечешь?</i>	<i>Functional analogue</i>	The Wolf of Wall Street (2013)

The most useful translation methods for slang terms are pragmatic equivalence (40%), contextual equivalence (25%), substitutions (20 %), and functional analogue (15%). The translation methods applied in slang transferring may be observed on the Figure 2.

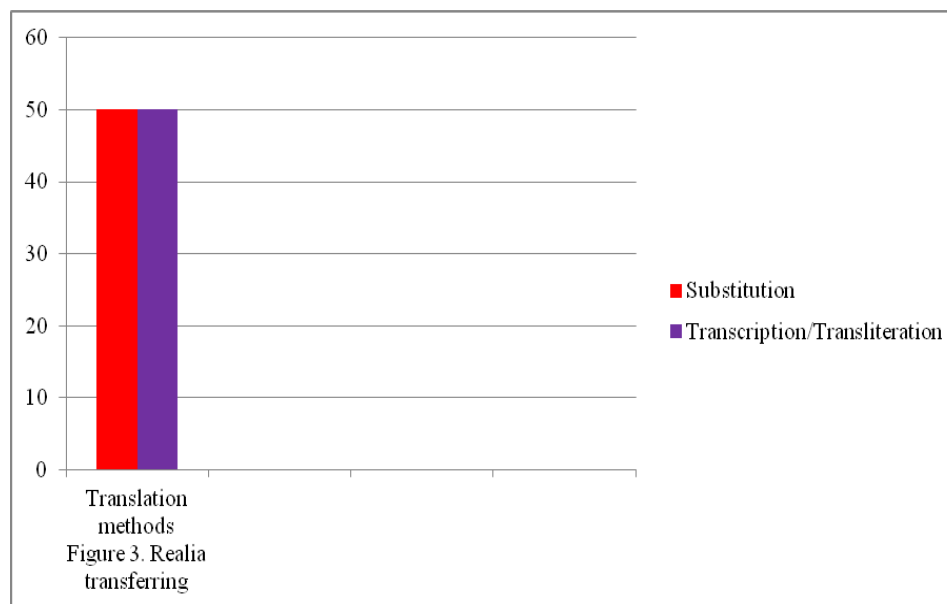


The least used culture-bound words in modern American movies are realia, they constitute only 4%. Some examples are given in the Table 3.

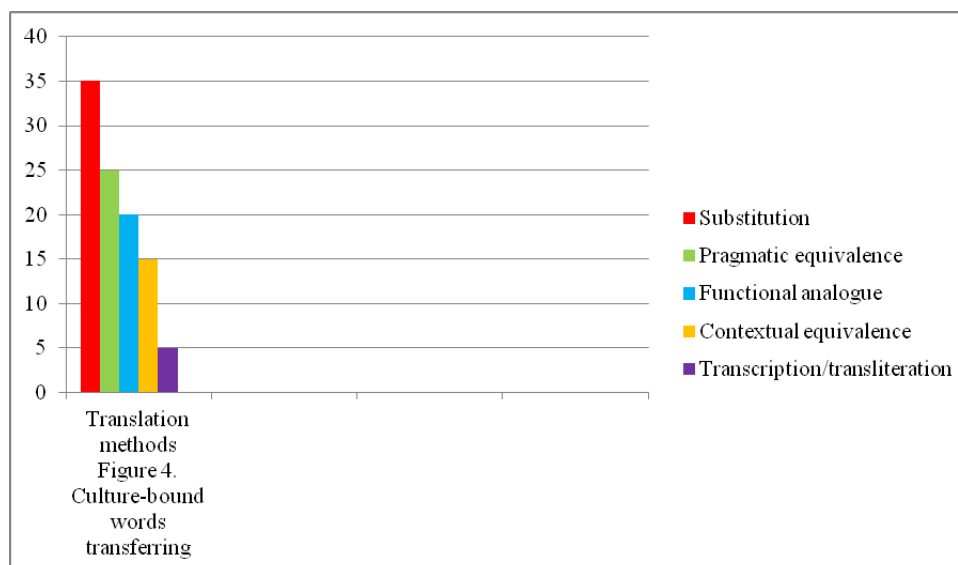
Table 3. Translation methods of realia

#	The Source Text	The Target Text	Method of Translation/ Transformations	Extracted from (Movie Title)
1	-Life. I don't remember the point - <i>Deep hasbro thoughts</i>	-Жизнь. Я забыл, в чем смысл - <i>Какое глубокое замечание</i>	<i>Substitution (lexical)</i>	The Fault in Our Stars (2014)
2	Call Natalie at <i>Glorious Foods</i> , tell her no for the 40th time.	Позвоните Натали в " <i>Глориос Фудз</i> " и скажите ей "нет" в сотый раз	<i>Transcription</i>	The Devil Wears Prada (2006)

Though realia are not usually translatable, they are transferred by means of transcription/ transliteration and lexical substitution. These translation methods may be observed on the Figure 3.



It is necessary to mention that the most useful translation methods for all culture-bound words are substitutions (35%), pragmatic equivalence (25%) and functional analogue 20%. The contextual equivalence constitutes 15%, transcription/transliteration amounts to 5%. These translation methods may be observed on the Figure 4.



The second part of this research analysis describes how project-based learning activities are used in teaching translation. The first project is focused on the film content and translation analysis, which include the following parts:

- Part 1. Genre peculiarities. The title of a movie. Genre peculiarities of the chosen film;
- Part 2. The basic plot of the movie in detail. Main characters. Main events;
- Part 3. Translation analysis of the chosen extract;
- Part 4. The type of film translation. The main features of this translation type;
- Part 5. Movie dialogues, slangs, idioms etc. in the chosen extract;
- Part 6. Basic translation devices (grammatical and lexical transformations) of the definite extract;
- Part 7. The final word on the film: interesting point about the movie;
- Part 8. Evaluation of the movie translation;
- Part 9. Discussion of the film project.

The next project is dealt with the content analysis of the research paper on film translation, see “Appendix A”. Firstly students choose the research paper, and then they read, analyze, and compile a glossary of film translation terms from the research paper and prepare project presentation. To define the terms students use dictionaries, encyclopedias and on-line resources. They also provide explanations of the film translation terms and write references of used examples. Objectives of this project are:

- to explore and examine the language of film translation studies;
- to foster interest in reading and extending vocabulary on film translation terminology;
- to learn how to use diverse background resources (special dictionaries, encyclopedia, Internet, etc.);
- to develop reading skills;
- to develop presentation skills.

The third project is focused on the research analysis of the chosen research paper, see “Appendix B”. The research paper review is based on two criteria: formal and scientific. The first criterion is focused on general information: research title, author of the research paper, and student’s name (reviewer), and the second criterion is dealt with the content of a research paper: research objectives, research background, current concerns in the area, methods, research results, and references.

CONCLUSION

In conclusion it is necessary to highlight, that a good translator should be familiar with the culture, customs, and social settings of the source and target language speakers. Thus, cultural communication should be regarded as one of the major aims of translation. The communication in the English language through American modern movie is the process of successful development of all communicative and translation skills, which are necessary for future translators.

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APPENDIX A: Project Guidelines (Content analysis of the research paper)

Task: read, analyze, compile a glossary of the film translation terms from a research paper on the film translation and prepare project presentation.

Objectives:

- to explore and examine the language of film translation;
- to foster interest in reading and extending vocabulary on terminology of the film translation;
- to learn how to use diverse background resources (special dictionaries, encyclopedia, Internet, etc.);
- to develop reading skills;
- to develop presentation skills.

Directions:

1. Choose and read the research paper (scientific article) from the on-line resources;
2. Make a glossary of terms from the analyzed research article;
3. Underline or highlight terms on the film translation;
4. Organize your own Glossary of terms (in alphabetical order). It should contain not less than 10 entries;
5. Provide explanations. To define the terms, use dictionaries, encyclopedias and on-line resources;
6. Write references of used literature;
7. Prepare project presentation.

APPENDIX B: ARTICLE REVIEW

- FORMAL CRITERIA -

GENERAL INFORMATION

Article Title.....
 Article Author (s)
 Student
 Date

- SCIENTIFIC CRITERIA -

CONTENT	
1.1 Abstract	<ul style="list-style-type: none"> • Does the abstract describe the research and the results?
1.2 Introduction	<ul style="list-style-type: none"> • The current concerns in the area • The research aim and objectives
1.3 Literature review	<ul style="list-style-type: none"> • Theoretical background of the research paper • Is the literature used in support of research sufficiently comprehensive and current?
1.4 Methodology	<ul style="list-style-type: none"> • What methods are used?
1.5 Results	<ul style="list-style-type: none"> • Are the results clearly presented?
1.6 Conclusions	<ul style="list-style-type: none"> • Are the conclusions logically explained?
1.7 References	<ul style="list-style-type: none"> • Do the references reflect the latest work/research in the considered area?? • Are the references correctly indicated in the article? • Are the references properly indexed and recorded in the bibliography?

INTERNATIONALIZATION OF HIGHER EDUCATION INSTITUTIONS: THE CASE STUDY OF THE POLYTECHNIC INSTITUTE OF BRAGANÇA

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ABSTRACT

Higher Education Institutions (HEI) operate in a competitive environment that forces them to adopt a new strategic position seeking to position themselves better in a greatly competitive, dynamic and differentiated market. Internationalisation is becoming one of the main key factor and strategic priorities of HEI all world. Most HEI include internationalisation, as a part of their competitive strategies once is a way to promote cooperation and mobility for both students and staff and knowledge transfer between institutions. The aim of the research is to analyse and evaluate the international academic mobility in the Polytechnic Institute of Bragança (IPB, Portugal). The aim is to contribute to the gradual interest of the understanding of the phenomenon of academic mobility and its impacts on IPB, once foreign students are an asset to HEI, during the stay where they are studying, and as well the staff mobility. In addition, given the relevance and importance of the internationalisation strategy followed by the IPB and its international both students and staff mobility, it is intended that the results of this will help the decision makers in the IPB to develop better strategies that will support the internationalisation process within IPB.

Keywords: Internationalization; Higher Education Institutions; Polytechnic Institute of Bragança; Competitiveness; Strategic Management.

INTRODUCTION

Over the last years, the higher education has been going through a stage of internationalization. Higher Education Institutions (HEI) around the world are taking advantage of this singularity, as they are competing with each other to attract international students. With internationalisation being a crucial criterion in the majority of university rankings and with the constant pressure of becoming more entrepreneurial (Dill, & Soo, 2005; Deem, Mok, & Lucas, 2008; Karakullukcu, 2012; Bordean, & Borza, 2013), the institutions have started to consider this phenomenon as a feasible source of competitiveness and competitive advantage (Luxon, & Peelob, 2009; King, 2010; Craciun, 2015).

The internationalization of higher education is the process of presenting exchange activities in education and research of several varieties among universities and institutions in different countries (Huang 2004; Egron-Polack, & Hudson, 2014). One of the main objectives of internationalised higher education is to offer the most relevant and appropriate education to students, who will be the citizens, entrepreneurs and scientists of tomorrow (Hénard, Diamond, & Roseveare, 2012). Internationalisation is not an end in itself, but a driver for change and enhancement – it should help generate the skills required in the 21st century, spur on innovation and generate replacements while, ultimately, fostering job creation (Hénard, Diamond, & Roseveare, 2012). The same authors state that the landscape of internationalised higher education is rapidly evolving; once new countries and institutions are ingoing the global talent pool and challenging the established position of the traditional champions of international education; moreover the English language is dominating new programmes; and, new forms of institutions, programmes and teaching methods are being set up. In addition, the effects of the economic and financial crises are far-reaching and long lasting, changing the flows of students and faculty across continents as well as brain circulation.

Hénard, Diamond and Roseveare (2012), report that internationalisation functions as a two way street: it can help students achieve their goals to obtain a quality education and pursue research; and the institutions may gain a worldwide reputation, as well as a foothold in the international higher education community, and rise to meet the challenges associated with globalisation. The highest five reasons that one HEI start the internalisation are (Marmolejo, 2012) to: improve student preparedness; internationalise the curriculum; enhance the international profile of the institution; strengthen research and knowledge production; and, diversify its faculty and staff.

In this regards, this paper intend to offer information about the success of Polytechnic Institute of Bragança and to analyse and evaluate the international academic mobility in the Polytechnic Institute of Bragança.

The paper, after the introduction, starts with a literature review of the internationalisation in higher education. Next, will be presented several implications for implementing strategies that would support the internationalisation phenomenon in IPB. Finally, the main conclusion will be presented.

BACKGROUND

There is no doubtfulness that internationalisation and globalisation are closely connected, even though they are two essentially different processes (Altbach & Knight, 2007; Knight, 2012; Bordean, & Borza, 2013). In the one hand, the globalization can be well marked as the economic, political, and societal forces pushing 21st century higher education concerning a greater international participation (Altbach, & Knight, 2007). Moreover, in the another hand, the internationalisation has more to do with the specific policies and programs carry out by governments, academic systems and institutions, and even individual departments to deal with globalization (Altbach, 2006; Ghasempoor, Liaghatdar, & Jafari, 2011).

According Pipia (2017) the both processes, internationalisation and globalisation, push higher education towards international involvement in globalized world. The differences is presented in in the table below.

Table 1. Distinctions between Globalization and Internationalisation.

Characteristics Features			Result
Internationalisation	The response of educational institutions to the globalization process.	Higher degree of internalization results in the higher degree of globalization and vice versa.	Physical mobility, academic cooperation and academic knowledge transfer.
Globalisation	The acceleration of movement of people, ideas, knowledge, capital, goods and services through national borders.	The process by which different cultures and nations become homogeneous.	Competition, commercial knowledge-transfer.

Source: Pipia (2017, p. 17).

The globalisation of higher education brings together students and professors from different systems, creating a dissimilar and different environment; however many HEI classically expect foreign students to adapt to their new higher education environments (Kelly, & Moogan, 2012). All institutions claim to be willing to become an international organisation, participating in the globalised knowledge creation and transfer. Nonetheless, many have designed student mobility policies that are disconnected from any strategic thinking regarding the objectives and benefit for the institution's missions and student achievements (Hénard, Diamond, & Roseveare, 2012). In order for internationalisation to be both successful and sustainable, it is essential for it to be rooted in the culture, policy and organizational process (Qiang, 2003).

Hsu (2012) claimed that internationalisation was a process to initiates policies to adapt various cultural knowledge and competencies and their practices in campus community. Pull factors had been a significant influence on students to choose study abroad and contribute to internationalise higher education campuses; knowledge and access to information; reputation and quality of institutions; recommendation of others in personal level; financial issues-fees and other expenses; presence of students of same country and option for part-time jobs; environment; geographic and time closeness; and social link-presence of family members or friends were identified as the components and ties that drew the international students (Chou, Roberts, & Ching (2012).

Internationalisation of higher education has been associated with several benefits like as (Bordean, & Borza, 2013):

- (i) One should note the cultural and social impact that this phenomenon is making within the local, regional and even national communities;
- (ii) The movement of students and staff among campuses has allowed them to gain new perspectives and become much more aware of the possibilities for cooperation;
- (iii) Both students and staff were able to recognize international opportunities and be internationally oriented;
- (iv) The internationalisation of higher education offers a new perspective in terms of quality assurance within universities.

McBurnie (2000) and Özturgut, Cantu, Pereira and Ramón (2014) explained that strategizing internationalisation of higher education included three components: (i) international composition of student body; (ii) foundation and development of overseas campus; and (iii) the assurance of internationalising the learning experience.

Wadhwa (2016) argued that the approach to traditional internationalisation which was based on international co-operation and infrequently a profit making activity were at the centre of traditional internationalisation has changed significantly from the last two decades. Appearance of the new phase of internationalisation of higher education is characterised by self-economic interest of maximizing profit and capturing student market by expanding institutional reach in other countries. The observed competition in recent decades in the international higher education market has led to the marginalisation of teaching learning, which is assumed to be the central role of educational institutions.

In view of that one of the basic objectives of higher education is to promote the overall development of the student in a competitive society, it is crucial and important that the students have to acquire the multicultural ability and attitude to serve to the cultural diversity that is present in society (Hurtado, Coronel, Carrasco, & Correa, 2013). Underlining the importance of internationalising higher education, Salisbury, Umbach, Paulsen, and Pascarella (2009) claimed that studying in multicultural surroundings increases compassion and respect for global issues, positive attitudes toward other cultures, and better intercultural communication skills and self-image. Roberts, Chou, and Ching (2010) argued that internationalisation was present in countless dimensions in higher education. University policies, initiatives, and practices were being adjusted in the context of globalisation.

Wit, Egron-Polak, Howard and Hunter (2015) argued that internationalisation in Europe has grown out of, and been strongly influenced by, the ERASMUS programme initiated by the European Commission almost 30 years ago. Beyond the three million mobile students, ERASMUS has had an even greater impact on the internationalisation and reform of higher education. It piloted the European Credit Transfer System (ECTS) and initiated access to EU membership for countries in Central and Eastern Europe and other aspiring candidates. The Horizon 2020, the framework programmes and their predecessors over the last 35 years have also had an impact on the international and European dimension of higher education, as have the collaborative programmes with the rest of the world, such as TEMPUS, ALFA and ALBAN, ATLANTIS and others, now brought together with the European mobility schemes in the new ERASMUS+ programme.

INTERNATIONALISATION PROCESSES IN THE POLYTECHNIC INSTITUTE OF BRAGANÇA

General description of the Polytechnic Institute of Bragança¹

The Polytechnic Institute of Bragança (IPB) is a higher education public institution with a defined mission in creating, transmitting and diffusing technical-scientific and professional knowledge through the articulation of study, teaching, applied research and experimental development. IPB belongs to the European Network for Universities of Applied Sciences (UASNET), which main objectives include the transferability of professional skills and the integration of applied research in their professional and technological education mission.

Founded in 1983, IPB comprises five schools: School of Agriculture; School of Public Management, Communication and Tourism; School of Education; School of Health; and School of Technology and Management. Its activity embraces a wide area of knowledge and technology, namely arts, communication and multimedia, business sciences and law, education and teachers training, agriculture sciences and natural resources, health and civil protection, tourism, sports and leisure, and technologies.

¹Based on web page of IPB: <http://portal3.ipb.pt/index.php/en/guiaects/polytechnic-institute-of-braganca>

In accordance to the current reform of the European higher education system, the actual goals of IPB are: to contribute to the increase of higher education frequency; to motivate lifelong learning; to improve the quality and relevance of its academic offer; to promote the mobility of students and graduates and to contribute to a better international cooperation in Europe and with the Portuguese-speaking countries. The IPB has consolidated its dimension to 7,000 students and has achieved the adequacy to the Bologna process through the offer of around a hundred courses and degrees, namely technical specialization courses, bachelors and masters programmes.

Nowadays, over 50 per cent of the IPB teaching staff holds a PhD degree. The IPB is part of the national system of science and technology, through the existence of R&D units and branches at the IPB. In several areas, the IPB presents indicators of impact and excellence of its scientific publications and applied research: according to the Iberoamerican 2012 ranking, developed by the SCImago Research Group, the IPB is the Portuguese higher education institution with the greatest normalized impact and the best excellence rate. In 2017, the prestigious Shanghai Ranking positions the IPB among the 50 best Institutions in the World in the area of Food Science and Technology, being one of only three Portuguese institutions, together with the Universities of Lisbon and the port, to reach the Top 50 of this ranking.

Following the implementation of the Bologna Process and the consequent legislation regarding the mobility of students among degrees and higher education institutions, prior learning must be recognized and credited. The prior learning concept comprises all the previous learning/training undertaken in other higher education study cycles in national or international institutions (crediting of certified training), as well as previous professional experience and any post-secondary school training or education. As such, the IPB promotes the crediting of the student's prior learning when arriving at the institution. Aiming at a quick and full integration of the student in his/her new education programme, the recognition procedures must be submitted when enrolling at the IPB.

The European Credit Transfer and Accumulation System (ECTS) comprises the adoption of a series of tools which enhances transparency and establishes the necessary conditions for an approach between higher education institutions and, as such, enlarges the range of options for students. The use of this system improves comparability, mobility and full recognition of students' academic results. The Polytechnic Institute of Bragança makes use of the ECTS as well as of the principles of the Bologna declaration in all of its programmes and also in the implementation of mobility among higher education institutions intra- and extra-EU.

Internationalisation in IPB

The internationalisation of the IPB is one of its current strategic challenges, due to the awareness that this will be a positive factor for differentiation among higher education institutions. The last decade has confirmed the IPB as one of the institutions that most extensively promoted academic mobility in Portugal: over 4,000 students in mobility and over 1,000 visiting teaching and non-teaching staff have transformed the brand of the institution. The results obtained have positioned the institution at a level of prominence both nationally and internationally. Currently, the IPB integrates the Top 100 of higher education institutions with the greatest number of incoming teachers and the Top 500 of institutions with the highest rate of incoming and outgoing students on Erasmus mobility. The experience gained in the European mobility project has catalysed the non-European cooperation, with special emphasis on the Portuguese-speaking countries and regions. The IPB has established an academic network with Brazilian Federal Institutes and Universities, as well as with the Macao Polytechnic Institute, representing an annual mobility of nearly a hundred students and the teaching and research cooperation. The presence of a community of students from African Portuguese-speaking countries is also a reality in the institution as a result of the Institute's involvement in the creation and development of higher education in Angola, Cape Verde, Mozambique and São Tomé and Príncipe. This will decisively contribute to the qualification of human and academic resources. The cooperation with Macao has allowed the establishment of protocols with Chinese Universities, involving the Portuguese and Chinese teaching and the creation of the Centre for Chinese Language and Culture in Bragança. Currently the IPB is a multicultural institution with 17% of international students. The IPB implements mobility within the European Higher Education Area for over 20 years: more than 200 bilateral agreements with HEIs from 24 different European Countries. Expansion of the international cooperation outside Europe: more than 150 cooperation agreements with non-European HEIs (26 Countries). In IPB 25% of the graduates had an international mobility experience during their study programme (Europe 2020 target: 20%).

The internationalisation process in IPB include various international aspects as teaching and administrative activities at different levels. The internationalisation process involves:

- students: recruitment of foreign students, the organisation of exchange programs, as well as individual student mobility;
- faculty: faculty exchange, joint research programs, training in foreign universities, joint training programs and the organisation of intensive programmes; certification issues, the recognition and measurement: issue of 'double' diplomas, credit system, and the international recognition of education, assessment of the quality of education;
- international cooperation: exchange programmes for the administration and management of human and material resources, consulting and information services, and the evaluation procedure and infrastructure.

For IPB the successful resolution of the internationalisation depends on the mutual efforts and close cooperation of the participants - managers and teaching staff of educational institutions, departments, and schools. Likewise, at the same time, the process of internationalisation has been depending of its features that were related and consistent with the educational mission of the IPB, its staffs and financial resources, physical facilities, scientific potential, the number of students. The IPB internationalisation has allowed:

- increase national and international visibility;
- leverage institutional strengths through strategic partnerships;
- increase the academic community within which to benchmark their activities;
- mobilise internal intellectual resources;
- add important, contemporary learning outcomes to student experience;
- and, develop stronger research groups.

One of the major challenges for the IPB in current century is to:

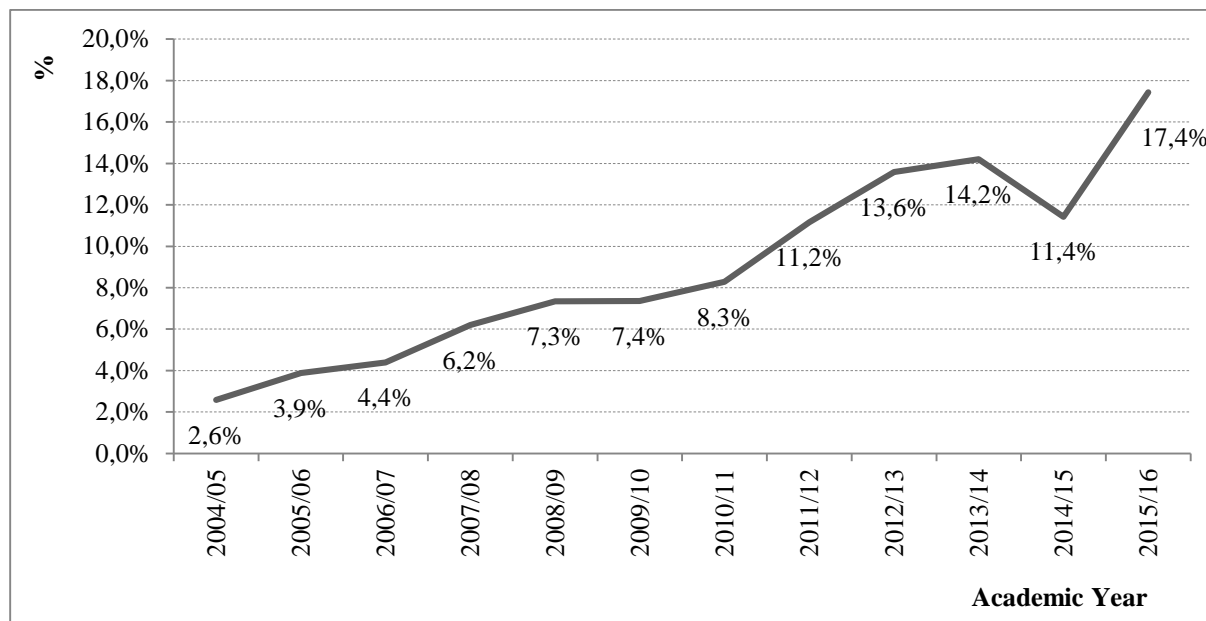
- maintain a highly capable, intellectually, and culturally competent workforce in a fast changing world;
- stimulate bilingual and multilingual learning as a basis for a language policy based on diversity;
- address the challenges of credit and degree mobility discrepancies and institutional cooperation, stemming from substantial differences in higher education systems, procedures and funding;
- recognise the rising reputation of work placements and build options to combine them with language and cultural skills training and study abroad;
- and, support the important role of academic and administrative staff in the further improvement of internationalisation.

Table 2 shows data on international mobility. It is possible to observe that in the period under analysis there were an important growth, with an annual rate that oscillated between -21% and 45%. The annual average rate of change for both flows, incoming and outgoing, is around 18%. The weight of the number of incoming in the total is around 64,4% and number of outgoing is 35,6%. The increase in number of international mobility since 2004/2005 is a clear evidence of increasing internationalisation in IPB. The obtained data reveals that IPB, as a host institution, gains its popularity among foreign students and shows a significant increase in numbers.

Table 2. Numbers of International Student Mobility in the IPB.

	Academic Year												Annual average rate of change
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Number of incoming	91	107	118	203	286	303	347	411	441	542	397	557	18%
Number of outgoing	49	96	148	179	203	221	270	366	456	368	323	308	18%
Total	140	203	266	382	489	524	617	777	897	910	720	865	18%
Annual rate of change	-	45%	31%	44%	28%	7%	18%	26%	15%	1,4%	-21%	20%	-

Is possible to see the importance of this type of students for the IPB, as shown in Figure 1. Currently, the weight of international students is 17,4% of the total number of students enrolled in the IPB. This figure is well representative of the internationalisation strategy that the IPB is pursuing, as well as the importance that this influx of students brings to the regional economy. The trend has been growing over the years.

Figure 1. Weight of international students in the total number of students enrolled in the IPB.

Most of the students received in the IPB are of European origin. According to the main countries and since the academic year 2006/2007, foreign students in the IPB come from Czech Republic, Denmark, France, Italy, Lithuania, Poland, Romania, Spain and Turkey.

CONCLUSIONS

This study suggests that internationalisation in IPB needs to continue, develop, and expand; especially since globalisation trends make it more pertinent to the understanding of various cultures. In order for IPB to be competitive and feasible in the global market, there needs to be a sustained goal in internationalising teaching, learning, and practices. The increase in number of foreign students since academic year 2004/2005 is a clear evidence of increasing internationalisation in IPB and a sign for the regional development.

There is a need, in an environment of increased dominance of English as the language of communication in research and education, to stimulate bilingual and multilingual learning at the IPB as a basis for a language policy based on diversity in European higher education.

Assumed the possibilities for work placements under ERASMUS+ is leading to stronger growth in credit mobility for work placements than study, there is a need for pay attention to be given to the importance of work placements in internationalisation of higher education of IPB.

In the emphasis on rising competitiveness, increased self-funding and graduate employability, the important role of IPB in social engagement and in the development of global and European citizenship for students and staff must not be lost or forgotten.

The IPB should be focus on partnerships and collaboration that recognise and respect the differences in contexts, needs, goals, partner interests and prevailing economic and cultural conditions; and should be given priority to the following areas of development: improving and enhancing the quality and diversity in programmes involving the mobility of students, academic and administrative staff; increasing focus on the internationalisation of the curriculum and of related learning outcomes; gaining commitment on a global basis to equal and ethical higher education partnerships.

In summing up, the future of IPB looks potentially optimistic and bright, however future positive development and impact will only happen if the several stakeholders and participants maintain an open dialogue about benefits, means, opportunities and obstacles in this ongoing process of change. The internationalisation is also challenged by increasingly profound social, economic and cultural issues; such as the financial crisis, demographic decline, immigration and ethnic and religious tensions.

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INVESTIGATING ETHICAL INFORMATION SHARING IN FACEBOOK WITHIN EDUCATIONAL CONTEXT THROUGH ADOPTED PAPA FRAMEWORK

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ABSTRACT

The pervasiveness of social media usage especially in educational context requires a reconsideration of current information ethics frameworks. This study primarily aims to identify the most common ethical challenges of social media usage in educational context along with the detection of most popular features of social media particularly Facebook. It also attempts to associate identified categories to Mason's PAPA framework for information ethics in social media usage. Up to date, there is no scale assessing particularly ethical information sharing in Facebook through ethical scenario approach. The framework was tested and validated through 24 scenarios of ethical dilemmas developed by the researcher and was administered to university students (N=100, with 44 females and 56 males, 61 undergraduates and 39 graduate) at the 2016 academic semester. Validity and internal consistency of the scale provided satisfactory results for this instrument to be used for future studies. According to the results of this study, students responded mainly with "unethical" to "questionable" options to privacy, accuracy, property and accessibility issues in educational use of Facebook. The results indicated that adopted framework is robust and it could be easily used in teaching and learning practices. Findings also revealed that PAPA framework should be expanded/refined to consider ethical issues that are specific to current status of instructional related information sharing facilities in social networking sites.

Keywords: Ethical scenarios; Facebook; information ethics; PAPA; social media usage

INTRODUCTION

Constantly evolving information technology has undoubtedly proliferated information sharing through social networking sites over the last decade while not only leading to exacerbation of already existing ethical challenges but also emerging new ethical complexities as well. This widespread and rapid use of IT has also penetrated the area of education without proper integrity of the social media advancements, hence the instances of unethical misconducts eventually inflate. It is not surprising to state that gathering sensitive, private information has now become 'a piece of cake', if an individual owns a social networking account. Through the use of internet and growing number of users at social networking sites gathering information no matter it is public or private, has become easier than ever. At present, Facebook is among the most popular and widely used social networking sites. Facebook statistics revealed that for the first quarter of 2017, Facebook had 1.94 billion monthly active users and 1.28 billion people daily active users which represents 18% increase year over year (Facebook, 2017).

The ubiquity of internet technologies and their superficial integration in educational settings needed urgent revision of ethical principles. Zimmer (2010) pointed out ethical dilemmas derived in social media adoption in educational context with an example involving Facebook where researchers use Facebook user data which failed to protect privacy and anonymity of the users who were subject to that educational research. Henderson et al. (2014) also pinpoints numerous threats of using social media in education context as; consent, confidentiality, boundaries and recognition of illicit activity.

About 3 decades ago, Richard Mason must have anticipated such emerging issues therefore he proposed that particularly personal privacy was in danger with immense growth of information technologies requiring urgent ethical framework to assess information via decision making (Mason, 1986). For this purpose, Mason suggested his pioneering framework which is currently known as PAPA standing for Privacy, Accuracy, Property, and Accessibility in order to resolve growing ethical complexities encountered within evolving information technology emergent daily life activities. In this framework Mason (1986) solely addressed four dimensions of the information ethics as privacy, accuracy, property and accessibility. Privacy refers to the nature of information and its' protection. Accuracy is about the correctness of the information and precaution taken if it is not. Property deals with the ownership of the information and how this ownership is determined. Accessibility is defined whether one could obtain the information or not and its protection.

Parrish (2010) went further and adapted these four aspects of PAPA to emerge four fundamental ethical

principles for information sharing in social networking sites. These principles are briefly defined as; the privacy of oneself as well as others related to the information shared should be protected; one is responsible for the accuracy of the information shared. Information that belongs to the original creative work of others should only be posted with permission. Users are responsible to check the authenticity of the stakeholders (a person or a software) in which the information shared is accessed. From these principles the following questions may emerge referring to the original discussion in Mason's work about privacy, accuracy, property and accessibility accordingly:

To what extent the information about oneself should be disclosed or undisclosed? How much of the information should be made public for third party to view? Under what security measures are taken to protect privacy on one's information? How much of the information could be accessed by others? How accurate is the information shared? Who will be responsible for accuracy of the information shared? What kind of information is safe to share? Is the information shared someone's original creative idea?

PAPA framework developed by Mason (1986) is used to identify the major ethical issues in computer usage. Many researchers have applied PAPA framework in ICT ethics which is under computer ethics. Numerous terminology are used in these studies in conjunction with each other as ICT ethics, IS ethics, IT ethics and Information ethics that could all be collected under computer ethics (Ming et al., 2015). Information ethics and computer ethics are stated to be used interchangeably in the literature (Bynum, 2008). Information ethics is the field of study that explores ethical complexities derive from the evolving development and pervasive use of information technologies (Masrom et al., 2011). Information ethics are reported to gain utmost importance as one of the most problematic areas inspected in numerous studies (Taherdoost et al., 2013)

A study done by Ming et al. (2015) portrays the results of a systematic literature review on computer ethics between 2010-2014 with 40 studies which showed that conducting surveys are most widely used by 83% of the studies and students are the mostly the target participants in 73.3% of the studies where PAPA is the most widely used framework in theoretical studies and second widely used framework in empirical studies after general issues in computer ethics. Ming et al. (2015) also remarked that studies involving PAPA framework mainly adopt scenario based approach to evaluate the ethical judgment of respondents in various supplied situations which represents one or more combination of PAPA dimensions. Scenarios in IT related ethical dilemmas of PAPA dimensions are used in either confirming current ethical issues or raising new emergent ethical concerns (Parrish, 2010; Peslak, 2006). Such studies often concentrated on evaluation and judgmental decision making of given scenarios (Andrews et al., 2015; Leonard&Cronan, 2005; Liu&Yishan, 2012; Masrom et al., 2010a; Masroom et al., 2011; Su, 2013; Pham, 2014; Taherdoost et al., 2010, Martin&Woodward, 2011). It was pointed out by Andrews et al. (2015) that using frameworks and scenario approach are beneficial for better comprehension of ethical challenges of social media and it minimizes ethical misconduct by stakeholders.

Hence, the significance of ethical information sharing in social media are emphasized by multiple studies (Parrish, 2010; Taherdoost et al., 2013). Ming et al. (2015) particularly warn institutions to take measures on the establishment of ethical educational environment. Masrom et al. (2010a) emphasized the significance of investigating ethical behavior of particularly students, in order to reduce unethical practices to great extent. Bubulka (2012) conducted a survey to 208 individuals to identify relationships between age, education level, relationship status and information sharing. The findings of the study revealed that there is a relationship between age and the information sharing. While young individuals with single status share more than older and married ones, there is no consistent trend between education level and information sharing habits. The results of the study indicate that young, single individuals are more prone to accessibility, privacy issues than their elder married counterparts.

From brief review of the literature presented above, it was concluded that Mason's PAPA framework on privacy, accuracy, property and accessibility are still main problems that awaits to be resolved. Students still comprise the main target group of the relevant studies on ethics. Till today, no scale assessing particularly ethical information sharing in Facebook in education through ethical scenario approach was located in the literature. In the light of above, the primary aim this study is to develop a valid, reliable scale based on the assessment of ethical scenarios to identify most commonly occurring ethical challenges of social media usage in educational context. In addition, this study sought to associate identified categories to Mason's PAPA framework for information ethics in social media particularly Facebook.

METHODOLOGY

24 ethical scenarios were developed by the researcher which were based on the extant literature mainly PAPA framework, the previous experience of the researcher working as full-time instructor and the observation of the incidents encountered by fellow instructors. The scenarios involve the concepts of un/ethical practices that

prevail in information sharing within the educational context in Facebook which comprise a short description of a situation. They are based on similar situations which are designed in a way that actual attitude of participants is reflected in their rating of the particular situation. These scenarios are assessed by the participants by choosing one from five Likert type options as; 'crime' (unethical and illegal. The person responsible should be accused for a criminal act), 'unethical' (a contrary act to your moral and ethical standard, but not a crime), 'questionable' (there is some question as to the moral or ethical aspects of the action), 'acceptable' (the act is acceptable to you, but you may have some doubts due to other's beliefs), and ethical (there is no question that the action is correct in every sense of the word). These options are used in similar studies (Harris, 2000; Martin&Woodward, 2011).

After checking the wording, grammar of the ethical scenarios an expert opinion was taken from fellow instructor about the clarity of each scenario. After corrections, the scale consisting of 24 ethical scenarios was administered to 100 students of the faculty of economics and administrative sciences during the 2016-2017 academic semester where the researcher works as full-time instructor.

The data was analyzed by using SPSS v17. The demographic information about participated students were given below in Table 1. Participants are 44% female and 56% male students with age ranges 57% are between 17-21 and 43% are between 22-26. In addition, 61% are undergraduate and 39% are graduate students. Participants are from CIS (31%), marketing (30%) and business administration (39%) departments. All participants own a Facebook account of which 96% of them visit frequently. 90% of the students responded that it is good idea to become Facebook friends with instructors while only 58% of them use Facebook for personal communication with their instructors.

Table 1: Demographic information of participated students

		Frequency	Percentage (%)
Gender	Female	44	44
	Male	56	56
Age	17-21	57	57
	22-26	43	43
Education Level	Undergraduate	61	61
	Graduate	39	39
Department	Comp. Information Systems	31	31
	Marketing	30	30
	Business Administration	39	39
Having fb account	Yes	100	100
	No	0	0
Facebook visit	Often in a day	86	86
	Everyday	10	10
	Few times in a week	1	1
	Once a week	2	2
	Once a month or less	1	1
Fb friends with inst.	Yes	90	90
	No	10	10
Fb comm. with inst.	Yes	58	58
	No	42	42

RESULTS

Validity and Reliability of the Scale

Since the scale was developed from scratch, numerous exploratory factor analyses were carried out with 24 5-Likert option ethical scenarios to obtain evidence for construct related validity and to associate the identified categories with Mason's PAPA framework. In line with the reliability analysis, the final factor analysis was done

with 21 items which 3 items were removed. The reason is explained below. The measure of the sampling adequacy was obtained as 0.66 considered as mediocre (Kaiser, 1974) and a KMO value greater than .50 indicating suitability for further factor analysis. Bartlett's test of sphericity was found to be significant (χ^2 (190) = 406.31, $p < .05$). The communalities were all higher than .3 showing each item shared some common variance with other items. Principle components analysis was executed to determine and compute composite scores of the underlying factors. 4 factor solution was determined by Varimax rotations of the factor loading matrix. The number of factors were fixed to 4 in the analysis. The four factor solution explaining 43.93% of the variance, was chosen with respect to literature and the 'leveling off' of eigenvalues on the Scree plot after four factors as shown in Figure 1 below. The descriptive statistics, eigenvalues, percentage, and cumulative percentages and internal consistency values of these 4 factors were presented in Table 2. The factor loading matrix is shown in Table 3. The results yielded robust validity of the scale.

The Cronbach's alpha reliability was calculated in order to obtain internal consistency results for the scale. Reliability analysis was carried out with 24 items but 3 items (Q3, Q10, Q23) were removed at later stages of the analysis in order to improve internal consistency. These 3 items were detected to have Corrected Item total Correlation to be less than .30. The overall Cronbach's alpha reliability for 21 items was calculated to be .78 which is considered as acceptable (George & Mallery, 2003). The internal consistency results for four factors that were determined by the factor analysis are; privacy (5 items) is .71, accuracy is (5 items) .75, property (6 items) is .80 and accessibility (6 items) is .72. Therefore, the results yielded acceptable to good values for sub dimensions of the scale.

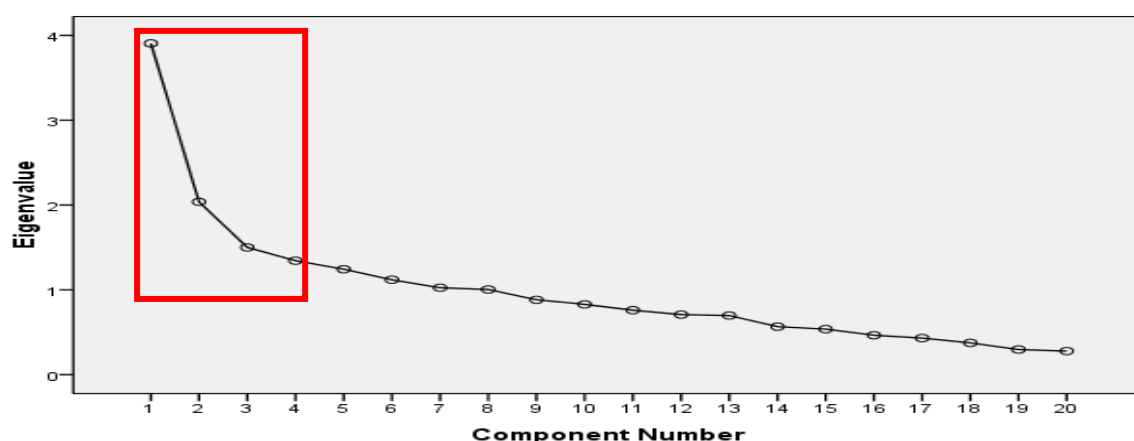


Figure 1: Scree Plot

Table 2: Validity and reliability values of the scale

FACTOR	No. of Items	M	SD	Total	% of Variance	Cumulative %	Cronbach α
Privacy	5	2.28	0.59	3.97	19.53	19.53	0.714
Accuracy	5	2.63	0.66	2.06	10.18	29.71	0.748
Property	6	2.88	0.66	1.62	7.50	37.21	0.802
Accessibility	5	2.20	0.58	1.43	6.72	43.93	0.725
Total	21	2.54	0.46				0.777

Overall Student Responses

From mean scores represented in Table 2 above, overall students' responses are between 'unethical' to 'questionable' for each dimension of the scale where property related scenarios are rated as highest and accessibility related scenarios are rated as lowest. The overall responses of the entire scale also lie between 'unethical' to 'questionable'.

From the Table 3 below the responses for accuracy, lowest rating was given for Q11 and highest rating is given for Q9. For property dimension, highest rating was for Q18 and lowest rating was given for Q13. For accessibility dimension highest mean score was given to Q20 and lowest rating was given to Q19. For privacy the highest rating was given to Q2 and lowest rating is given to Q5. All the responses except for Q5 change between 'unethical to questionable' whereas Q5's response is between 'crime' to 'unethical'.

Table 3: Factor loadings of 21 items

FACTORS	1	2	3	4	M	SD
ACCURACY					2.63	.66
Q8- Teaching assistant who is responsible to evaluate plagiarism at students' reports posted in course' fb group, did not inform instructor about a student who had done considerable amount of plagiarism. Student told to assistant that if he fails from this course his family wouldn't allow him to pursue his degree anymore.	.769				2.47	1.27
Q11- Student assistant is helping to instructor to enter final grades for the course while he is at overseas conference. He sends final grades through fb message to the assistant. Assistant provides a financial benefit from peers by altering the grades of students.	.765				2.15	1.18
Q7- Student submits daily fake check-ins in fb and sends fake photos from office regularly to her instructor about the mandatory internship program that she has to complete which in fact she does not physically attend.	.751				2.69	1.05
Q12- Student who obtained high grade than he expected due to some announcement mistake at course's fb group did not make any objections upon correction of his grade.	.745				2.92	1.01
Q9- Student claims to instructor that materials at course's fb group were not accurate so that she could not properly study to exam and hence it was not a valid exam.	.743				2.93	1.01
PROPERTY					2.88	.66
Q17- Student writes an application to obtain personal information and invites fb friends to use this app.	.735				3.15	1.07
Q15- Instructor shares her course presentation photos with fb friends another colleague who is friends with the instructor and who is her superior took her photo and put it into a public website of the faculty for advertising purposes.	.720				2.87	1.16
Q18- Student shares lecture notes of the course that she is taking, with a friend on fb who is not registered to the course.	.715				3.42	1.07
Q14- Student records video of the instructor lecturing without her knowledge and shares it in his personal fb account.	.710				2.76	1.17
Q16- Student sells digital books to fellow students which he obtained from an instructor who shared them at course fb group for educational purposes only.	.709				2.72	1.20
Q13- Student took photo of his midterm exam paper and posts it on his fb wall, while instructor distributed papers to students during lecture for students to see their results.	.701				2.38	1.14
ACCESSIBILITY					2.29	.58
Q20- Instructor accidentally discovers identities of students who submitted low ratings for his course evaluation from university's course-instructor evaluation results since they were collected directly from fb accounts of students.		.699			2.62	.97
Q24- Student who is assigned to submit course related material to course's fb group is also sending commercial spam messages to subscribed students.		.680			2.22	1.10
Q22- Student uses lab computer that instructor used previously during lecture and finds out that his fb account is still connected. A message to another instructor catches her eye regarding the content about her letter of recommendation upon her request in an unflattering way.		.671			2.21	.99

Table 4: Factor Loadings of 21 items continued...

FACTORS	1	2	3	4	M	SD
ACCESSIBILITY (cont.)						
Q19- Student, who is officially registered, subscribes to a course's fb group and sends negative posts about the course.		.669		2.08	.91	
Q21- Instructor hears from other students about one of her student starting a negative campaign about him in student's fb, since as his advisor he refused to not to tell about his parents his failing from courses and not participating once to any classes sessions.		.650		2.32	.95	
PRIVACY				2.29	.59	
Q5- Student created a fake fb profile about an instructor and sends requests to instructor's all fb friends since instructor did not accept his fb request.			.645	1.73	1.04	
Q4- Master student sends a questionnaire to his fb friends for his thesis. The questionnaire includes highly specific information on domestic life etc. The student then decides to use this data for commercial purposes.			.639	2.45	1.14	
Q6- Student who is not fb friends with instructor discovers from another instructor's timeline post who is friends with him that the instructor is on vacation at his home town and he visits her vacation place to convince her to higher up his final grade.			.630	2.40	1.04	
Q1- Student who is not fb friends with instructor sends fb messages as "You should announce final grades at once!" although the official deadline for announcing final grades according to academic calendar was not yet exceeded.			.621	2.29	.89	
Q2- Student who is not fb friends with instructor sends fb messages insisting that instructor should assign higher grade if not, he would lose his scholarship.			.603	2.56	.96	

DISCUSSION AND CONCLUSION

The motivation of this research is due to the lack of adequate tools to assess ethical decision making in information sharing at social media within the scope of educational context. The aims of the study are three fold; to develop a valid and reliable scale based on the assessment of 5 Likert option ethical scenarios, to associate determined dimensions of the scale to Mason's PAPA framework and lastly to identify common challenges on ethical usage of social media particularly Facebook within the scope of educational context.

In this respect, developed scale proved to yield robust results in terms of validity and reliability and it can be easily adjusted to other social networking tools and educational environments which proved to be useful in identifying ethical challenges through scenarios. In addition, the ethical scenario approach is still widely used in existing literature to offer similar situations that stimulate respondents' decisions on a given situation. As compared to former studies this research attempted to include more scenarios than ever to identify different aspects as possible. In this respect, this scale is unique to include more scenarios than existing studies using scenario approach in the literature.

The reason behind associating identified categories with PAPA is that, privacy, accuracy, property and accessibility are still main unresolved issues that are faced in social media usage today. However, constantly evolving facet of technology and hence social media and it's premature integration into educational settings have emerged new situations requiring attention from ethical perspective which cannot be classified under the current, available framework. While Leonard&Manly (2007) and Ming et al. (2015) stated that PAPA framework constitutes an applicable basis to make healthy judgements about ethical considerations in information sharing on social media, Multiple studies argued upon whether traditional ethics frameworks (i.e. PAPA) are adequate enough to cover current IT related ethical considerations (Leonard&Manly,2007; Parrish, 2010; Stahl et al., 2012). As cited in Parrish (2010), Fairweather (2003) stated that some recent emerging challenges could not simply be classified under four main dimensions of PAPA framework. Further, Parrish (2010) argued upon the static nature of PAPA framework which he claims to concentrate on information and not on evolving, interactive feature of technology. For example, one study done by Woodward et al., (2011) proposed different factors such

as; privacy, low risk and high risk property misuse and responsibility. In another study conducted by Henderson et al. (2014) factors like; consent, traceability, and public/private boundaries were highlighted.

Thus, the current framework should be refined and/or expanded to involve other emerging issues as well. Some aspects which are not the comprehensive coverage that could be listed as; consent, confidentiality, spamming/spamming, public bashing, dishonesty and distortions, distorted endorsement and improper anonymity, misuse of free expertise and contests, opportunism, committing crimes, stalking, cyber bullying, information theft, fraud, moral cultural values and misconceptions, equity and boundaries (Barry,2014; Ocholla, 2013; Stahl et al., 2012).

LIMITATIONS AND SUGGESTIONS

This study represents an initiating avenue for future studies. Current study is restricted to undergraduate and graduate students from one faculty only. Further research could be carried out with sample from more diverse groups involving students from other departments to see whether they have similar views or not, instructors to compare views with students to identify any existing difference or similarity, other institutional professionals to compare and contrast their opinions in order to obtain deeper understanding of the ethical situations and how or from where their decisions are influenced from. In addition, study could be conducted to identify how different cultures react.

The scenarios were developed by the researcher in line with PAPA framework and Facebook usage habits also by considering former experiences of the researcher herself and colleagues. In future, these scenarios could be easily elaborated to cover other social networking settings as well.

This study based upon honest responses of participants to given ethical scenarios and it is evaluated quantitatively. While assurances were given to participants about the confidentiality and anonymity of their responses, whether their answers truly reflect their ethical acts are still debatable. However, using quantitative and qualitative methods together will definitely improve the trustworthiness of the responses.

The current study has focused only the information sharing aspect of social media within educational context. Other frameworks are advised to be integrated as for future work to expand the boundaries of the ethical decision making.

Stick to the point that the main aim of the study is to develop a valid, reliable scale, hence this study did not attempt to identify any differences with respect to basic, demographic attributes such as gender, education level and age. Further research could be focused on detecting any underlying differences among numerous demographic attributes.

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INVESTIGATING FORMATIVE ASSESSMENT STRATEGY TO CHEMISTRY HABITS OF MIND (CHOM) OF BUFFER SOLUTION CONCEPT IN LEARNING CHEMISTRY

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ABSTRACT

In this research, we investigate formative assessment strategy to Chemistry Habits of Mind (CHOM) of buffer solution concept. The method used in this research is Pre-Experiment with one group pretest-posttest design. The instruments used are written test, observation sheet, questionnaire and an interview guide. Implementation of formative assessment applied is the making of the concept map, observation of practice performance, and preparing practice report. The habits of mind category refer to the habits of mind developed by Marzano with three categories: self-regulation, critical thinking, and creative thinking. The results of the study as a whole show that the improvement in students' concept mastery has an average percentage of N-Gain of 78.5% with the high criterion. This increase also occurred in the upper, medium and lower groups with the average percentage of N-Gain of 91.67%, 77.50%, and 62.50%, respectively with the high criteria for upper and medium groups, and medium criteria for the lower group. The highest increase in student's overall habits of mind in the self-regulation category with an increase in 10.67% in point 3. This increase also occurred in the top categories of self-regulation and creative thinking with an increase of 16.66% in points 4 and 16.66% on point 3. The middle and lower group also experienced the highest increase in the self-regulation category with an increase of 13.75% each on points 3 and 10% in point 4.

INTRODUCTION

Science education is not contributing as it could to understanding and addressing such global issues as Feeding the World's Population, Ensuring Adequate Supplies of Water, Climate Change, and Eradication of Disease in which we all have a responsibility to play a role. Students are not made aware of how the solution of any of these will require applications of science and technology, along with appropriate and committed social, economic and political action. The concept is an abstraction professionals that represents a class of objects, events, activities, or relationships, which have the same attributes (Wibowo, 2016). As long as their school science is not equipping them to be scientifically literate citizens about these issues and the role that science and technology must play, there is little hope that these great issues will be given the political priority and the public support or rejection that they may need. (Linder, Ostman, & Wickman, 2007).

Various efforts continue to be done by the government and society to improve the quality of education. Similarly, in learning and assessment as an important part of education. In the field of assessment, various innovations are done to improve the quality of learning outcomes and learning process, one of them is by applying formative assessment. Formative assessment is one effective strategy, because in formative assessment students are fully involved in the learning process. Students can monitor their own understanding, acknowledge their weaknesses and strengths, and become aware of the learning strategies that can help them (Aydeniz and Pabuccu, 2011). Formative assessment strategy is believed to be able to increase process activity and student learning outcomes (Nahadi et al., 2015). A review of 580 articles from more than 160 journals over a period of nine years concluded that formative assessment had a positive impact on student learning outcomes and student motivation (Yin, et al., 2008). Formative assessment can also support the expectation that all children can learn at a high level and make students who have poor performance and ability willing to invest in further learning (Mehmood et al., 2012). The application of formative assessment helps teachers obtain feedback on the learning process developed so that students' progress can be monitored (Rustaman, et al., 2013; Clark, 2011; Havnes, et al., (2012).

However, formative assessment will not be a formative assessment if there is no feedback process in it. As stated by the National Research Council (in Furtak, 2009) that formative assessment is the process of setting learning goals, comparing learning objectives with information obtained by students, and providing feedback to students to help achieve their learning objectives (Sadler, 2010; Shute, 2008; Wiliam, 2011). Feedback needs to be done

continuously in order to obtain information about the weaknesses in the results or the learning process so that it can be done immediately. Feedback can encourage students to improve learning motivation, correct errors made or leave negative things that become weaknesses in their learning. One of the formative assessment strategies developed in this research is by making concept maps. Drafting a concept map is one way to find out how far the students' knowledge of a subject. In learning, concept mapping employs students to think creatively. Creative thinking belongs to the category of habits of mind. Marzano, et. Al., (1993) reveals that habits of mind are divided into three categories: self regulation, critical thinking, and creative thinking. A habits of mind is made up of many skills, attitudes, omens, past experiences, and trends (Costa and Kallick, 2012). Some research has been done to prove the positive impact of habits of mind for students, individuals, and entire school staff (Costa and Kallick, 2012). Describe the Scientific Habits of Mind Survey (SHOMS) developed to explore public, science teachers', and scientists' understanding of habits of mind (HoM), the SHOMS will prove to be a useful tool for educators and researchers who wish to investigate HoM for a variety of participants (Çalik and Coll, 2012). Indicators of habits of mind need to be applied to students in order to act intelligently, successfully in academics and as a provision to face life. Habits of mind can be applied through formative assessment because in formative assessment the students are involved in the learning process directly. Development of habits of mind in students to practice good thinking habits so as to produce good learning as well and help students to explore further their knowledge. Students must master the concepts taught as a provision to continue to higher education level. Habits of mind will indirectly support the mastery of student concepts. We suggest that habits of mind potentially valuable ways to teach, using classroom discourse and argumentation, and case-based issues in order to enhance scientific literacy. We note that while the above literature argues that scientific thinking including HoM should be what scientists actually display including 'scientific attitudes', there is not much literature that actually explicates this (Coll & Taylor, 2004; Coll, Taylor, & Lay, 2009). We propose that engaging in habits of mind and teaching science would benefit from a deeper understanding of how scientists think (Gauld, 2005), a useful way to characterize how scientists think is what he terms SHOMS.

This research also needs to be lifted because the habits of mind have not been implemented by many researchers in the field of chemistry. The goal this research is to identify the implementation of formative assessment strategy to improve the mastery of concept and habits of mind of students on the material of buffer solution. These objectives research is investigate formative assessment strategy to Chemistry Habits of Mind (CHOM) of buffer solution concept. The specific objectives of describing the implementation of formative assessment of conceptualization, habits of mind before and after the implementation of formative assessment strategies, and student responses to the implementation of formative assessment strategies on buffer material materials.

THE STUDY

The methodology used in this research is Pre-Experiment with one group pretest posttest design. Feedback used in the form of feedback aimed at the learning process by verbal and written feedback (commenting on concept maps and student lab reports). Subjects in this study were students of class XI one private high school in Bandung, amounting to 26 students. The study was conducted in five meetings. Instrument in this research is written test used to measure mastery of student concept, observation sheet habits of mind used to describe and analyze habits of mind of student at the time of learning, interview guide used to get additional information supporting questionnaire and observation data and questionnaire of student response Is used to describe students' responses to the implementation of formative assessment strategies on the subject matter of the buffer solution that students have studied.

The written test is in the form of an objective test (multiple choice) of seven questions with five answer choices and an essay test of five questions. The habit of mind observation sheet is a list of tables filled with a check mark on the appropriate value column. Assessment indicators consist of a range of values 1 - 4 that refer to the rubric. The habits of mind search section were adopted and developed by Marzano et al. (1993) and Sriyati (2011). This rubric consists of several questions consisting of three categories: self regulation, critical thinking, and creative thinking. The interview guide is in the form of a structured interview (contains brief questions that have been arranged in a systematic and complete). Questionnaire responses students in the form of 25 questions with closed answers by choosing strongly agree, agree, disagree and strongly disagree. Mastery test concept used previously validated first then tested. After the trial is done analysis of test results (reliability, level of difficulty, and distinguishing power). Afterwards N-Gain was calculated to see the improvement of conceptual mastery, analyzed, and discussed. For habits of mind percentages were made before and after which then compared and made descriptions of which categories were most developed. Student responses are also made a percentage then made a description.

FINDINGS

Implementation of formative assessment strategy that is done greatly affect the mastery of the concept of students, especially from feedback provided by the teacher. Both feedback from concept mapping, practical performance, and preparing practical reports help to improve students' understanding which will also affect the

mastery of student concepts. From some of the strategies applied by students argue that the most influential on the mastery of the concept is the performance of practice because the lab is a kinesthetic learning that involves all the five senses so directly recorded in the long-term memory of students. In addition, students also consider that this practical learning is very interesting. This is because by many factors among students rarely do practicum so that students look more enthusiastic in carrying out the lab. Students look more critical, disciplined, systematic, conscientious, and show their curiosity. This is also supported by the results of interviews with students is "after following the learning of buffer solution with formative assessment strategy to make students more motivated to study chemistry especially in learning practicum".

From this research as a whole, the average pretest is 27,69, while the average post test is 82,96 and N-Gain are 78,50 or 0,785. As stated by Hake (1998) that when $g > 0.7$ then the increase in mastery of the concept included in the high category. The increase is due to the implementation of formative assessment strategies. These improvements prove that students have actually experienced the learning process. Gagne states that learning is a process by which organisms change behaviour due to experience (Dahar, 1996). In this case, students are able to master the material that has been studied with various formative assessment strategies provided, indicated by the students' ability to answer written tests of conceptual mastery. The varied formative assessment strategies in this study can help create a cognitive structure that can bridge the learner's early knowledge and related learning experience. This causes the understanding to be more organized and deep so that it can link between one concept with another concept on buffer material. When viewed from the grouping of students the mastery of the concept of top, medium, and bottom concept can be seen in Figure 1 below.

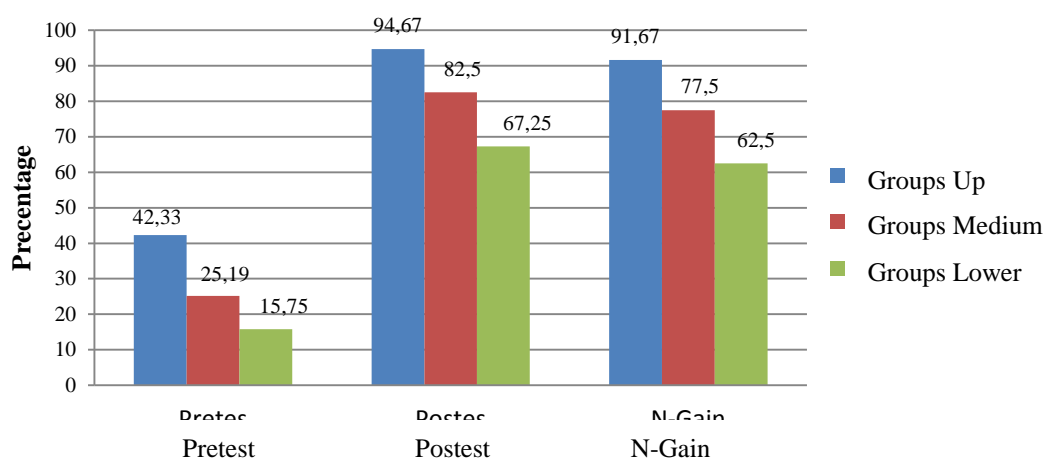


Figure 1. Average Pretest, Posttest, and N-Gain Groups Up, Medium, and Lower

The upper group N-Gain score is 91.67 or 0.9167, the increase in mastery of the concept belongs to the high category while the moderate group N-Gain is 77.5 or 0.775 also belongs to the high category and the lower group N-Gain is 62, 5 or 0.625 which is in the medium category. This shows that the mastery of the students' concept of all groups, both upper and lower groups, has increased especially in the upper groups. The increase is due to the implementation of formative assessment strategies. In this study the upper group has a higher concept mastery improvement when compared with the middle and lower groups. This is because the capacity of upper group students' abilities differs from the capacity of the students in the middle and lower groups. In addition, upper group thinking ability is higher when compared with middle and lower groups. So the upper group has the ability to apply higher concepts that must have been preceded by the development of the ability to remember and understand the concept than the middle and lower groups. Similarly, the group was compared with the lower group. The group is having the ability to apply the concept higher when compared with the lower group. To describe the effect of the implementation of formative assessment strategy on each category of habits of mind (self regulation, critical thinking, and creative thinking) can be seen in Figure 2, Figure 3, and Figure 4.

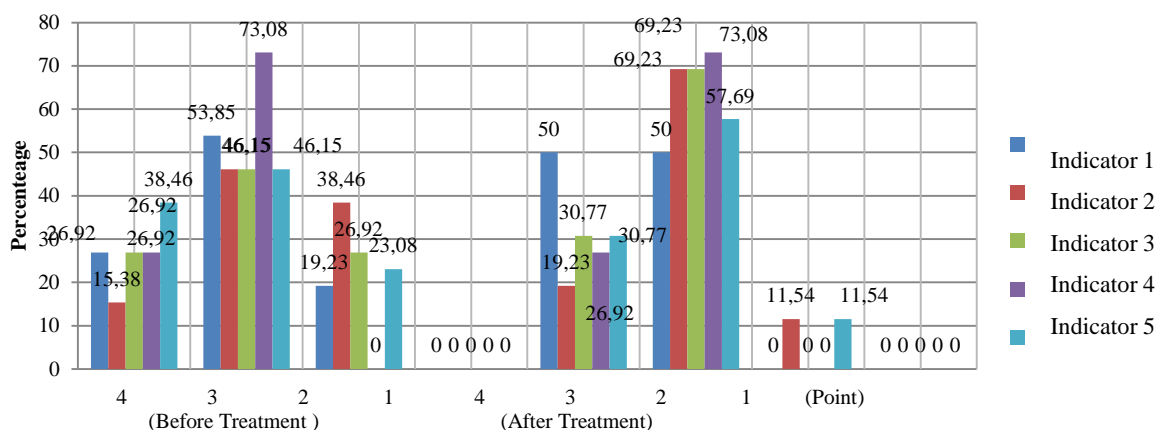


Figure 2. Comparison of Habits of Mind Students Before and After Treatment On Self Self Regulation Category Description:

- Indicator 1 = Recognize thinking,
 Indicator 2 = Make plans effectively,
 Indicator 3 = Recognize and use required information sources
 Indicator 4 = Sensitive to feedback
 Indicator 5 = Evaluate the effectiveness of the action

From Figure 2 it can be explained that the formative assessment strategy is given feedback so that the students directly realize the mistake of the concept / concept is wrong so at that time also the students directly evaluate the effectiveness of his actions. At the time of learning, students may initially only use informed sources of information but after a formative assessment strategy the students become aware of the need to use the necessary information resources because the demands must solve the problems in the given material.

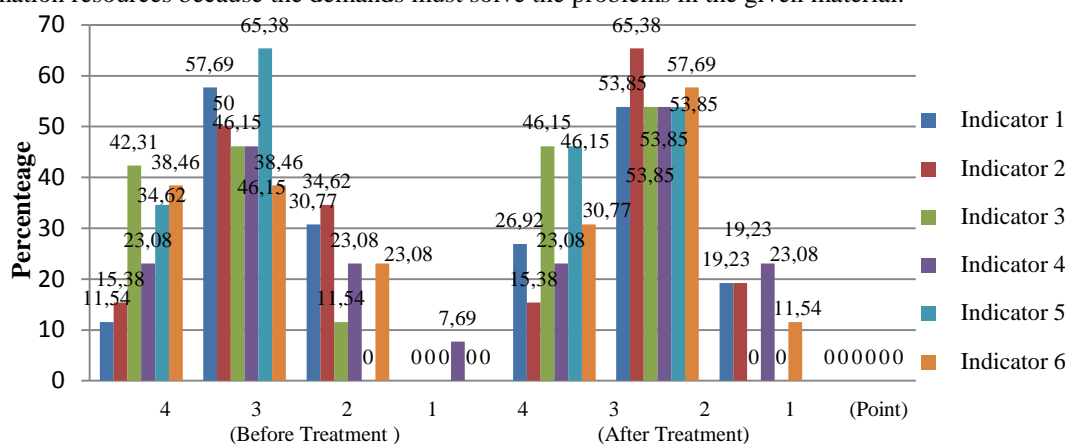
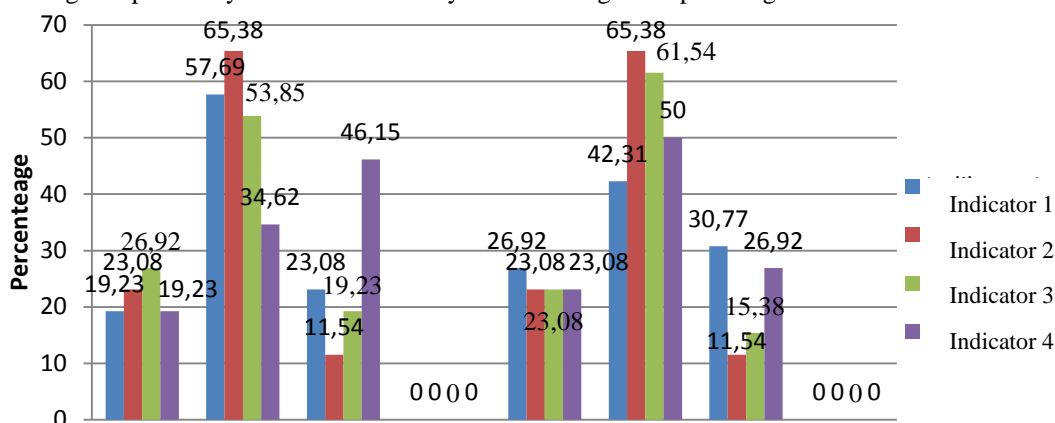


Figure 3. Comparison of Habits of Mind Students Before and After Treatment In Critical Thinking Category Description:

- Indicator 1 = Accurate and seek accuracy
 Indicator 2 = Clear and seek clarity
 Indicator 3 = Open-ended
 Indicator 4 = Refrain from impulsivity
 Indicator 5 = Ability to hold back when there is a guarantee
 Indicator 6 = Sensitive and know the knowledge of his / her friends

From Figure 3 it can be explained that the problems that exist in the teaching materials make students look for accuracy and seek clarity about the correctness of the solution to the problem posed. During group discussions students learn to be open to the opinions of others, able to refrain from emotion despite differences and students also learn to be sensitive and know the knowledge of their friends so that they can share knowledge during the discussion process takes place both in groups and in the classroom. In addition, at the time of giving feedback students also look for accuracy and clarity of the answers that have been made, are sensitive and open to the feedback given proven by the students directly fix the wrong concept after given feedback.



4 3 2 1 4 3 2 1 (Point)
(Before Treatment) (After Treatment)

Figure 4. Comparison of Habits of Student Mind Before and After Treatment In Category Creative Thinking
Description:

Indicator 1 = Can be involved in the task even if the answer is not immediately visible

Indicator 2 = Doing business maximizes ability and knowledge

Indicator 3 = Creating, using, improving the evaluation standard made by itself

Indicator 4 = Produce a new way of looking at a situation different from the usual way of general prevailing

From Figure 4, there is 1 indicator that looks interspersed and develops in points 4 and 3 are indicator 4 that is generating a new way of looking at situations that are different from the usual way in general. This is because in the process of learning in the classroom both the theory and practicum students look more eager in following the learning which means students can involve themselves in the task although not yet know the exact answer to the given problem. In the teaching materials given there are problems that require students to design the manufacture of a buffer solution with a certain pH and students use their own way for the design. In addition to the feedback provided to students to improve the evaluation standards made by themselves. The components of the most formative assessment strategy that affect the habits of mind are feedback. Based on Figures 2, 3, and 4 the implementation of formative assessment strategy gives the greatest influence on the self regulation category that is on point 3 which has the highest increase of 10.67%. Followed by the critical thinking category on point 3 which increased by 5.77% and creative thinking category on points 4 and 3 which increased by 1.92%. This is because the formative assessment strategy provided initially affects self regulation. After students realize and improve self-regulating ability then students can develop critical thinking and creative thinking. Other things that affect the formation of habits of mind students are teaching materials, learning methods, teachers, students, facilities infrastructure, media and classroom management. Description of the effect of the implementation of formative assessment strategy on each category of habits of mind (self regulation, critical thinking and creative thinking) when viewed from the grouping of students (upper group, medium group, and lower group) can be seen in Figure 5, 6, 7, 8, 9, 10, 11, 12, and 13.

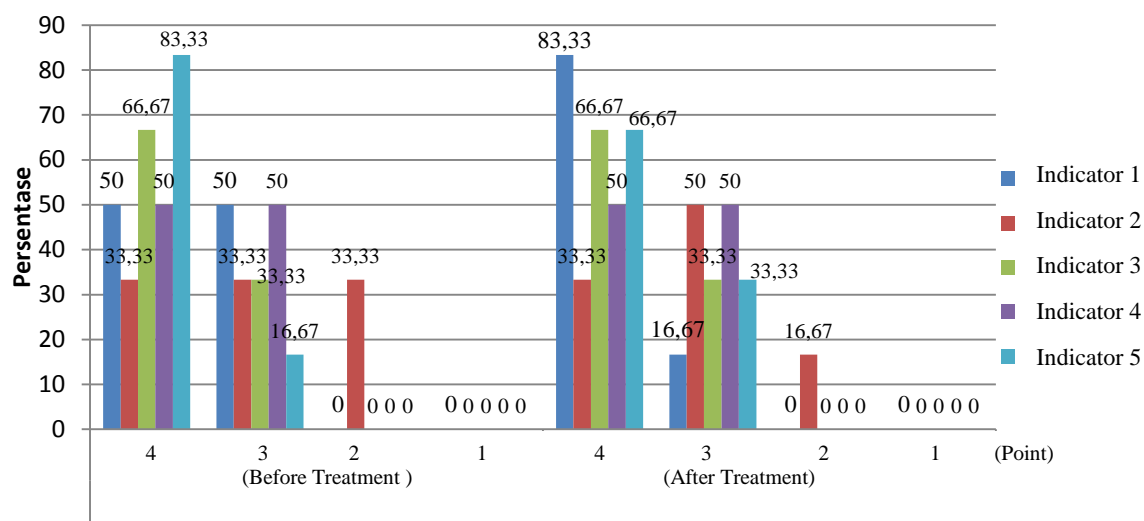


Figure 5. Comparison of Habits of Mind of Upper Group Students Before and After Treatment In Self Self-Regulation Category

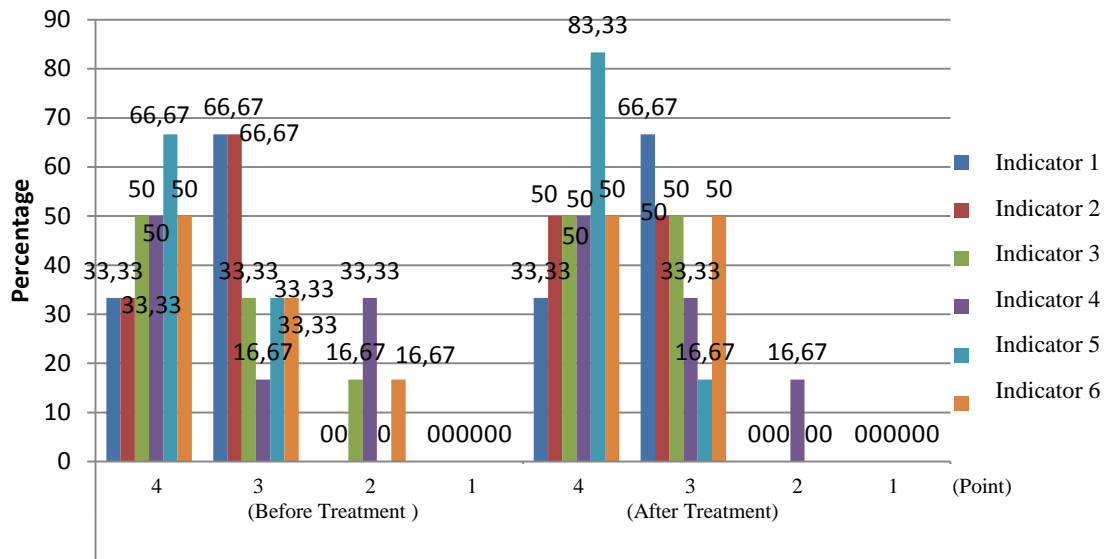


Figure 6. Comparison of Habits of Mind of Upper Group Students Before and After Treatment In Critical Thinking Category

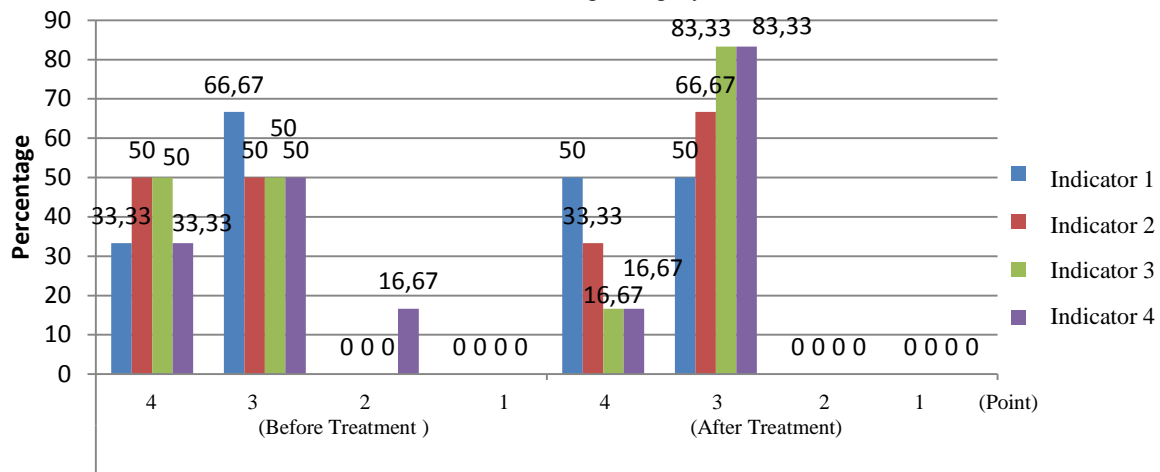


Figure 7. Comparison of Habits of Mind of Upper Group Students Before and After Treatment In Category Creative Thinking

Based on Figures 5, 6, and 7. the implementation of Formative Assessment Strategy in the upper group gives the greatest influence on the self regulation category that is on point 4 which experienced an increase of 16.66% and creative thinking category that is on point 3 which experienced an increase of 16 , 66%. Followed then the category of critical thinking on points 4 which increased by 5.56%. This is due to the formative assessment strategy provided to develop the self-organizing ability and group thinking processes over not only conceptual but also applicative and more rational so as to make the upper groups think out of the box. Other things that affect the formation of habits of mind students are teaching materials, learning methods, teachers, students, facilities infrastructure, media and classroom management.

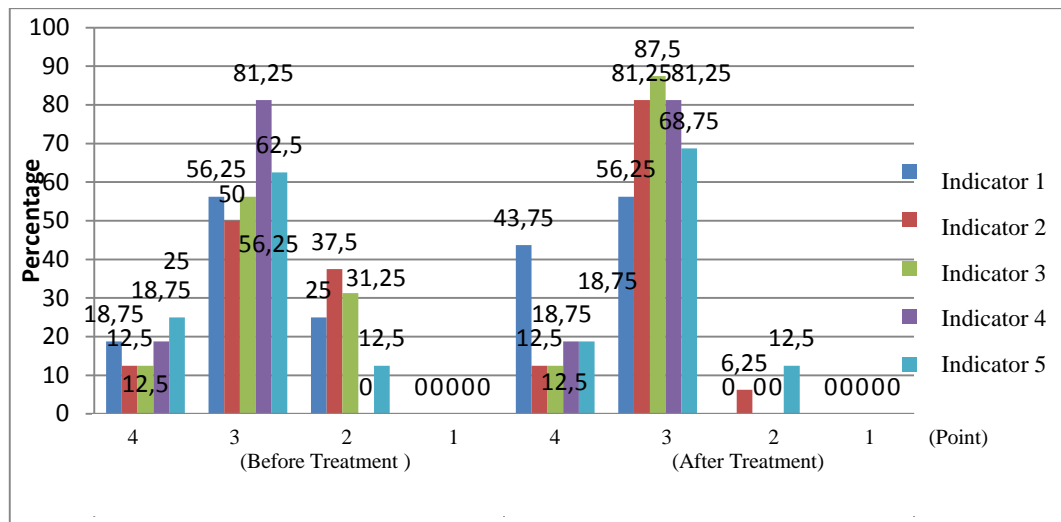


Figure 8. Comparison of Habits of Mind Moderate Group Students Before and After Treatment In Self Self-Regulation Category

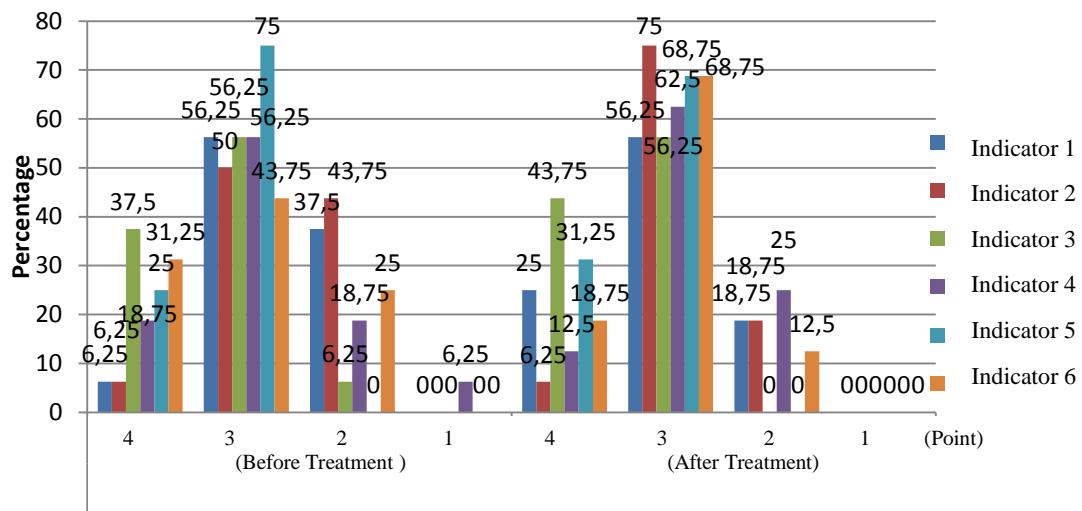


Figure 9. Comparison of Habits of Mind Moderate Group Students Before and After Treatment In Critical Thinking Category

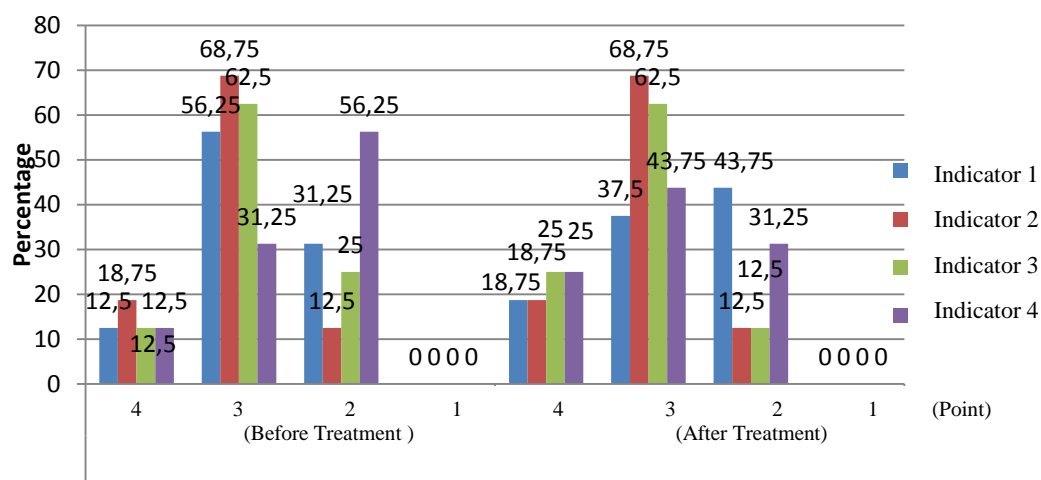


Figure 10. Comparison of Habits of Mind Moderate Group Students Before and After Treatment In Category Creative Thinking

Based on Figures 8, 9, and 10. implementation of formative assessment strategy in the group is giving the greatest influence on the self regulation category that is on point 3 which experienced an increase of 13.75%, followed by the critical thinking category that is on point 3 that has increased By 8.33% and the last category creative thinking on points 4 which increased by 7.82%. This is because the formative assessment strategy provided gives the most influence on the ability to manage themselves. Self-regulation will make students more reflective thinking then the group is able to a higher level of thinking that is critical thinking followed by creative thinking. Other things that influence the formation of habits of mind in the middle group are teaching materials, learning methods, teachers, students, infrastructure, media and classroom management.

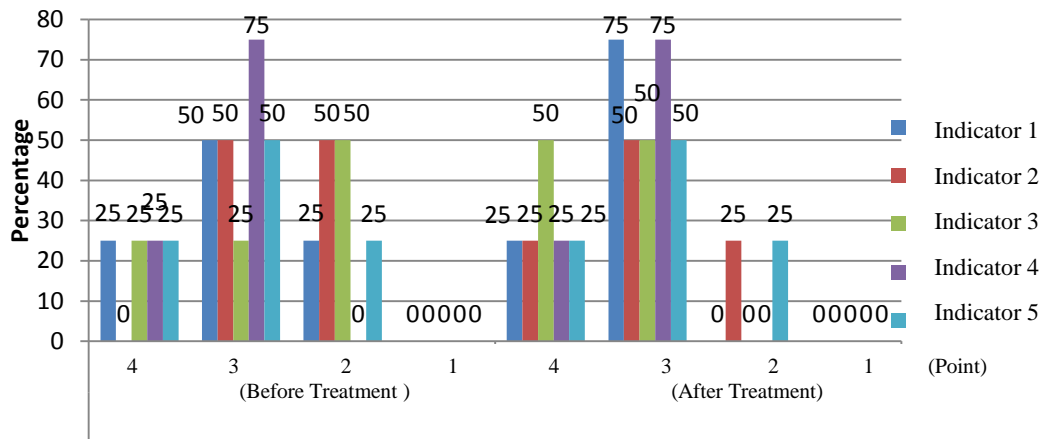


Figure 11. Comparison of Habits of Mind Students of Lower Groups Before and After Treatment in Self-Regulation Category

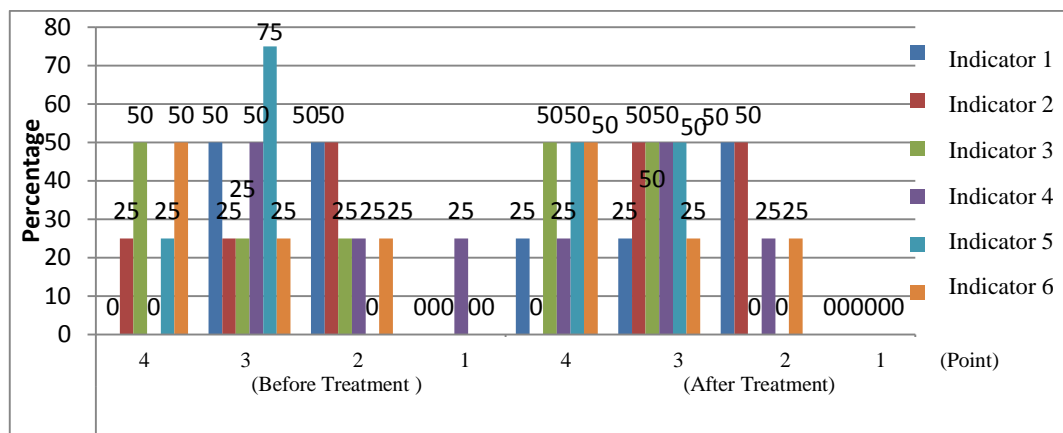


Figure 12. Comparison of Habits of Mind Students Group Down Before and After Treatment in Critical Thinking Category

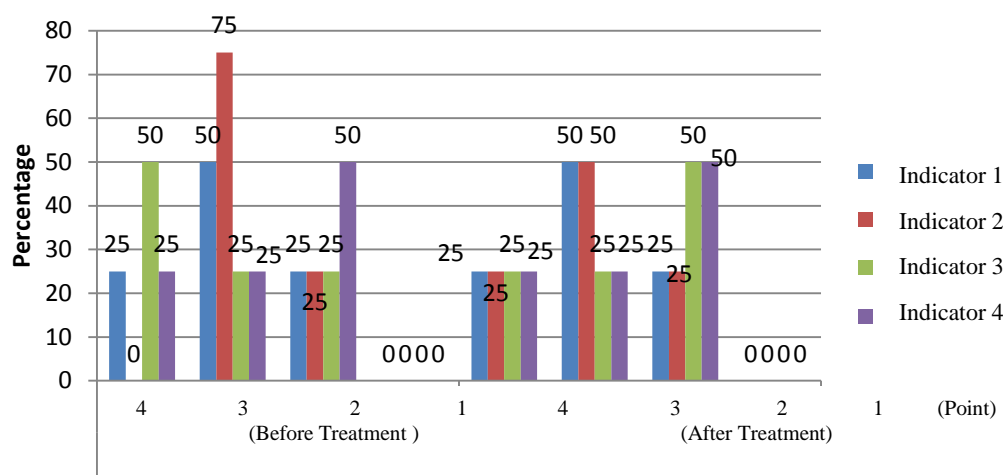


Figure 13. Comparison of Habits of Mind Students Under Class Before and After Treatment In Category Creative Thinking

Based on Figures 11, 12 and 13. the implementation of formative assessment strategy for the lower group gives the greatest influence on the self regulation category that is on point 4 which increases by 10%, followed by the critical thinking category that is on point 4 which increases by 8 , 33% and the last category of creative thinking on point 2 which increased by 6.25%. This is because the formative assessment strategy provided gives the most influence on the ability to manage them. Good self-regulation will make the students self-management more consistent so that more can develop a higher level of thinking that is critical thinking followed by creative thinking. The top group that has the highest concept mastery improvement is also in line with the highest habits of mind improvement as well. Intelligent cognitive intelligence is also in behaving which means the upper group already reflects a pattern of intelligent behaviour that will enable productive action. When faced with a dilemma, should upper-class students use certain intelligent behaviour patterns to deal with such dilemmas in everyday life. This requires a certain level of skill in order to effectively use, execute and maintain such intelligent behaviour (Costa and Kallick, 2012). The results of student responses analysis on the implementation of formative assessment strategies to improve the mastery of concepts and habits of mind students through various strategies to get a good response from students and of course a positive impact to students. Students become more interested and motivated to learn more chemistry.

CONCLUSION

Based on the findings, the results of the analysis and discussion, the researchers can conclude about the implementation of formative assessment strategy to improve the mastery of concepts and habits of mind of high school students on the material of buffer solution is as follows (1) Implementation of formative assessment strategy in this research improve mastery of student concept as a whole with high category according to Hake (1998). Based on the category of student groups, improved mastery of the upper and medium group concepts is included in the high category while the lower group is included in the medium category. (2) Implementation of a formative assessment strategy also improves students' habits of mind. The highest increase overall is in the self-regulation category. When viewed from the group category of students, the upper group experienced the highest increase in the self-regulation and creative thinking category while the middle and lower groups experienced the highest increase in the self-regulation category. (3) The results of questionnaire distribution and interviews show that most students responded positively to the implementation of formative assessment strategies on buffer material materials. Implementation of a formative assessment strategy makes the chemistry learning of buffer solution material interesting and enhances students' interest to learn more about this material.

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INVESTIGATION OF HEALTHY LIVING BEHAVIORS OF UNIVERSITY STUDENTS PARTICIPATING AND NON PARTICIPATING SPORTS

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ABSTRACT

The aim of this research is to examine the healthy lifestyle behaviors of university students participating and non participating sports. The university students who participated in the research consisted of 164 male and 236 female student athletes. The research was conducted with a total of 400 athletes from different universities. "Healthy Life Style Behavior Scale" and "Personal Information Form" were used to determine the healthy lifestyle behaviors of the student athletes. As a result of the normality test, it was determined that the data were not distributed normally. Mann whitney u test was used to determine differences in gender and sport situation in the data analysis of this information. The level of significance was taken as $p < 0.05$ in all analyzes. According to research findings; Gender and sporting status were found to influence the healthy lifestyle behaviors of the students athletes in sport science faculties. In line with these results; In order to protect and improve the health of non-athletic students in the sports sciences faculties compared to the athletes, Knowledge and behavior are insufficient. As a result of this research, it can be said that education programs about healthy lifestyle behaviors should be established. Based on the implementation of these programs, it can be said that the levels of having healthy lifestyle behaviors of non-athletes may increase.

Keywords: Sport, spor sciences, healthy living behaviors

INTRODUCTION

Exercise's effects on and functions in mental health have been investigated (Byrne and Byrne, 1993; Gauvin and Spence, 1996; Salmon, 2000; Dishman et al., 1997; Droste et al., 2003; Thoren et al., 1990; Blumenthal et al., 1999; McAuley et al., 1997) and are still being investigated (Bayköse et al., 2015; Yavuz et al., 2015; Karakaya et al., 2005) by many researchers. Recent studies address both physiological and psychological effects of sport from different perspectives (Salmon, 2000; Droste et al., 2003; Blumenthal et al., 1999). An important element for both physical and mental health, exercise is frequently associated with health and health behaviors in the literature (Biddle, 2000; Stephens, 1988). A shared opinion in studies on effects of exercise on the individual's

attitudes and behaviors is that exercise is an essential element for a healthy life. Within the framework of this opinion, this study aims to explore healthy lifestyle behaviors of faculty of sport sciences students who exercise and do not exercise.

Healthy lifestyle behavior is defined as a combination of considerations regarding nutrition, self-actualization, health responsibility, exercise habit, interpersonal support, and stress management (Fox, 1996; Bidlack, 1996). According to another definition, a healthy lifestyle is achieved when the individual controls all behaviors which may affect his health and regulates his everyday activities in accordance with his health status (Pender, 1987).

Health improvement efforts are very important for the individual to take his health to the highest level. Social health level is measured by the percent of the population that is healthy. Health is a fundamental human right and the basis for improved health is protection and maintenance of health. Individuals must take their own responsibility to develop healthy behaviors and turn healthy lifestyle behaviors into everyday life habits (Komduur et al., 2009). From this perspective, exercise is one of the fundamental elements of a healthy life for every individual. Considering that exercise is one of the healthy lifestyle behaviors which indicate overall health of the individual, it is only natural to expect that students attending faculty of sport sciences have a high level of healthy lifestyle behaviors.

This study was conducted to investigate Healthy Lifestyle Behavior Scale (HLBS) scores of faculty of sport sciences students by exercise status and gender variables

METHOD

In this section, research group, measurement tools and statistical methods utilized in this research were exhibited.

Participants

The study was conducted with 400 sport sciences students, 164 male and 236 female, from three different universities.

Measuring Instruments

In accordance with the purpose of the study, the "Healthy Lifestyle Behavior Scale" was used to determine healthy lifestyle behavior levels of students and the "Personal Information Form" was used to collect personal information.

Healthy Lifestyle Behavior Scale

The Healthy Lifestyle Behavior Scale (HLBS) was developed by Walker et al. to test the Health Promotion Model suggested by Pender in 1987 (Esin, 1999). The scale measures behaviors which promote a healthy lifestyle and thus improve the individual's health. The scale was tested for validity and reliability in Turkey by Esin (1999) and used in a large number of studies (Esin, 1999). HLBS consists of 48 items and 6 subscales: self-actualization, health responsibility, exercise, nutrition, interpersonal support, and stress management. All 48 items in HLBS include positive statements. There is no reverse item in the scale. The suitable marks the statements given in the items in a four-point Likert scale calculated as "Never=1 point", "Sometimes=2 points", "Often=3 points", and "Regularly=4 points". The minimum score is 48 and the maximum score is 90. The application of the scale to the subject takes 8 to 10 minutes.

Data Analysis

The normality test is used to determine whether the data shows normal distribution or not. SPSS 21.0 was used for the normality test of the data. As suggested by Hair et al. (1995), the normality test was performed in three stages. The data was reviewed in terms of form in the first stage. The second stage involved checking skewness and kurtosis values. The Kolmogorov-Smirnov test was performed in the third stage. In the first stage of the normality test which included graphical examination, the data's minimum and maximum values, mean values, frequency and standard deviation values were calculated. Values obtained as a result of the graphical examination of the data including Histogram and Q-Q Plot graphs can be seen in Table 1.

Table 1: Measures of central tendency for Total Subscale Scores

	Self-Actualization	Health Responsibility	Exercise	Nutrition	Interpersonal Support	Stress Management
N	400	400	400	400	400	400
Mean	3,5856	3,3905	3,4485	3,4088	3,5062	3,4332
Median	3,7692	3,5000	3,6000	3,5000	3,5714	3,4286
Mode	3,77	3,50	3,60	3,50	3,57	3,43
Std. Deviation	,30978	,20607	,29148	,29442	,33476	,32731
Variance	,096	,042	,085	,087	,112	,107
Skewness	-2,626	-2,089	-2,434	-2,209	-3,548	-2,505
Kurtosis	7,674	6,519	5,926	7,841	15,117	8,177
Minimum	2,15	2,50	2,20	2,00	1,71	1,86
Maximum	3,85	3,90	3,80	4,00	4,00	4,00

According to Büyüköztürk (2011), it can be said that scores show normal distribution and parametric tests can be used if scores have similar arithmetic average, median, and mod values and skewness-kurtosis values fall within the range of -1 to +1. It was observed as a result of the normality test that the data did not show normal distribution and finally the results of the Kolmogorov-Smirnov test were examined. The results of the Kolmogorov-Smirnov test were found to be significant for all subscales. After the examinations, it was decided to use non-parametric statistical methods for analysis of the data. Healthy lifestyle behavior levels of faculty of sport science students were determined using the Healthy Lifestyle Behavior Scale and the scores were compared by different variables. The Mann-Whitney U test was used to investigate differences by gender. .05 was accepted as the statistical significance level.

FINDINGS

This section includes findings obtained from the analysis performed for the purposes of the study.

Table 2: Mann-Whitney U Test Results of Self-Actualization Scores by Gender

Self-actualization	Groups	N	Mean Rank	Sum of Ranks	U	z	P
	Female	236	236,56	55829,00	10841,000	24371,000	0.000
	Male	164	148,60	24371,00			

When the difference between Healthy Lifestyle Behavior Scale's self-actualization subscale scores of faculty of sport sciences students was examined by gender, female students were found to have a significantly higher average self-actualization score compared to male students ($p < 0.05$)

Table 3: Mann-Whitney U Test Results of Health Responsibility Scores by Gender

Health Responsibility	Groups	N	Mean Rank	Sum of Ranks	U	z	P
	Female	236	218,71	51615,50	15054,500	-4,207	0.000
	Male	164	174,30	28584,50			

When the difference between Healthy Lifestyle Behavior Scale's health responsibility subscale scores of faculty of sport sciences students was examined by gender, female students were found to have a significantly higher average health responsibility score compared to male students ($p < 0.05$)

Table 4: Mann-Whitney U Test Results of Exercise Scores by Gender

Exercise	Groups	<i>n</i>	Mean Rank	Sum of Ranks	<i>U</i>	<i>z</i>	<i>p</i>
	Female	236	215,91	50954,00	15716,000	-3,530	0.000
	Male	164	178,33	29246,00			

When the difference between Healthy Lifestyle Behavior Scale's exercise subscale scores of faculty of sport sciences students was examined by gender, female students were found to have a significantly higher average exercise score compared to male students ($p < 0.05$)

Table 5: Mann-Whitney U Test Results of Nutrition Scores by Gender

Nutrition	Groups	<i>n</i>	Mean Rank	Sum of Ranks	<i>U</i>	<i>z</i>	<i>p</i>
	Female	236	197,99	46724,50	18758,500	-,564	0.573
	Male	164	204,12	33475,50			

When the difference between Healthy Lifestyle Behavior Scale's nutrition subscale scores of faculty of sport sciences students was examined by gender, female students were found to have a significantly higher average nutrition score compared to male students ($p < 0.05$)

Table 6: Mann-Whitney U Test Results of Interpersonal Support Scores by Gender

Interpersonal Support	Groups	<i>n</i>	Mean Rank	Sum of Ranks	<i>U</i>	<i>z</i>	<i>p</i>
	Female	236	209,58	49461,00	17209,000	-1,956	0.050
	Male	164	187,43	30739,00			

When the difference between Healthy Lifestyle Behavior Scale's interpersonal support subscale scores of faculty of sport sciences students was examined by gender, female students were found to have a significantly higher average interpersonal support score compared to male students ($p < 0.05$)

Table 7: Mann-Whitney U Test Results of Stress Management Scores by Gender

Stress Management	Groups	<i>n</i>	Mean Rank	Sum of Ranks	<i>U</i>	<i>z</i>	<i>p</i>
	Female	236	223,94	52850,00	13820,000	-5,298	0.000
	Male	164	166,77	27350,00			

When the difference between Healthy Lifestyle Behavior Scale's stress management subscale scores of faculty of sport sciences students was examined by gender, female students were found to have a significantly higher average stress management score compared to male students ($p < 0.05$)

Table 8: Mann-Whitney U Test Results of Self-Actualization Scores by Exercise Status

Self-Actualization	Groups	<i>n</i>	Mean Rank	Sum of Ranks	<i>U</i>	<i>z</i>	<i>p</i>
	Athlete	315	222,45	70070,50	6474,500	-7,903	0.000
	Non Athlete	85	119,17	10129,50			

When the difference between Healthy Lifestyle Behavior Scale's self-actualization subscale scores of faculty of sport sciences students was examined by exercise status, students who exercised were found to have a significantly higher average self-actualization score compared to students who did not exercise ($p < 0.05$)

Table 9: Mann-Whitney U Test Results of Health Responsibility Scores by Exercise Status

Health Responsibility	Groups	<i>n</i>	Mean Rank	Sum of Ranks	<i>U</i>	<i>z</i>	<i>p</i>
	Athlete	315	216,86	68310,00	8235,000	-6,064	0.000
	Non Athlete	85	139,88	11890,00			

When the difference between Healthy Lifestyle Behavior Scale's health responsibility subscale scores of faculty of sport sciences students was examined by exercise status, students who exercised were found to have a significantly higher average health responsibility score compared to students who did not exercise ($p < 0.05$)

Table 10: Mann-Whitney U Test Results of Exercise Scores by Exercise Status

Exercise	Groups	<i>n</i>	Mean Rank	Sum of Ranks	<i>U</i>	<i>z</i>	<i>p</i>
	Athlete	315	215,31	67821,50	8723,500	-5,444	0.000
	Non Athlete	85	145,63	12378,50			

When the difference between Healthy Lifestyle Behavior Scale's exercise subscale scores of faculty of sport sciences students was examined by exercise status, students who exercised were found to have a significantly higher average exercise score compared to students who did not exercise ($p < 0.05$)

Table 11: Mann-Whitney U Test Results of Nutrition Scores by Exercise Status

Nutrition	Groups	<i>N</i>	Mean Rank	Sum of Ranks	<i>U</i>	<i>z</i>	<i>p</i>
	Athlete	315	224,29	70651,00	5894,000	-8,564	0.000
	Non Athlete	85	112,34	9549,00			

When the difference between Healthy Lifestyle Behavior Scale's nutrition subscale scores of faculty of sport sciences students was examined by exercise status, students who exercised were found to have a significantly higher average nutrition score compared to students who did not exercise ($p < 0.05$)

Table 12: Mann-Whitney U Test Results of Interpersonal Support Scores by Exercise Status

Interpersonal Support	Groups	<i>N</i>	Mean Rank	Sum of Ranks	<i>U</i>	<i>z</i>	<i>p</i>
	Athlete	315	219,30	69078,00	7467,000	-6,497	0.000
	Non Athlete	85	130,85	11122,00			

When the difference between Healthy Lifestyle Behavior Scale's interpersonal support subscale scores of faculty of sport sciences students was examined by exercise status, students who exercised were found to have a significantly higher average interpersonal support score compared to students who did not exercise ($p < 0.05$)

Table 13: Mann-Whitney U Test Results of Stress Management Scores by Exercise Status

Stress Management	Groups	<i>N</i>	Mean Rank	Sum of Ranks	<i>U</i>	<i>z</i>	<i>p</i>
	Athlete	315	214,12	67446,50	9098,500	-4,938	0.000
	Non Athlete	85	150,04	12753,50			

When the difference between Healthy Lifestyle Behavior Scale's stress management subscale scores of faculty of sport sciences students was examined by exercise status, students who exercised were found to have a significantly higher average stress management score compared to students who did not exercise ($p < 0.05$)

CONCLUSIONS

Research findings showed a statistically significant difference between male and female participants in self-actualization, health responsibility, exercise, nutrition, interpersonal support, and stress management subscales of the Healthy Lifestyle Behavior Scale. Average values were higher in favor of female participants in all subscales except for nutrition. Findings showed a higher average score in the nutrition subscale for male participants. While there are research reports which support our findings in the relevant literature, there are also studies with opposing findings. Kaya et al. (2008) conducted a study with faculty members and did not find a significant difference between male and female participants in terms of healthy lifestyle behaviors. Therefore, findings obtained by Kaya et al. (2008) do not support our findings. Another similar study was conducted by Cihangiroğlu and Deveci (2011) with university students. The findings of Cihangiroğlu and Deveci (2011) are not consistent with our findings as well. Considering the exercise subdimension, the data from 20 years ago reports that two third of the young population in Turkey do not have sufficient physical activity and physical activity is higher among women (Ersoy, 1995). Also, findings of the studies conducted by Walker et al. (1987) and Akça (1998) suggest that women have higher physical activity compared to men as well, which are consistent with our findings. Considering the nutrition subdimension, the literature contains findings which support those of the present study, as well as opposing findings. Pasinoğlu and Gözüm (1998) reported that women had a significantly higher average nutrition score compared to men. This finding is not consistent with our results. However, findings obtained in the study conducted by Yıldırım (2005) are consistent with our findings.

Research findings showed a statistically significant difference by exercise status variable in self-actualization, health responsibility, exercise, nutrition, interpersonal support, and stress management subscales of the Healthy Lifestyle Behavior Scale. Participants who exercised had higher average values in all subscales compared to participants who did not exercise. These findings are consistent with findings in the relevant literature. The youth period which covers 17 years of age and above coincides with university years and is of great importance. University is a period where significant changes happen in an individual's life (22). On one hand, the individual is separated from his family for the first time, joins a new educational environment, and goes through a new period of transition, which may lead to negative behavior. On the other hand, there may also be changes in health behaviors of the individual in addition to professional training and changes in personal life. These changes are important for attitudes and behaviors related to health. In this period, young individuals may adopt behavior patterns which improve their health or gain negative health behaviors which harm both themselves and others around them. Health-related attitudes and behaviors of the young individual affect himself in specific and his family and the society in general (McKay and Diem, 1995; Eguchi et al., 2012).

In line with these results, it can be said that faculty of sport sciences students who do not exercise are not at the same level with those who exercise in terms of protection and promotion of health. As a result of this study, it is believed that it is necessary to create and implement educational programs related to healthy lifestyle behaviors, which will encourage faculty of sport sciences who do not exercise to adopt healthy lifestyle behaviors.

Authors' Disclosures of Potential Conflicts of Interest

The authors indicated no potential conflicts of interest.

Footnotes

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INVESTIGATION OF PRESERVICE ELEMENTARY TEACHERS' OPINIONS ON SCIENCE FICTION FILMS

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ABSTRACT

In this research, opinions of preservice elementary teachers on science fiction films are investigated in terms of gender, academic success and department. The survey research method was used in this study. In this descriptive study, a relational screening model was used from survey method to determine the current situation. The relational screening model is a type of research model that aims to determine whether there is a relationship between two or more variables and to determine the degree of the relationship. Likert type attitude scale developed by Çemrek et al (2005) was used for gathering data in this research. The data were gathered from 142 students at the department of elementary science teacher and classroom teacher education at Hacettepe University during the 2014-2015 academic year. The collected data has been analyzed and interpreted with the help of SPSS statistical programme and recommendations were given in the light of results gathered at the end of this analysis.

Key Words: Science fiction film, preservice teacher, elementary education.

INTRODUCTION

Individuals have been thinking about how humanity can create a future in a long period of time, as well as how their personal future will be, what kind of life will be encountered or what kind of life can be created (Ekem, 1990). As a result of rapid advances in science and technology, the thoughts of mankind about future are shaped. In the formation of these thoughts, the contribution of science-fiction cannot be ignored sometimes at the point of providing a basis for the next thought and sometimes applying it. The famous science-fiction writer Arthur C. Clarke asserts that "The spread of science-fiction is useful for the future of mankind" (cited: Ekem, 1992).

Orhan Duru, who created the science-fiction concept in Turkish Literature, emphasizes that science-fiction is "a phenomenon of our time" as well as not only the extraordinary scientific and technical developments in the emergence of science-fiction, but also the fact that people are devoted to the dream, extraordinary and extrinsic events as well (Reyhanoğulları, 2012). Zılhoğlu (1986) also describes science-fiction as the symbolic communication of what might be happened, occurred, lived in the open or implicit future.

By looking at the definitions of science-fiction, we can see that science-fiction can be in the service of mankind and potentially used for educational purpose. First of all, science-fiction starts and maintains its subjects in a scientific way. Science-fiction films also convey these scientific events in an audiovisual appeal (Ekem, 1992).

When we examine the historical development of science-fiction films, we can see that they are shaped according to the characteristics of the period. For example, until the 19th century, science-fiction films have dealt with current events in ways that might be possible in the future. In the following years, science-fiction films have shown that science can be used not only for the benefit of people, but also for warlike purposes. Several science-fiction films were made full of artificial people, pessimistic themes and monsters. After 1950s, we see more science-fiction films for military purposes. After the 1960s, as a result of the developments in scientific research and technology science-fiction films have become worthy of the name keeping pace with developments in cinematography (Ekem, 1992).

Ekem (1992) states some of the factors that make science-fiction films attractive are as follows; the existence of science, the existence of unreal science, the process of the future, the idea of technological products in the future, the process of good and bad concepts, appeal to individual's imagination, the effective power of cinema, ambient conditions. It can be said that the content of science-fiction films may be appropriate to the nature of science,

especially in terms of the existence of science, the process of the future, and the idea of technological products in the future. Especially in science and mathematics, imagination can be used effectively in problem solving and in spatial thinking. In this context, it should be considered the fact that science-fiction films can make possible to gain this mentality in science and mathematics (Balbağ, Yenilmez and Turgut, 2012). The functions of science-fiction films in science education and teaching are collected under three titles. These are; the effect on students' attitudes towards science, the effect of improving students' personalities, the ability to give concrete examples to some scientific issues (Ekem, 1991). When the literature is reviewed, Ekem (1990) found that science-fiction films have a positive effect on the attitudes of university students towards science. In the research conducted by Çemrek et al., it is seen that the reflection of science-fiction films on the success of the teacher candidates in the science courses is seen as positive (Çemrek et al. , 2005).

For this purpose, in this research, it was aimed to compare the views of science and classroom teacher candidates towards science fiction films in terms of gender, academic achievement, and department.

Research questions:

1. What are the views of science and classroom teacher candidates on science fiction films?
2. Are the views of science and classroom teacher candidates on science fiction films differentiated by department?
3. Are the views of science and classroom teacher candidates on science fiction films differentiated by gender?
4. Are the views of Science Teachers and Classroom Teachers towards science fiction films differentiated by academic success?

THE STUDY

The research was conducted as a relational screening model study, since it aims to determine the current situation. The screening model aims to describe the current situation as it is. The individual, object or event that subject to the research is tried to be defined without the aim of changing in its own conditions (Karasar, 2004).

The research was conducted with (133) science teacher candidates and (100) classroom teacher candidates who were studying at the undergraduate program of Science and Classroom Teaching at a state university in Ankara in the 2014-2015 academic year. The information for the study group is presented in Table 1.

In the research, personal information form and a questionnaire for science-fiction films were used. Information about gender and academic averages of the teacher candidates were obtained with the personal information form. The questionnaire for science-fiction films is a 5-point likert type measurement tool developed by Çemrek et al. (2005). In the research, the reliability (Cronbach Alpha) coefficient of the opinion questionnaire for science-fiction films was 0.95.

Table 1. Demographic Information of the participants

variables		n	%
department	Science teacher	133	57,1
	Classroom teacher	100	42,9
gender	Female	182	78,1
	Male	51	21,9
gpa (grade point average)	0-1,99	9	3,9
	2-2,49	30	12,9
	2,5-2,99	105	45,1
	3-3,49	77	33,0
	3,5-3,99	12	5,2
grade	1 st grade	52	22,3
	2 nd grade	91	39,1
	3 rd grade	53	22,7

4th grade

37

15,9

When Table 1 was examined, 57.1% of the participants in the survey were "Science Teacher Education" and 42.9% of them were "Primary Teacher Education" students. 78.1% of the participants were female and 21.9% were male. Looking at the academic average, it is seen that the majority of the teacher candidates have an academic average of 2.5-2.99% with 45.1%. In terms of their grade the distribution is as follows; first grade is 22,3%, second grade is 39,1%, third grade is 22,7% and fourth grade is 15,9%.

FINDINGS

Shaphiro Wilk test was used for the normal distribution fitness of continuous variables to determine the opinions of science teachers and classroom teacher candidates about science-fiction films. The t-test used for comparison of two groups with normal distribution and One-way ANOVA and LSD multiple comparison tests used for comparison in more than two groups. Cronbach Alpha coefficients were calculated for reliability of the scale. SPSS for Windows version 24.0 package program was used for statistical analysis and $P < 0.05$ was accepted as statistically significant. The below mentioned tables include information about findings.

Table 2. Science and Classroom Teacher candidates' opinions on Science-Fiction films score t-Test results by department

Department	N	\bar{X}	sd	t	P
Science teaching	133	98,9474	31,01522	-1,381	0,169
Classroom teaching	100	104,1300	24,34128		
Total	233	101,1717	28,40343		

There was no significant difference in science and classroom teacher candidates' opinions on science fiction films when compared to the scale total scores in terms of department ($P = 0,169$). In this context, it can be said that science and classroom teacher candidates have similar views on science fiction films.

Table 3. Science and Classroom Teacher candidates' opinions on Science-Fiction films score t-Test results by gender

Gender	N	\bar{X}	sd	t	P
Female	182	100,9560	28,77726	-0,218	0,827
Male	51	101,9412	27,28986		
Total	233	101,1717	28,40343		

There was no significant difference in science and classroom teacher candidates' opinions on science fiction films when compared to the scale total scores in terms of gender ($P = 0,827$). In this context, it can be said that female and male teacher candidates have similar views on science fiction films.

Table 4. One-Way analysis of variance (ANOVA) results of Science and Classroom Teacher candidates' opinions on Science-Fiction films score by grade level

Grades	N	\bar{X}	sd	F	P
1 st grade	52	90,55	28,63	3,435	0,018
2 nd grade	91	105,81	24,11		

3 rd grade	53	101,96	33,20
4 th grade	37	103,54	27,69
Total	233	101,17	28,40

According to the one-way analysis of variance (ANOVA) results of Science and Classroom Teacher candidates' opinions on Science-Fiction films score by grade level, there was a significant difference in the total scores between the grades ($P=0,018$). Subgroup differences were tested by the LSD test and are given in Table 5. The scores of the students in the first grade were statistically significantly lower than the other grades. No, significant differences were observed between the other classes.

Table 5. LSD test results

(I) grade	(J) grade	mean difference (I-J)	P
1	2	-15,25*	0,002
	3	-11,40*	0,038
	4	-12,98*	0,032
2	1	15,25*	0,002
	3	3,85	0,426
	4	2,27	0,677
3	1	11,40*	0,038
	2	-3,85	0,426
	4	-1,57	0,792

Table 6. One-Way analysis of variance (ANOVA) results of Science and Classroom Teacher candidates' opinions on Science-Fiction films score by grade point average

Average groups	N	\bar{X}	sd	F	P
0-1,99	9	90,56	24,75	0,594	0,668
2-2,49	30	105,47	31,97		
2,5-2,99	105	101,23	28,46		
3-3,49	77	101,51	28,42		
3,5-3,99	12	95,75	21,41		
Total	233	101,17	28,40		

With the reason of the lack of frequency in the groups, 0-1,99 and 2-2,5 groups were combined and 3,5,3,99 and 3-3,49 groups were combined and the analyzes were repeated.

Table 7. One-Way analysis of variance (ANOVA) results of Science and Classroom Teacher candidates' opinions on Science-Fiction films score by grade point average (repeated)

Average groups	N	\bar{X}	sd	F	P
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0-2,49	39	102,03	30,81	0,028	0,972
2,5-2,99	105	101,23	28,46		
3-3,99	89	100,73	27,55		
Total	233	101,17	28,40		

Analysis of science and classroom teacher candidates' opinions on science-fiction films by grade point averages did not show any significant difference in mean scores between the groups in terms of scale scores ($P = 0.972$).

CONCLUSIONS

In this study of Science and Classroom Teacher candidates' opinions on science-fiction films, the following results were obtained: Science and Classroom Teacher candidates' opinions on science-fiction films seem to be similar and positive. Balbağ, Yenilmez and Turgut (2012) have found that the views of science and elementary mathematics teacher candidates' opinions on science-fiction films are generally positive. Science and Classroom Teacher candidates' opinions on science-fiction films differ in terms of their grade levels. The scores of the students in the first grade were statistically significantly lower than the other grades. No significant differences were observed between the other classes. Science and Classroom Teacher candidates' opinions on science-fiction films do not change in terms of grade point average. Studies can also be conducted with different teacher candidates for science fiction films.

When examined in the literature; It is noteworthy that science-fiction films can influence students' understanding of science and their ideas. Barnett, Wagner, Gatling, Anderson, Houle, and Kafka (2006) argue that science fiction films can have a major impact on student ideas and the conceptual understanding of scientific concepts, have a significant impact on students' scientific ideas and so they emphasized teachers and science educators should be aware of the ideas presented in science-fiction films may also be an important source of some misconception for the students. In the future studies, the effects of science fiction films on primary school students' learning the concept of science and the effects of overcoming the problem of misconceptions about science may be examined.

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INVESTIGATION OF RELATIONSHIP BETWEEN FACTORS HINDERING THE PARTICIPATION OF UNIVERSITY STUDENTS IN RECREATIONAL ACTIVITIES AND THEIR LEISURE MOTIVATIONS LEVELS

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ABSTRACT

The aim of this study is to examine the association between factors hindering the participation of university students in recreational activities and their leisure motivations. The students (800) of the Erciyes University in 2014-2015 academic year became involved voluntarily in the research. The volunteers participating in the research filled the socio-demographic information form including their personal information; then, "Leisure Barriers Scale" and "Leisure Motivation Scale" were applied to them. The package statistics program of IBM SPSS (Statistical Package for the Social Sciences) 20 was employed in analyzing the data. The arithmetic mean and standard deviation of scores the university students got from the scales of Leisure Barriers and Leisure Motivation were presented as $X \pm SS$. In order to disclose the relationship between the data obtained from two scales, Pearson Product-Moment Correlation Analysis was applied. The significance level was accepted as $p < 0.05$. In conclusion, it was found that the leisure motivations and the participation in recreational activities of students are at middle level. It was detected that there is a positive significant correlation among the sub-dimensions of leisure motivations and barriers. University students should benefit from recreational activities during the time left from their studies and from the time spent for vital needs, in order to solve material and moral problems, socialize, enhance and share cultural and knowledge accumulation, and be healthy physically, spiritually, and mentally. Thereby, students would achieve success more easily in socio-cultural and professional life. For this reason, universities should arrange the recreational areas such as cultural, artistic, sportive ones, and multiply the recreational activities in line with students' needs.

Keywords: University Students, Leisure Barriers, Leisure Motivation

INTRODUCTION AND PURPOSE

In the process of transition from individuality to sociality, an individual coexists with the largest communities in the studentship period. The period in which the transition occurs with more logical and conscious choices is that of university education, as it was considered to be the development period. Some habits adopted during the period in which individuals, that become distanced from their family in the course of university education, make new friend groups and acquire new tendencies would affect in a negative or positive way the whole life quality of these individuals. Students may not use effectively and efficiently their leisure time, get into bad habits, and display irresponsible behaviors by being influenced by friends, friend groups, and social environment (1). Although the attendance of university youth at recreational activities has increased in recent years by virtue of the improvement of university campuses and the endeavor of university administrations on this issue, it remains still inadequate at a lot of university. The latest rise in the number of universities has a substantial impact on this situation. On the other hand, the number of educated individuals multiplies. In this context, as the philosophy of recreation is comprehended better, it is unavoidable that individuals would demonstrate themselves in a more active manner both at their social and professional life. (2) For this reason, the required effort, planning, and programming should be made. Hence, the aim of this study is to assess the participation level of university students in recreational activities, to assist and contribute to regenerate the recreational activities in universities, to figure out how university students spend their leisure time, to make a contribution to the studies conducted in this field, and to identify the organizations students participate in or select. (3) The review of the literature reveals that there are some studies investigating the attendance of university students at recreational activities (4, 5, 6) and the leisure barriers (7, 8). However, any study examining simultaneously the attendance of university

students at recreational activities and the leisure barriers does not exist. It is considered that the university period which holds a crucial part of lifespan is worthy of being dwelled on and being made research on. The purpose of this study is to examine the relationship between the leisure motivations and the participation of university students in recreational activities.

MATERIAL AND METHOD

Establishment of Volunteer Groups

The universe of the study comprises of 3954 students studying at the department of Physical Education and Sports, and the faculties of Fine Arts, Medicine, Education, Law, and Arts and Sciences in the Erciyes University.

The sample of the study consists of 800 volunteer students, in total, studying at the department of Physical Education and Sports (201), and the faculties of Fine Arts (199), Medicine (100), Education (100), Law (100), and Arts and Sciences (100) in the Erciyes University.

Data Collection Techniques

Personal Information Form:

The volunteers participating in the research were demanded to fill the personal information form comprising of three questions about age, sex, and the department of participants.

Table1. Descriptive Statistics on Participants

Variable		n	%
Age	18-21	410	51.25
	22-25	317	39.62
	26-29	73	9.13
Total		800	100
Gender	Female	461	57.62
	Male	339	42.38
Total		800	100
Department	Physical Education and Sports College	201	25.13
	Fine Arts	199	24.87
	Faculty of Education	100	12.5
	Faculty of Medicine	100	12.5
	Faculty of Law	100	12.5
	Faculty of Arts and Sciences	100	12.5
Total		800	100

Leisure Barriers Scale

In the research, “The Leisure Barriers Scale,” which evaluates the factors hindering university students to participate in recreational activities and was developed by Gürbüz and Karaküçük, was employed. A scale with 27 items, evaluating the factors which prevent the involvement in recreational activities, takes place. The four point Likert-type rating scale was used. For each question, the options of 1: “Absolutely not”, 2: “Unimportant”, 3: “Important”, 4: “Very important” were offered, and the research group was asked to mark the option closest to their opinion. The Leisure Barriers Scale is split into 6 sub-dimensions. The first sub-dimension (individual psychology) is composed of the items 1, 2, 3, and 4; the second one (lack of knowledge) of the items 5, 6, 7, 8, and 9; the third one (facilities/services) of the items 10, 11, 12, 13, 14, 15, 16, and 17; the fourth one (lack of friends) of the items 18, 19, and 20; the fifth one (time) of the items 21, 22, 23, and 24; the sixth sub-dimension (lack of interest) of the items 25, 26, and 27 (9).

Leisure Motivation Scale

The Leisure Motivation Scale (LMS) was developed by Pelletier, Vallerand, Blais, and Briere. The scale, which involves the factors motivating individuals to participate in recreational activities, consists of 7 sub-dimensions, that are (1) to know (intrinsic motivation), (2) to accomplish things (intrinsic motivation), (3) to experience stimulation (intrinsic motivation), (4) to identify (extrinsic motivation), (5) introjection (extrinsic motivation), (6) external regulation (extrinsic motivation), (7) amotivation, and of 28 items. The seven point Likert-type scale ranges from “Strongly disagree (1)” to “Strongly agree (7)”. The reliability and validity of the scale in Turkish was established by Mutlu in 2008. The scale’s form in Turkish is composed of 22 items and of 5 sub-dimensions

that are (1) amotivation, (2) to know and accomplish things, (3) to experience stimulation, (4) identification/introjection and (5) external regulation. The scale is five point Likert-type (Strongly Disagree is 1 point, Disagree 2 points, Partly Agree 3 points, Agree 4 points, Strongly Disagree 5 points). The amotivation sub-dimension is comprised of the questions 5, 12, and 19; the sub-dimension of knowing and accomplishing things of the questions 6, 9, 13, 16 and 20; the sub-dimension of experiencing stimulation of the questions 11 and 18; the identification/introjection sub-dimension of the questions 10, 14, 17, and 21; the external regulation sub-dimension of the questions 1, 8, 15, and 22. The total internal consistency coefficient of scale is .77 (10).

Data Analysis

The package statistics program of IBM SPSS (Statistical Package for the Social Sciences) 20 was employed in analyzing the data. The arithmetic mean and standard deviation of the scores, that university students got from the scales of Leisure Barriers and Leisure Motivation, was presented as $X \pm SS$. Pearson Moment-Product Correlation Analysis was applied in order to disclose the association between the data obtained from these two scales. The significance level was accepted as $p < 0.05$

RESULTS

Table 2. Descriptive Statistics of the Participants' Scores at Surveys

		N	Min	Max	$X \pm SD$
Leisure Motivation	Amotivation	800	3	15	10.64±2.52
	To Know and Accomplish Things	800	5	74	17.58±4.24
	To Experience Stimulation	800	2	10	5.43±2.00
	Introjection	800	4	20	13.15±2.92
	External Regulation	800	4	20	10.86±2.58
Leisure Barriers	Individual Psychology	800	4	16	10.07±2.82
	Lack of Knowledge	800	5	20	13.71±3.51
	Facilities/Services	800	8	32	23.28±4.66
	Lack of Friends	800	3	12	7.72±2.28
	Time	800	4	16	10.97±2.45
	Lack of Interest	800	3	12	7.37±2.24

In the present study, as the Leisure Motivation inventory scores of university students was examined, it was found that the amotivation dimension is 10.64±2.52, the dimension of knowing and accomplishing things 17.58±4.24, the dimension of experiencing stimulation 5.43±2.00, the introjection dimension 13.15±2.92, and the external regulation 10.86±2.58.

The investigation of Leisure Barriers inventory scores uncovers that the Individual Psychology dimension is 10.07±2.82, the Lack of Knowledge dimension 13.71±3.51, the Facilities/ services dimension 23.28±4.66, the Lack of Friends dimension 7.72±2.28, the Time dimension 10.97±2.45, and the Lack of Interest dimension 7.37±2.24 (Table 2).

Table 3. Correlation between Leisure Motivations and Barriers of University Students

		1	2	3	4	5	6	7	8	9	10	11
1.Amotivation	r	1										
	p											
2.To Know and Accomplish Things	r	.655**	1									
	p	.000										
3.Stimulation	r	.179**	.202**	1								
	p	.000	.000									
4.Introjection	r	.502**	.574**	.390**	1							
	p	.000	.000	.000								
5.External Regulation	r	.032	.072*	.304**	.301**	1						
	p	.365	.043	.000	.000							
6.Individual Psychology	r	.128**	.079*	.099**	.083*	.135**	1					
	p	.000	.025	.005	.019	.000						
7.Lack of Information	r	.120**	.122**	.215**	.122**	.136**	.430**	1				
	p	.001	.001	.000	.001	.000	.000					
8.Facilities	r	.271**	.221**	.101**	.195**	.097**	.228**	.334**	1			
	p	.000	.000	.004	.000	.006	.000	.000				
9.Lack of Friends	r	-.007	.032	.173**	.081*	.197**	.120**	.211**	.260**	1		
	p	.840	.362	.000	.022	.000	.001	.000	.000			
10.Time	r	.156**	.113**	.108**	.112**	.135**	.340**	.336**	.348**	.296**	1	
	p	.000	.001	.002	.001	.000	.000	.000	.000	.000		
11.Lack of Interest	r	-.004	.030	.158**	.067	.252**	.300**	.319**	.205**	.248**	.372**	
	p	.904	.392	.000	.058	.000	.000	.000	.000	.000	.000	

As Table 3 was examined, while any significant correlation was not found between the amotivation dimension of leisure motivation, and lack of friends ($r = -.007$, $p = .840$) and lack of interest ($r = -.004$, $p = .904$) within leisure barriers, the positive significant correlation of the former dimension with individual psychology ($r = .128$, $p = .000$), lack of knowledge ($r = .120$, $p = .001$), facilities ($r = .271$, $p = .000$), and time ($r = .156$, $p = .000$) was identified. As any significant association was not detected between the dimension of knowing and accomplishing things, and lack of friends ($r = .032$, $p = .362$) and lack of interest ($r = .030$, $p = .392$) within leisure barriers, the positive significant correlation of the former dimension with individual psychology ($r = .079$, $p = .025$), lack of knowledge ($r = .122$, $p = .001$), facilities ($r = .221$, $p = .000$), and time ($r = .113$, $p = .001$) was found. A positive correlation between the stimulation dimension of leisure motivation, and individual psychology ($r = .099$, $p = .005$), lack of knowledge ($r = .215$, $p = .000$), facilities ($r = .101$, $p = .004$), lack of friends ($r = .173$, $p = .000$), time ($r = .108$, $p = .002$), and lack of interest ($r = .158$, $p = .000$) was observed. While any significant correlation was not found between the introjection dimension of leisure motivation, and lack of interest ($r = .067$, $p = .058$) within leisure barriers, the positive significant correlation of the former dimension with individual psychology ($r = .083$, $p = .019$), lack of knowledge ($r = .122$, $p = .001$), facilities ($r = .195$, $p = .000$), lack of friends ($r = .081$, $p = .022$), and time ($r = .112$, $p = .001$) was observed. A positive correlation between the external regulation dimension of leisure motivation and individual psychology ($r = .135$, $p = .000$), lack of knowledge ($r = .136$, $p = .000$), facilities ($r = .097$, $p = .006$), lack of friends ($r = .197$, $p = .000$), time ($r = .135$, $p = .000$), and lack of interest ($r = .252$, $p = .000$) was identified.

CONCLUSION

Time is the thing, every instance of which today's human plans desires to live through fully, and according to which today's human adjusts himself. Time is the life itself and should be made meaningful. In 21st century, the industrial and technological improvements, the domination of machine over humankind, and the enhancement in welfare level have led to increase in people's interest in leisure (11).

Although recreational activities are important for individuals at their every age to rest and be happy, the behaviors acquired through recreational activities during university period are more important for individuals. In the present study, it is aimed to investigate the university students' participation in recreational activities and the barriers to this participation.

For the Leisure Motivation of university students, it was observed that the amotivation dimension is 10.64 ± 2.52 , the dimension of knowing and accomplishing things 17.58 ± 4.24 , the dimension of experiencing the stimulation 5.43 ± 2.00 , the introjection dimension 13.15 ± 2.92 , and the external regulation 10.86 ± 2.58 (Table 2). In Kaya's study on leisure motivations of university students, the amotivation dimension was found as 10.81 ± 2.56 , the

dimension of knowing and accomplishing things as 17.10 ± 3.79 , the dimension of experiencing the stimulation as 4.77 ± 1.91 , the introjection dimension as 12.64 ± 3.37 , and the external regulation as 9.99 ± 2.52 (1). In the light of this study and the information offered by literature, it can be claimed that students' leisure motivations are at middle level.

Leisure motivation is an individual taking action voluntarily in order to achieve an aim. However, reaching a certain motivation level by means of stimulations or motives has an important role for an individual participating in recreational activities, or overcoming the barriers (12).

Yet, the fact that leisure motivations of university students are at middle level is a puzzling finding. In fact, university students that would comprise the society in future are expected to use their leisure time efficiently.

As the Leisure Barriers inventory scores were investigated, it was identified that the Individual Psychology dimension is 10.07 ± 2.82 , the Lack of Knowledge dimension 13.71 ± 3.51 , the Facilities/ services dimension 23.28 ± 4.66 , the Lack of Friends dimension 7.72 ± 2.28 , the Time dimension 10.97 ± 2.45 , and the Lack of Interest dimension 7.37 ± 2.24 (Table 2). Bulut and Koçak reported in their study that the facility factor ($X = 3.10 \pm 0.624$) is the first among the barriers to university students' participation in recreational activities and it is followed by "lack of knowledge" ($X = 3.10 \pm 0.62$), "individual psychology" ($X = 6.61 \pm 0.62$), "time" ($X = 2.58 \pm 0.64$), "lack of friends" ($X = 2.30 \pm 0.63$), and "lack of interest" ($X = 2.22 \pm 0.73$) respectively. In this study, university students' barriers to participate in recreational activities were found higher.

As any significant correlation was not found between the amotivation dimension of leisure motivation, and lack of friends ($r = -.007$, $p = .840$) and lack of interest ($r = -.004$, $p = .904$) within leisure barriers, the positive significant correlation of the former dimension with individual psychology ($r = .128$, $p = .000$), lack of knowledge ($r = .120$, $p = .001$), facilities ($r = .271$, $p = .000$), and time ($r = .156$, $p = .000$) was identified. As any significant association was not detected between the dimension of knowing and accomplishing things, and lack of friends ($r = .032$, $p = .362$) and lack of interest ($r = .030$, $p = .392$) within leisure barriers, the positive significant correlation of the former dimension with individual psychology ($r = .079$, $p = .025$), lack of knowledge ($r = .122$, $p = .001$), facilities ($r = .221$, $p = .000$), and time ($r = .113$, $p = .001$) was found. A positive correlation between the stimulation dimension of leisure motivation, and individual psychology ($r = .099$, $p = .005$), lack of knowledge ($r = .215$, $p = .000$), facilities ($r = .101$, $p = .004$), lack of friends ($r = .173$, $p = .000$), time ($r = .108$, $p = .002$), and lack of interest ($r = .158$, $p = .000$) was observed. While any significant correlation was not found between the introjection dimension of leisure motivation, and lack of interest ($r = .067$, $p = .058$) within leisure barriers, the positive significant correlation of the former dimension with individual psychology ($r = .083$, $p = .019$), lack of knowledge ($r = .122$, $p = .001$), facilities ($r = .195$, $p = .000$), lack of friends ($r = .081$, $p = .022$), and time ($r = .112$, $p = .001$) was observed. A positive correlation between the external regulation dimension of leisure motivation and individual psychology ($r = .135$, $p = .000$), lack of knowledge ($r = .136$, $p = .000$), facilities ($r = .097$, $p = .006$), lack of friends ($r = .197$, $p = .000$), time ($r = .135$, $p = .000$), and lack of interest ($r = .252$, $p = .000$) was identified (Table 3).

Gradually increasing importance of time discloses the significance of time out of work time, the leisure time, and the requirement of the latter's effective use. The fact that working and other activities involve majorly boring and repeated efforts makes recreational activities an essential part of our life and a renewal instrument (5).

In conclusion, leisure motivation of students is at middle level and their leisure barriers are high. An association was identified between leisure motivations of university students and the barriers' sub-dimensions. University students should benefit from recreational activities during the time left from their studies and from the time spent for vital needs, in order to solve material and moral problems, socialize, enhance and share cultural and knowledge accumulation, and be healthy physically, spiritually, and mentally. Thereby, students would achieve success more easily in socio-cultural and professional life. For this reason, universities should arrange the recreational areas such as cultural, artistic, sportive ones, and multiply the recreational activities in line with students' needs.

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SUGGESTIONS

- The present state of recreational areas in university campuses should be identified and their usage conditions should be improved.
- The number of recreational areas in university campuses should be multiplied.

- Studies should be carried out in order to enhance university students' knowledge and interest in recreational activities.
- Any factor impeding the usage of recreational areas in university campuses should be eliminated.
- A unit related to recreational activities should be created within Departments of Health, Culture, and Sport of universities.
- Various participant groups can be involved in researches.

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Investigation of Teacher Opinions on Measurement Tools Used to Evaluate Listening/Monitoring Skills*

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ABSTRACT

In this study, the answer is searched for whether secondary school Turkish lessons about the measurement tools used in assessing listening ability are consistent with the objectives and achievements of Primary School Turkish Teaching Program with the opinions of teachers. Assessment is one of the dimensions of Turkish teaching program. Measuring is the process of determining the degree of having a certain feature. Assessment is the process of reaching a value judgment by comparing the measurement results to a criterion or criterions. The assessment can be categorized according to the time, the goal and the measure used. The purpose of evaluating the teaching process is the evaluation of teaching and the determination of learning deficiencies. In order to evaluate teaching, tests for monitoring, student product files, performance assignments, etc. are used. Check lists, peer assessment form, self-assessment form, observation forms, etc. are used to determine the extent and manner of learning in the process. The method of work is qualitative research; In the scope of the study, eight secondary school teachers were interviewed and their experiences, attitudes, thoughts, intentions, interpretations, mental perceptions and reactions about the measurement instruments they used were revealed. Findings are digitized as much as possible and also supported by a chart. The results obtained with findings were discussed in the context of the literature and suggestions were presented.

Keywords: *Listening, Measurement, Evaluation, Measurement Tools*

INTRODUCTION

Language is a natural means of communicating among people and taking part in all learning activities. Language is a multi-faceted entity related to all fields such as science, art, and technology that can't be considered separately from people and society, and constitutes them at the same time (Aksan, 1979: 11; Aksan, 2003: 28). Language consists of skills of reading, listening based on understanding, speaking, writing and understanding.(Kavcar, Oğuzkan, Sever, 1995: 56). Language acquisition and education develop in a certain period. The aim of Turkish teaching is to develop the understanding and speaking power of the people by using appropriate methods and techniques of language rules. Listening / monitoring is one of the basic ways of communicating and learning (Aktaş & Gündüz, 2010: 87), and is the ability to understand, interpret and evaluate the given message correctly. According to the research, people listen to the sum of the time they spend talking, reading and writing (Akyol, 2006: 2006). The widespread use of audiovisual instruments and their use in education require effective listening / monitoring training. Listening is mentioned in the West as listening the neglected skill, listening: the forgotten skill. The situation in our country is no better than this (Çifçi, 2001: 165-177). Various factors (Dogan, 2011: 16-17) play a role in neglect and insensitivity of listening First, listening is naturally developing; so it is not necessary to focus on the subject in order to teach to listen. Second, the curriculum is very intensive; there is no time to listen/ monitor.Third, listening can not be taught, even if taught it can not be evaluated. Assessing and evaluating listening is nearly impossible because it is invisible (Kingen, 2010:276). However, researches have not confirmed the view that language develops itself spontaneously, can not be taught, and can not be evaluated even if it is taught.

One of the most important items of education and training activities is evaluation. According to Özçelik (1998: 6), the reasons for measuring school learning vary. These causes can be grouped into four groups: 1. Determining the readiness of the students, 2. Selecting the real targets, 3. Monitoring the learning activities in the unit, 4. Determining accessibility. Evaluation is aimed to demonstrate whether the system is functioning correctly or not, and to ensure that the deficiencies in the system are completed and the mistakes are corrected (MEB, 2006: 214). The assessment can be categorized according to the time, the goal and the measure used. Evaluation in the teaching process is done for two purposes. These are evaluation of teaching and determination of learning deficiencies. In order to evaluate teaching, tests for monitoring, student product files, performance assignments, etc. are used. In addition, check lists, peer assessment form, self-assessment form, observation

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forms, etc. are used to determine the extent and manner of the learning in the process. available. Within the learning process, the evaluation made to better observe and evaluate the students is called "process evaluation". There are four reason for the remarkable alternative assessment: (1) concern about the negative impact of the use of standardized tests in minimum competency testing, (2) dissatisfaction with existing psychometric models, (3) the belief in a constructivist learning, and (4) the belief that the primary purpose of public schools is the promotion of social justice (Cunningham, 2005:123).

Traditional measuring instruments which are used by most of the teachers in the education process, which is a single correct answer such as multiple choice, short answer, fill in the blanks, true false questions (Bahar, Nartgün, Durmuş & Bıçak, 2015:25, 48) are inadequate in identifying high-level mental processes such as problem solving, reading comprehension, critical thinking, analytical thinking, creativity (Başol, 2016: 67, Brookhart, 2010: 3). The inadequacy of the traditional assessment system and its failure to assess has caused various problems in the education system. New evaluation approaches have come to the fore in order to solve these problems and create a better evaluation system. This understanding focuses more on the learning process and evaluation of the various skills of the students and also takes into consideration the of the s process of the product as well (Güneş, 2013: 307), thus determining the extent to which the students achieve the predicted gains in the school programs. new evaluation methods are used. At the same time, this evaluation methods requires more real-life and student-centered complementary measurement tools such as scoring rubric and self assesment, peer assesment, group assesment etc. In according Russell & Airassian (2008:206), many factors account for the growing popularity of performance assessment. First, performance assessment is being proposed or mandated as part of formal statewide assessment programs. Second, increased classroom emphasis on problem solving, higher level thinking, and real-world reasoning skills has increased the value of performance and product assessment to demonstrate student learning. Third, performance assessments can provide some students who do poorly on selection-type tests an oppurtunity to Show their achievement in alternative ways.

Related studies:

The study of Yiğit & Kırımlı (2014) named "Turkish teachers' methods of application of complementary assessment and assessment methods and problems in practice" examines the applications of 5th-8th class Turkish teachers to complementary assessment and evaluation methods in primary school Turkish lesson curriculum and the problems they encountered during the course. In this descriptive study, interviews were used from quantitative data collection tools and interviews from qualitative data collection tools. Frequency (f) and percent (%) distribution calculations were made on the data. Content analysis method was used in the analysis of the qualitative data obtained at the end of the interviews. As a result of the research, it was determined that the teachers used graded scoring key when evaluating performance task, project and student product files. In group studies, it was seen that Turkish teachers gave the same grade to all members of the group. When applying complementary assessment methods, it was determined that the most common problems were the inadequacy of weekly class hours and the excess of class size.

Benzer & Eldem (2013), the research titles "Levels of Knowledge about Turkish Language and Literature Teachers' Measurement and Assessment Tools" examines whether Turkish teachers and Turkish language and literature teachers had information about the measurement and evaluation tools and methods they needed to use during the teaching process or not. A 10-question open-ended questionnaire was administered to 53 people, consisting of Turkish and literary teachers. As a result, it was determined that teachers of both branches had low knowledge and usage levels about measurement and evaluation methods. The preparation of area specific assessment guidance manuals has been proposed to raise the findings to a low level.

Duran, Mıhladı & Ballıeli (2013) stated that primary school teachers 'attitudes towards complementary evaluation methods, their qualification perceptions for using these methods and frequency of use in their work where they determined the level of proficiency of teachers in their study titled "Proficiency Levels of Elementary School Teachers' Compensation Methods for Complementary Assessment Methods" The study is a research in the screening model. In the research, "teacher competencies" questionnaire was used as data collection tool. As a result of the research, it has been found that teachers have "moderate" competence in complementary assessment methods.

Melanlıoğlu & Tayşi (2013) classified the achievements expressed in the field of listening / monitoring learning in primary education Turkish lesson curriculum and guide in the study titled "Classification of Listening Achievements of Turkish Teaching Program in Terms of Measuring and Evaluation Methods" according to measurement methods and techniques and examines whether the period or result or both were evaluated at the same time. It has been concluded that the increasing usage frequency and priority of measurement and evaluation

methods which can be evaluated continuously by arranging the listening / monitoring gains included in the Turkish lesson curriculum is necessary

In this study, the consistency between the aims and achievements of the Turkish Language Teaching Program in Primary School was examined with the opinions of the teachers of secondary school Turkish lessons about the measurement instruments used in evaluating the listening ability.

METHODS:

The method of work is qualitative research; the data was collected by interview (Sönmez & Alacapınar, 2014: 152). Interviewing is a process of communication that is based on a pre-determined and serious purpose, based on a questioning and answering style. Through interviews, individual experiences, attitudes, thoughts, intentions, interpretations, mental perceptions and reactions are revealed. There are usually two types of interviews in the literature: "Structured" and "unstructured" interview. The purpose of a structured interview is to identify and compare the similarity and differences between the information given by the interviewed individuals. In the unstructured interview, there is no expectation of a specific answer since there is no pre-set questions. In the unstructured interview, the researcher tries to discover certain topics by interviewing; explores specific areas specific to the problem that is being worked on, explores in depth with more detailed questions (Yıldırım & Şimşek, 2011:119-120). Within the scope of the study, interviews were made with the teachers of eight secondary school Turkish lessons who were selected randomly in 2016-2017 academic year. Interview voice recordings were converted into written text, two content analysis techniques, frequency and categorical analysis, were used for interpretation, (Bilgin, 2006). The collected data/findings were discussed in the context of Primary School Turkish Teaching Curriculum and literature.

FINDINGS:

Table 1: Purposes of using Turkish teachers' measurement tools

Themes:	Traditional Measuring Instruments		Themes:	Complementary Measuring Instruments	
	f	%		f	%
Recognition	7	35	Ability	1	5
Monitoring	7	35	Skill	1	5
Determining	3	15	-	-	-
Teaching	1	5	-	-	-
Sum	18	90	Sum	2	10

As it is understood from Table 1. and the teachers' opinions, it could be concluded that recognizing (35 %), monitoring (35 %) and determining (15 %) are the purposes of using Turkish traditional instruments for evaluating listening skills while complementary measurement tools are the ability (5 %) and the skill (5 %). The purpose of teachers' use of measurement tools also defines their measurement technique. "Turkish teachers use measurement tools with many different purposes. Each teacher's purpose may be different. What are your goals in measuring your listening / monitoring ability?" Examination of the answers, given to the questions above by the secondary school Turkish teachers, achievement of the determined goals and behaviors in line with the general aims of Turkish National Education, determination of the level of readiness of the students; identification of learning deficiencies; determination of the level of achievement reached in class are the purposes of teachers.

The following are the opinions of Turkish teachers regarding the use of traditional and complementary measurement tools to assess listening performance:

My aim is primarily to achieve the goals and behaviors determined in line with the general aims of Turkish National Education. We are guiding our work according to the level of readiness, according to the class situation. Naturally, the level of success of each class is not similar, it can be different. For this reason, we measure readiness levels (T-2)

What could be my purpose in listening? Does the student understand what he/she is reading or listening? Sometimes, what are we doing while trying to figure out what the student is listening to? When tell “let me summarize and explain this text that you have listened to”, very different results come out (T-3).

Almost every year I do preliminary exams regularly. But I do not know how professional and how accurate the measuring is. What we do is the most widely used measurement tools, multiple-choice tests. I prepare exam questions based on more understanding, meaning of sentences, meaning of words, paragraph questions by asking twenty or twenty-five questions in the test. (T-4).

At what level did the student come, what level of perception the student has, or how much is the vocabulary? Every year I do a evaluation test. Although we seem to be working on the grounds of National Education, we are aiming to prepare students for successful high schools such as the Anatolian and Science high schools The information we expect from children; Whether they have learned something or not, we are trying to measure this. (T-4).

Firstly, knowing the students, ensuring that the information about the topic taught after the students are learned is persistent; ensuring that children are able to connect with previous information and subsequent information. Did he or she learn or not? I would like to make an assessment of this (T-5).

First, our goal is to understand how much the student has learned, Of course, it is our goal to try to teach students where he or she has trouble. To question whether the student we are working with has taken the subject (T-6).

The goal is to understand that whether each student understand what he/she listens and measure it. Can they express themselves in the way they listen? First of all the most important thing is are the students are ready and then we move on to the measurement process. Where is the problem? Which student or students know what (T-7)?

First, I look at the access of students when using measurement tools in Turkish education. Where did student come from, how much he/she could contribute? How much we can improve them, what the missing ones are, and measurement tools must be used to identify these. However, this is ideal, but in most cases, the system requires, for the purpose of grading, I have had to use measurement tools to grade, and there have been, and still are, many. But, firstly, as I said, I intend to be able to understand what the student has missed (T-8).

Table 2. Measurement tools used by Turkish teachers

Traditional Measuring Instruments							Complementary Measuring Instruments													
Question-Answer	Fill in Blanks Questions	True False Tests	Matching Questions	Writteng exams	Multiple Choice Tests	Attitude Scale	Working Papers	Open Ended Questions	Project Evaluation Forms	Performance	Graded Marking Key	Student Observation Form	Control List	Listening Scale	Listening Rubric	Drama	Self Evaluation Form	Peer Evaluation Form	Group Evaluation Form	Process Development File
%							%													
11	11	8	9	11	12	4	6	5	-	2	-	5	-	-	-	5	4	5	2	-
66							34													

As it is understood from Table 2. and teachers' opinions, the percentage of Turkish teachers using traditional measurement instruments to determine listening ability (66 %), while percentage of using complementary measurement tools (34 %). "What are the measurement tools that you can use when determining the listening skills of students in Turkish language classes?" The answers for the question above were multiple choice (14 %), space completion (11 %), question-answer (11 %), written examination (11 %), matching (9 %), true-false (8 %), attitude scale (4 %), working papers (6 %), open ended questions (5 %), student observation form (5 %), drama (5 %), peer evaluation form (5 %), self evaluation form (4 %), performance (2 %), group evaluation (2 %) while project evaluation forms, graded scoring keys, checklist, listening scale, listening rubrics and process development files were never used. The opinions of Turkish teachers regarding the use of traditional and complementary measurement tools in assessing listening skills are presented below:

Views on traditional measurement tools:

We resort to traditional methods mostly. When evaluating students, we focus on multiple-choice questions. Conditions forces us to do this. Here, if we have multiple-choice questions, if we ask twenty questions, here are five of them are multiple choice, we use the classic method of expressing two self-expressions, three of them filling the gap, we use the matching method. I use all of them in a mixed way. However, we use multiple-choice questions in our exam-based studies, especially in our practicing classes (T-1).

We use fill-in-the-blank, and in particular, fill in the spaces as predictive work of the text, make short inquiries, and conduct observation studies (T-2).

In this sense, peer evaluation seems like an objective assessment, at least among students. Students observe their friends. Here, according to self-evaluations, it seems to me to be a little more objective work (T-3).

Is it possible to use multiple-choice questions when evaluating listening ability? It is not possible to measure the listening ability with the multiple choice question type. It is necessary to prepare a lot in the classroom, before the lesson: Here, preparing the text, asking about the text ... That could be, just the question-answer we use most. I mean, to make students evaluate students in terms of listening skill. No! Measuring instruments we use more of attitude scales. As an observation table we already have these in our workbooks; I try to apply the observation tables to the class, yes (T-3).

To be honest, I think that the biggest problem of students, teachers and schools is these examinations ... Due to these exams, the student, sincerely, we do not teach Turkish. We leave each of the learning areas you mentioned in Turkish lesson to one side. Our work, you know the previous practices, there were courses; Anyway, we do same at school. That's the truth. The school is a course that prepares us to find the right option among the four options. This is our goal. Another measuring tool that we apply filling gaps. Or a true / false type measuring tool. Matching is also in the context of word-matching, word-meaning, and comprehension of word meaning. Multiple-choice measurement tools are inevitable, are must (T-4)

Having a test to determine whether they learn the lesson, to find out if they understand what they do not understand. And every student can not be prone to everything. I see that if a student succeeds in the multiple-choice exam, another student can succeed in interpretation. I use these (T-5).

Of course, first of all, here we are doing multiple-choice tests, we have evaluation questions at the end of the theme. Of course, there are observation reports; We fill out observation reports (T-6).

It must be clear, in fact, that there are all of the concept maps you have said, Or at the end of the events after the texts after each text. It can not be said that we use them a lot. We are trying to do drama work and this makes the students very happy; We try to use it when it is right time. The most effective is learning to be drama anyway (T-7).

Comments on complementary measuring instruments:

In particular, we work on peer-review studies and self-evaluation studies to measure listening performance. This is not often. In particular, in the self-evaluation study, the student may mark a behavior that he / she did not do, in the form of a yes or no (T-2).

Naturally, there are observation reports; We are filling in the observation reports ... Peer evaluation, yes, for example listening to his or her friend, giving him or her a grade, evaluating him, evaluating his or her friend ...

At the end of the books, we gave self-evaluation forms. To put it plainly, children do not objectively evaluate themselves like this (T-6).

Use complementary measurement tools to assess listening / monitoring skills It is useful for students to assess each other and contribute to each other. I often use peer evaluation (T-7).

All of the options could be as okay, I am okay, among friends, there are such evaluations as I am very good. They are not very objective, yes, they do not have reliable data. On the self-assessment forms, student can mark as he or she knows the subject that actually he or she does not know He or she claims that can do the test that actually he or she can not. Different things ... (T-8).

CONCLUSION:

In Turkish class, both process evaluation and product evaluation should be done together (MEB, 2006). In process evaluation; The performance of the students in the process is monitored. In the product evaluation, the extent to which the students achieve the gains determined in the program and what they learn is measured.

As Table 1. shows, it is seen that secondary school Turkish teachers determine students' achievement level, level of readiness, actual goals in teaching, lack of learning and student access (success) at the end of the teaching process. However, an effective evaluation (Berberoğlu, 2006:18) could be done by examining student development, determining learning difficulties, evaluating the effectiveness of teaching materials, giving feedback to student developments, monitor ingstudent development, choosing students for advanced or compulsory programs, and conducting research on the level of learning of students.

Table 2. shows that secondary school Turkish teachers use traditional measurement tools such as multiple choice, space completion, question-answer, true false and attitude scale, etc. because of parental expectation, test success, enforcement of circumstances, lack of learning detection, preparation, easy to mark and apply (Türkyılmaz, 2008:12-13) and also because of data obtained with complementary measurement tools is not objective. Teachers who indicate that they use complementary measuring instruments usually do not follow the evaluation process but pass on the processing of the related forms.

Multiple choice tests from traditional measurement tools allow students to determine what deficiencies and inadequacies are in which subjects, depending on the responses they have given. True-false tests provide useful evaluation in terms of generalization of a subject, causal relationships of events, the relationship between events and matching test are useful to determine different levels of mental ability According to Berberoğlu (2006: 115), if a teacher wants to know to what extent his students are familiar with basic concepts, he or she should make an assessment using the most appropriate form of traditional methods; However, in the long run, if the aim is improving students' learning processes, they need to turn to complementary assessment instruments. The lack of widespread use of these methods in the education system and the lack of examples of how these tools are used and how their outcomes are to be assessed lead teachers to have problems in this regard (Gelbal & Kelecioğlu, 2007: 135 -145). Students of Teachers, who use an appropriate assessment approach to the appropriate learning process, will always be more successful.

According to Biemer (1993), nowadays, it is important for educational institutions that individuals acquire rapidly changing information and use this information in real life situations. In this context, schools have to educate individuals who can solve problems, look at events with critical eyes, know themselves, reveal original information, etc. This situation causes changes in the measurement and evaluation approaches in the curriculum, methods and techniques used in the teaching process (Akt.:Kutlu, Doğan & Karakaya, 2010: 3). It is getting more and more important to take into consideration the assessment processes of not only the knowledge development but also social skills, communication skills, friendship relations and reveal the result of what students' know rather than what they do not know (Berberoğlu, 2006: 115-116).

Since listening skills are included in the cognitive, emotional and dynamic areas in scope, it is also necessary to use multiple evaluation tools that are complementary in measuring and evaluating this skill (Göçer, 2014: 215). The main objective of the complementary evaluation is to evaluate the learning process and result of the student together and determine how the student develops (Atılğan, Doğan & Kan, 2009: 366)

Suggestions:

1. Turkish teachers can be taken to in-service courses on the use of complementary traditional measurement instruments used to assess the listening / monitoring skills of teachers.
2. A similar research can be done using quantitative / qualitative patterns on the views of traditional elementary school teachers on traditional and complementary assessment instruments used to evaluate listening / monitoring skills.

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INVESTIGATION OF THE FACTORS INFLUENCING TEACHING PROFESSION CHOICES OF PEDAGOGICAL FORMATION TRAINEES

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ABSTRACT

This study aims to investigate the factors influencing teaching profession choices of pedagogical formation trainees. Survey model was used in the study in which quantitative and qualitative data were collected, aiming to describe any situation as either are in the past or present. The study group of the research consists of 420 teacher candidates trained in Pedagogical Formation at Mersin University Faculty of Education in 2016-2017 academic year. In the research "Personal Information Form" which aims to reveal the personal characteristics of the teacher candidates developed by the researchers and "Motivations For Teaching Scale" developed by Watt & Richardson (2007) and adapted to Turkish by Eren & Tezel (2010) has been used as a quantitative data collection tool. The open-ended questionnaire developed by the researchers was used as a qualitative data collection tool. The general results of the study show that the teaching profession is preferred because of intrinsic, extrinsic and altruistic motivational reasons. Some situations in which internal causes are more effective, such as the reasonable workload, the duration of a vacation, satisfactory fees; gender is not a significant variable; the variation of age group and department make a difference in the individuals' motivation to teach are the main findings of the research. From this point forth, it can be referred that the reason for choosing the teaching profession is multidimensional. The results of the study reveal that pedagogical formation trainees have similar reasons for career choice as teacher candidates in teacher training institutions. In this sense, it is considered that there is a need to determine the implementations that can be made for the teaching profession choices of pedagogical formation trainees and to examine the effectiveness of these implementations.

Key words: teaching profession, pedagogical formation, teacher candidates

INTRODUCTION

It is important to make it clear that teachers often make positive changes by influencing individuals' lives and their learning tendencies. Likewise, it has been recognized that effective teaching with qualified teachers assigned by governments around the world is important for training intelligent, wise and worthwhile citizens. In this sense, it can be said that teacher training is a great influence on shaping the future of countries. Teaching profession is accepted as a field of specialization that requires certain qualifications. The teaching certificate obtained at the end of undergraduate education and pedagogical formation training completed in the institutions that train teachers in Turkey shows that the individuals have the competences related to teaching profession. Teacher is defined as persons assigned with the aim of guiding and directing students' learning experiences in an official or private educational institution (Öncül, 2000). In Article 43 of the basic law of national education No 1739; "The teaching profession is defined as a specialization profession that undertakes the government's education, teaching and related administrative duties". Based upon these definitions, it can be argued that the teacher is the authorized person who has the duty of helping the individuals in the direction of certain programs and laws.

Individuals are thought to have some reasons for choosing teaching. These reasons can be explained by the individual's motivations about teaching. This is because motivation for teaching is directly related to teaching as a career choice (Richardson & Watt, 2006). It is one of the important research subjects how people make professional choices and which causes are controlled by occupations. Examining the literature on teaching as a career choice; intrinsic, extrinsic, and altruistic motives are emphasized as the most important factors influencing the choice of teaching profession (Balyer & Özcan, 2014; Brown, 1992; Chuene *et al.*, 1999; Çermik, Doğan & Şahin, 2010; Eren & Tezel, 2010; Kyriacou & Coulthard, 2000; Kyriacou & Kobori, 1998). More explicitly, these motivations include monthly income, vacation time, desire for teaching, experiences, intellectual satisfaction, and the desire to raise other individuals (Bastick, 2000). The image of teaching profession in the society and reasons for choosing that profession are influenced by the same sociological, economical and psychological factors, while varying from country to country in terms of rank and importance (Atav & Altunoğlu, 2013).

Although there are many studies on the factors that influence teaching choice as a career, they lack a theoretical framework to show which factors influence selection and shape the process (Eren & Tezel, 2010). But the FIT-Choice (Factors Influencing Teaching Choice) framework, which founded on expectancy-value theory (Eccles, 2005) and developed by Watt and Richardson, was highly useful to provide a comprehensive and coherent model to guide systematic investigation into the question of “why people choose a teaching career” (Watt & Richardson, 2006). When literature is examined, it is seen that there are many studies about teaching as a career choice but fewer studies about the teaching as a career choice of pedagogical formation trainees. Considering the researches, it is possible to say that there are various reasons for choosing teaching as a career. It is believed that it is important to understand the situations about people who do not complete undergraduate education in a teacher training institution but decide to become a teacher. From this point of view, this study aims to investigate the factors influencing teaching profession choices of pedagogical formation trainees. Based on this aim, the following questions were searched in the study:

- 1- How are the motivations of the pedagogical formation trainees to choose the teaching profession?
- 2- Do the reasons for the pedagogical formation trainees preference for the teaching profession differ significantly in terms of various variables (gender, age, department)?
- 3- How do the pedagogical formation trainees describe the teaching profession?
- 4- What are the factors influencing teaching profession choices of pedagogical formation trainees?

METHOD

Research Model

Survey model was used in the study in which quantitative and qualitative data were collected, aiming to describe any situation as either are in the past or present.

Study Group

The study group of the research consists of 420 teacher candidates trained in Pedagogical Formation at Mersin University Faculty of Education in 2016-2017 academic year. There are 162 male and 258 female teacher candidates among the participants. This group was selected because the individuals who have different undergraduate degrees apart from the field of teacher training completed the courses of teaching profession and teaching practice. Teacher candidates participating in the research were chosen with convenience sampling from purposive sampling methods. In the purposeful sampling method, the qualities of the persons are taken as a criterion; a choice is made to reflect differences within the group and to ensure inclusion of certain qualities (Berg, 1998). The “maximum diversity” sampling method (Patton, 1990), which aims to raise the likelihood of reflecting all relevant qualities of the study group, has been used to better understand the tendency of the selected group. For this purpose, the participants were selected, the characteristics such as department and gender, and female and male teachers’ candidates were selected considering the voluntary basis in each department. Table 1 presents the gender distributions of the study group.

Table 1. distribution of pedagogical formation trainees by gender

Gender	f	%
female	240	57.1
male	180	42.9
total	420	100

Data Collection

In the research “Personal Information Form” which aims to reveal the personal characteristics of the teacher candidates developed by the researchers and “Motivations For Teaching Scale” developed by Watt & Richardson (2007) and adapted to Turkish by Eren & Tezel (2010) has been used as a quantitative data collection tool. The open-ended questionnaire developed by the researchers was used as a qualitative data collection tool.

Personal Information Form

In the formation of personal information and closed-ended questionnaire form including the questions which aims to reveal the characteristics of the individuals in the most obvious way experts were offered for consideration in order to take into account the academic and social characteristics of the teacher candidates.

Open-ended Questions Form

The FIT-Choice Scale was developed by Watt & Richardson (2007) and used to assess factors influencing the choice to teach for prospective teachers. The scale contains 12 motivation factors, 5 factors for beliefs about the profession, and 1 factor for career choice satisfaction (Watt & Richardson, 2007). As emphasized earlier, the

motivation factors are ability, intrinsic career value, fallback career, job security, time for family, job transferability, shape future of children/adolescents, enhance social equity, make social contribution, work with children/adolescents, prior teaching and learning experiences, and social influences each of which contains 3 items, except the time for family factor which contains 5 items. Following the original format of the scale, all motivation items were prefaced by "I chose to become a teacher because." As was the case in the original scale, a seven-point Likert type response format was used. Thus, possible responses ranged from 7 (extremely important) to 1 (not at all important).

Data Analysis

Quantitative Data

As a result of the collected data with the personal information form, frequency and percentage were calculated. As a result of the collected data through the scale, parametric tests (after examining normality values and other assumptions) were used.

Qualitative Data

The responses of participants to open-ended questions were analyzed through content analysis. The main purpose of content analysis is to reach the concepts and relations that can explain the collected data (Yıldırım and Şimşek, 2003). Frequency tables were created by coding in the direction of the participants' expressions and determining the frequency of the encoded units. Coding was carried out by two different researchers and codes were agreed upon.

In order to calculate the reliability of the content analysis of qualitative data, after the implementation, the interview coding keys and the interview dossiers were read separately by the researcher and an expert and the necessary arrangements were made by discussing the issues of "agreement" and "disagreement". In order to calculate inter-rater reliability, the total number of agreements was divided by the sum of total number of agreements + disagreements (Miles & Huberman, 1994). The analysis resulted in a high level of inter-rater reliability (87%).

FINDINGS

In this section, the research findings and interpretations obtained from the analysis of the data are respectively given in tabular form.

1. How are the motivations of the pedagogical formation trainees' preference for the teaching profession?

The results of pedagogical formation trainees' motivations for teaching score results by gender are presented in Table 2.

Table 2. Motivations for teaching scores of pedagogical formation trainees

	N	Minimum	Maximum	Mean	Std. Deviation
Total	419	148,00	257,00	211,2482	23,23842
Valid N (listwise)	419				

The analysis results of the pedagogical formation trainees according to the motivation for teaching scores ($\bar{X} = 211.24$, $S = 23.23$) show that individuals have a high level of motivation for teaching.

2. Do the reasons of the pedagogical formation trainees preference for the teaching profession differ significantly in terms of various variables (gender, age, department)?

The results of pedagogical formation trainees' motivations for teaching score t-test results by gender are presented in Table 3.

Table 3. Pedagogical Formation Trainees' Motivations for teaching score t-Test results by gender

gender	n	\bar{X}	S	sd	t	p
female	239	209.41	7777.00	26.26	-1.867	.604
male	180	213.68	2954.00			
total	419					

When Table 3 is examined, it was found that the motivations for teaching scores of the pedagogical formation trainees did not differ significantly by gender ($t = -1.867$, $p > .05$).

The results of pedagogical formation trainees' motivations for teaching score results by age are presented in Table

4.

Table 4. Pedagogical Formation Trainees' Motivations for teaching scores by age

age	N	\bar{X}	Std. Deviation	Std. Error
21-25	119	203,41	21,16	1,93
26-30	124	218,75	20,43	1,83
31-35	113	213,60	25,59	2,40
36 and over	63	207,06	22,76	2,86
Total	419	211,24	23,23	1,13

When Table 4 is examined, it is seen that the highest mean of motivations for teaching scores are individuals in the 26-30 age group ($\bar{X} = 218.75$) and the lowest mean of motivations for teaching score in the 21-25 age group ($\bar{X} = 203.41$).

Table 5 presents the results of the one-way analysis of variance to determine the differentiation of pedagogical formation trainees' motivations for teaching scores by the age group.

Table 5. One-Way analysis of variance (ANOVA) results of Pedagogical Formation Trainees' Motivations for teaching scores by age

	Sum of Squares	df	Mean Square	<i>F</i>	<i>p</i>	<i>LSD</i>
between groups	16015.287	3	5338.429	10.564	.000	21-25 and 26-30
within groups	209714.899	415	505.337			21 -25 and 31 -35
total	225730.186	418				

The results of pedagogical formation trainees' motivations for teaching score results by department are presented in Table 6.

Table 6. Pedagogical Formation Trainees' Motivations for teaching scores by department

department	N	\bar{X}	Std. Deviation	Std. Error
Turkish Lang.	61	208.83	19.11	2.44
Foreing Lang	73	223,70	16,88	3,08
Mathematics	38	212.07	22.17	3.59
Physics	27	211.88	23.00	4.42
Chemistry	27	218.92	17.81	3.42
Biology	30	218,53	21,78	2,54
Philosophy	33	193.63	31.55	5.49
Sosiology	45	210.17	25.39	3.78
Economics	34	208.52	23.84	4.08
Radio-TV-Cin	15	204.80	26.64	6.87
Psychology	36	205.80	16.47	2.74
Total	419	211.24	23.23	1.13

When Table 6 is examined, it is seen that the highest mean of motivations for teaching scores are in the foreign language department ($\bar{X} = 223.70$) and the lowest mean of motivations for teaching score in the philosophy department ($\bar{X} = 193.63$).

Table 7 presents the results of the one-way analysis of variance to determine the differentiation of pedagogical formation trainees' motivations for teaching scores by department.

Table 7. One-Way analysis of variance (ANOVA) results of Pedagogical Formation Trainees' Motivations for teaching scores by department

	Sum of Squares	df	Mean Square	<i>F</i>	<i>p</i>	<i>LSD</i>
between groups	22739.35	10	2273.93	4.57	.000	Tur – For. Lang.
within groups	202990.83	408	497.52			Tur – Bio.
total	22739.35	418				Tur – Philo.
						For. Lang - Philo
						Mat – Philo
						Psy - Philo

The result of the analysis of variance in Table 7 revealed that this difference in the mean of motivations for teaching scores of pedagogical formation trainees was statistically significant ($F = 4.57$, $p < .05$). compared to that of the subjects who received pedagogical formation training. In other words, the motivation for teaching levels of pedagogical formation trainees varies in terms of department.

3. How do the pedagogical formation trainees describe the teaching profession?

In this section, the answers about how do pedagogical formation trainees describe the teaching profession in the open-ended questions form are examined. Table 8 contains the statements of pedagogical formation trainees about the teaching profession.

Table 8. Pedagogical formation trainees' views on teaching as a career choice

THEME	CODE	f (211)
personal utility 82	enjoyable	26
	easy	17
	learning through teaching	14
	voluntary	11
	appeals to heart and brain	8
	important	6
social utility 85	shapes the society	25
	respectful	23
	protects national values	9
	adopted by society	8
	valuable	7
	blessed	5
	leads the truth	4
	model for students	4
Expertise Requirement 44	requires patience	11
	requires responsibility	10
	requires devotion	9
	requires skills	8
	teaching profession	6

When Table 8 is examined, it is seen that the pedagogical formation trainees define the teaching profession as a pleasant occupation ($f = 82$). Also, while the vast majority indicated social effects ($f = 85$), some expressed the need for expertise and not easy as it seems ($f = 44$).

4. What are the factors influencing teaching profession choices of Pedagogical Formation Trainees

In this section, the answers about the factors influencing teaching profession choices of pedagogical formation trainees in the open-ended questions form are examined. Table 9 contains the statements of pedagogical formation trainees about the factors influencing teaching profession choices.

Table 9. Factors Influencing Teaching Profession Choices of Pedagogical Formation Trainees

THEME	CODE	f (421)
intrinsic motivations 117	compulsion	48
	desire to teach	24
	time for family	16
	life-long career	15
	embrace	13
	aspiration	11
extrinsic motivations 239	family pressure	42
	good status in the society	36
	Fees, job security	35
	holidays	30
	Prior learning experiences	28
	Reasonable workload	26
	time to earn extra money	21
	teaching skills	14
altruistic motivations 66	shape future	21
	love children/people	18
	contribution to the social development	16
	Raising Atatürkist individuals	11

When Table 9 is examined, intrinsic motivations for the teaching profession of pedagogical formation trainees are found to be higher ($f = 239$). Also, while quite a large majority indicated extrinsic motivations ($f = 229$) some have expressed altruistic motivations such as shaping society ($f = 66$).

Results and Discussion

This research was conducted to investigate the factors that influence teaching profession choices of Pedagogical Formation Trainees, to determine the perceptions on teaching and to question the relation of the profession choices with various variables. The general results of the study show that the teaching profession is preferred because of intrinsic, extrinsic and altruistic motivational reasons. Some situations in which internal causes are more effective, such as the reasonable workload, the duration of a vacation, satisfactory fees; gender is not a significant variable; the variation of age group and department make a difference in the individuals' motivation to teach are the main findings of the research. From this point forth, it can be referred that the reason for choosing the teaching profession is multidimensional.

However, similar situations are clearly seen in the literature when compared with other studies based on career choice of teacher candidates. The reasons for teaching profession choices of individuals are more dependent on internal motivation can be interpreted as it is mostly due to the opportunities that the profession will provide rather than the desire to teach. Similarly, Papanastasiou & Papanastasiou (1997) and Sinclair (2008) found that the attractiveness of choosing a teaching profession lies in more internal factors than external factors. The findings of the research conducted by Sinclair (2008) show that the self-interested and extrinsic factors on career choice of individuals are more dominant than those of intrinsic and altruistic factors. Moreover, in many studies (Acat & Yenilmez, 2004; Boz & Boz, 2008; Gençay & Gençay, 2007; Çermik, Doğan & Şahin, 2010; Gürbüz & Sülün, 2004; Salı, 2013) conducted in Turkey, individuals' motivations to teaching have been examined and the internal situations such as career, fees and social status have been seen as the foreground.

As stated in the answers to the open-ended questions, reasons such as "individual's score is enough only for the existing department" or "obligation" may have affected the choices which are significant on behalf of the departments with higher university entry points. A study by Salı (2013) shows that individuals may have department-specific reasons in career choice such as personal utility value and extrinsic career value. The finding on individuals' ages and career choices can be explained by the fact that candidates have to deal with career choices more autonomously based on age and experience (Çermik, Doğan & Şahin, 2010). Findings on extrinsic motivation confirm the findings of a study (Kniveton, 2004) that family and society are more effective than

teachers on career choices of candidates. The present study indicates that Pedagogical Formation Trainees intend to choose a career in teaching and factors that are crucial in their choice of career. Based on the results of this Pedagogical Formation Trainees have been influenced by intrinsic factors such as the long holidays, potential talent for teaching, social status, extrinsic factors such as family pressure, Prior learning experiences, Fees, job security and altruistic factors such as shaping future, sacred profession. The results of the study reveal that pedagogical formation trainees have similar reasons for career choice as teacher candidates in teacher training institutions. In this sense, it is considered that there is a need to determine the implementations that can be made for the teaching profession choices of pedagogical formation trainees and to examine the effectiveness of these implementations.

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INVESTIGATION OF THE RELATIONSHIP BETWEEN UNIVERSITY STUDENTS' PERSONAL CHARACTERISTICS AND SUCCESS TENDENCIES

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ABSTRACT

The purpose of this study was to analyze the relationship between university students' personal characteristics and success tendencies. For this purpose, study sample was composed of 494 students who were randomly selected from Erciyes University, Dumlupınar University and Selçuk University, schools of physical education and sports. In this study, to measure personal characteristics, Eysenck Personal Questionnaire -EPQ-RSV (Francis LJ, Brown LB, Philipchalk R 1992), Success Tendency Scale (Akin, A. Çetin, B. 2007)) and "Personal Information Form", which was developed by the researchers, were used as data collection method. Statistical analyses of the data obtained from Personal Information Form were conducted with SPSS 20.0 package program. Personal information and inventory total scores and factor scores related to participants were presented as identifying frequency (f) and percentage (%) values. Pearson Moment Product Correlation (r) was applied to determine the relationship between scores that were obtained from the scales, and Multiple Regression Analysis (β) was applied to determine whether the obtained scores were predictor of each other. It was found that Extroversion from personal characteristics was positively directed with learning tendency approach from success tendencies and lying personality characteristics was positively directed with tendency for performance approach. Additionally, a positive directed meaningful relationship was determined between psychoticism personal characteristics and tendency for performance approach. A meaningful relationship was not found between school of physical education and sports students' neuroticism personal characteristics and success tendencies sub-scales. According to results of our study, personal characteristics affect students' success tendencies as they affect many other areas. Therefore, it is thought that personal differences and personal characteristics should be considered while preparing education programs.

Keywords: Personality, Success Tendency, Physical Education

INTRODUCTION

Personal characteristics are another important factors in addition to success tendencies which are among the crucial factors affecting university students' academic status. Personality, with its broadest definition, can be defined as long-lasting tendencies which determine individuals' psychological reactions, including emotion, thoughts and behaviors, and determine their distinguishing characteristics as cannot be explained through biological conditions in a certain moment or through an environment in which environmental factors take place (Berens, 1999). According to many theoreticians, personality includes almost everything about cognitive, emotional, social and physical phenomena (Ewen 2009).

Although personality theoreticians define personality in different ways as focusing on different aspects according to their own thoughts, personality can be generally defined as combination of "unique and structured characteristics that differentiate individuals from each other" (İnanç, Yerlikaya, 2012).

In their personality theories, many factor analysts argue that there are five or more sub-factors comprising personality, however it can be seen that in Hans Eysenck's personality theory, dimensions comprising personality includes only three traits (Feist and Feist, 2008). At the beginning, Eysenck identified personality with two broad dimensions as neuroticism and extraversion, then evaluated as three dimensional structure as adding a third dimension, psychoticism. Extraversion dimension represents sociability and impulsivity; neuroticism dimension represents emotional stability and overreacting behaviors; psychoticism dimension represents distantness. Scale that was developed by Eysenck has a four-item structure as neuroticism, extraversion, psychoticism and lie personality (Thomas, Segal 2006) sociability and impulsivity characteristics are very important for extraversion while it also covers liveliness, aliveness, dynamism and optimism aspects. Contrary to extraversion characteristics; quietness, passiveness, unsociability, carefulness, distantness,

thoughtfulness, pessimist, peacefulness and being in control are among main characteristics that define introversion (Feist and Feist, 2008). Individuals, who have high level of neuroticism, obtain characteristics like emotionally overreacting and they have difficulty to call down after they emotionally triggered; moreover, they tend to complain physical symptoms including headache and back pains, furthermore they tend to have and suffer from worry and anxiety, however high neurotic individuals might not have any kinds of psychological symptoms, either (Eysenck 1996).

On the other hand, Success Tendency theory enables understanding how to gain sufficiency in learning process and how it could be developed (Akin & Çetin, 2007). Success tendency represents cognitive processes and activities that stem from will to reach targets (DeShon & Gillespie, 2005) and this tendency plays an important role within success context (Dweck & Leggett, 1988). Success tendencies theory analyzes students' behaviors related to learning and focuses on their aims related to learning duties that they obtain. Therefore, this theory focuses on individuals' thinking ways related to themselves and their own duties, instead of separating the individuals as those who have motivation and lack of motivation (Akin, 2006). According to success tendencies approach that were conceptualized by Dweck et al. (Ames, 1992; Dweck & Leggett, 1988; Nicholls, 1984); in all kinds of learning environment, there are 3 main academic targets that lead students' attitudes and behaviors to materials and academic duties that should be learnt: learning tendency approach, tendency for performance and avoidance of performance tendency. The main aim of students with learning tendency approach is to learn the related content and obtain the related knowledge and abilities. The main aim of students with tendency for performance is to approve their academic superiority and sufficiency levels compared to others as showing a higher success level related to the material that must be learnt. On the other hand, avoidance of performance tendency is defined with such behaviors as trying to finish responsibilities related to learning as obtaining an acceptable pass score with minimum effort (Özgüngör 2014). Will of students in schools of physical education and sports teaching to be more successful in terms of sports, starting from their childhood periods, their families' and societies' parallel will in this subject positively affect students' success tendencies due to they do not have any conflicts in this subject (Pepe 2015).

Considering success tendency only with its cognitive aspects remains insufficient when today's scientific developments are taken into account. While one of the most important determinants of university students' academic behaviors is their success tendencies, emotional moods that drive individuals for success also affect these tendencies, hence their personal characteristics play a determinant role in reaching the success.

The purpose of our study was to determine whether there was a relationship between success tendencies and personal characteristics of students who studied in schools of physical education and sports, and if there was a relationship, to determine its significance level. In literature review, it was seen that there were limited number of studies that focused on this subject and our study has been expected to contribute to literature in this manner.

MATERIAL-METHOD

STUDY GROUP

This research was conducted using correlational screening model. The screening model could be defined as "... researching models which aim to determine the possible covariance between two or more variables and/ or to determine covariance degrees" (Karasar 2007).

This research obtains a descriptive nature due to present analyses related to personal characteristics and success tendencies of students in schools of physical education and sports, and analyses for relationships between candidates' demographic characteristics.

Creating Voluntary Groups:

The research was conducted with voluntary groups. Study group was consisted of the 1st, 2nd, 3rd and 4th grade students in Erciyes University, Dumlupınar University and Selçuk University, Schools of Physical Education and Sports, in Physical Education and Sports Teaching, Coaching, Sport Management and Recreation Training Departments. Randomly selected 494 individuals, who studied in Schools of Physical Education and Sports, were included to the study.

DATA COLLECTION TOOLS

During questionnaire implementation process in the research, as making necessary explanations to candidates and allocating an appropriate time frame for each candidate, without creating any hurry, a healthy assessment duration for candidates was created by other instructors in universities in addition to the researchers. Additionally, convenient material and environmental conditions were prepared for participants to fill the questionnaires.

In this study, to measure personal characteristics, Eysenck Personal questionnaire -EPQ-RSV (Francis LJ, Brown LB, Philipchalk R 1992), 'Success Tendency Scale (Akin, A. Çetin, B. 2007)) and "Personal Information Form", which was developed by the researchers were used as data collection method.

Socio-demographic Information Form

Creating socio-demographic information form for the study, socio-demographic forms in other studies in literature that focused on personal characteristics and success tendencies were reviewed and a pool that was composed of characteristics to be observed in participants of this study was created. Then, socio-demographic information form was created as consulting statistics experts. The created socio-demographic information form included 7 questions to obtain information about participants' age, gender, education department, university, class, placing score to higher education and grade point average.

Table 1. Participants' Socio-Demographic Characteristics

	Variables	N	%
Gender	Male	301	60,9
	Female	193	39,1
Age	18-21	292	59,1
	22-25	182	36,8
	26-29	20	04,0
Department	Physical Education and Sports	136	27,5
	Teaching	126	25,5
	Coaching Education	105	21,3
	Sports Management	127	25,7
	Recreation Training	110	22,3
Class	1	112	22,7
	2	137	27,7
	3	135	27,3
	4	21	4,3
GDP	1.25-1.99	358	72,5
	2.00-2.99	115	23,3
	3.00-4.00	182	36,8
University	Erciyes	164	33,2
	Dumlupınar	148	30,0
	Selçuk	88	17,8
University Entrance Exam Score	160-200	195	39,5
	201-240	159	32,2
	241-280	43	08,7
	281-320	9	01,8
	321-360		

Eysenck Personality Questionnaire

"Eysenck Personality Questionnaire (Revised and shortened version)" that was developed by Francis et al. (1992) and adapted to Turkish by Karancı et al. (2007) was used to identify participants' personal characteristics. Eysenck Personality Questionnaire (EPQ-RSV) is composed of 24 items and 4 sub-scales. These are as follows; neuroticism, extraversion, psychoticism and lie personality sub-scales (Francis et al., 1992).

Internal consistency co-efficiencies of the scale for extraversion, neuroticism, psychoticism and lie personality dimensions were found as 0.78, 0.65, 0.42 and 0.64, respectively and test-retest consistency was found as 0.84, 0.82, 0.69 and 0.69, respectively (Karancı et al., 2007). In this questionnaire in which each of dimensions are considered with 6 items, participants are asked to answer 24 questions as Yes (1) or No (0) format. The score that can be obtained from each of personal characteristics vary between 0 and 6.

Success Tendencies Scale

“Success Tendencies Scale” that was developed by Midgley et al., and adapted to Turkish by Akin and Çetin (20) was used as a data collection tool in this research. The original form of Success Tendencies Scale is composed of 18 questions and the first 6 questions are related to learning tendencies, the following six questions are related to tendency for performance and the last six questions are related to avoidance of performance tendencies. On the other hand, the Success Tendencies Scale that was used in this research is composed of 17 items. These 17 items in Success Tendencies Scale are distributed as follows; 1-6 items are about learning tendencies, 7-12 items are about tendency for performance and 13-17 questions are about avoidance of performance tendency. The scale employs 5-item Likert type evaluation format as “1=Never”, “2 =Rarely”, “3= Often”, “4 =Generally” and “5 =Always”.

Data Analysis

Data obtained from Personal Information Form, Personality Characteristics and Success Tendencies Scale was entered to SPSS 20.0 package program and analyses were conducted on this program. Personal information and inventory total scores and factor scores related to participants were presented as identifying frequency (f) and percentage (%) values. Pearson Moment Product Correlation (r) was applied to determine the relationship between scores that were obtained from the scales, and Multiple Regression Analysis (β) was applied to determine whether the obtained scores were estimation of each other.

FINDINGS

Table 2. Descriptive statistics related to students' answers to questions

	N	Minimum	Maximum	X \pm SS
Extraversion	494	,00	6,00	3,34 \pm 1,28
Lie Personality	494	,00	5,00	2,61 \pm 1,01
Neuroticism	494	,00	6,00	3,03 \pm 1,46
Psychoticism	494	,00	6,00	2,92 \pm 1,16
Learning tendency approach	494	10,00	30,00	23,99 \pm 4,61
Tendency for performance approach	494	6,00	30,00	20,44 \pm 6,05
Avoidance of Performance Tendency	494	5,00	25,00	14,03 \pm 5,38

In Table 2, participants' extraversion mean is 3,34, lie personality mean is 2,61, neuroticism mean is 3,03 and psychoticism mean is 2,29. Moreover, learning tendency approach mean is 23,99, tendency for performance approach mean is 20,44 and avoidance of performance tendency mean is 14,03.

Table 3. Correlation Coefficiencies of Students' Personal Characteristics and Success Tendencies (n=494)

		1	2	3	4	5	6	7
1. Extraversion	R	1						
	P							
	N	494						
2. Lie Personality	R	,173**	1					
	P	,000						
	N	494	494					
3. Neuroticism	R	,266**	,158*	1				
	P	,000	,000					
	N	494	494	494				
4. Psychoticism	R	,061	,140*	,313*	1			
	P	,176	,002	,000				
	N	494	494	494	494			
5. Learning tendency approach	R	,109*	-,008	,021	,013	1		
	P	,015	,862	,644	,778			
	N	494	494	494	494	494		
6. Tendency for performance	R	,043	,119*	,085	,148**	,163**	1	
	P	,343	,008	,058	,001	,000		

Approach	N	494	494	494	494	494	494	
7. Avoidance of Performance Tendency	R	-,089*	,050	,029	-,050	-,088	,068	1
	P	,047	,263	,523	,265	,050	,132	
	N	494	494	494	494	494	494	494

As presented in Table 3, a positive relationship was found between extraversion dimension and learning tendency approach ($r = .109$ $p = .015$) and low level and negative relationship was found between extraversion dimension and avoidance of performance tendency ($r = -.089$ $p = .047$), on the other hand, a meaningful relationship was not found between extraversion dimension and tendency for performance approach ($r = .043$ $p = .343$). A low level relationship was found between lie personality and tendency for performance approach ($r = .119$ $p = .008$) while a meaningful relationship was not found between lie personality and learning tendency approach ($r = -.008$ $p = .862$), and between lie personality and avoidance of performance tendency ($r = .050$ $p = .263$). A meaningful relationship was not found between neuroticism dimension and learning tendency approach ($r = .021$ $p = .644$), tendency for performance approach ($r = .085$ $p = .058$) and avoidance of performance tendency ($r = .029$ $p = .523$). A positive directed low level and meaningful relationship was found between psychoticism and tendency for performance approach ($r = .148$ $p = .001$) while a meaningful relationship was not found between psychoticism and learning tendencies ($r = .013$ $p = .778$) and between psychoticism and avoidance of performance tendency ($r = -.050$ $p = .265$).

Table 4. Regression Table Related to Predictions of Students' Personal Characteristics About Their Success Tendencies

Personal Characteristics		β	t	p	R	R ²	F	p
Extraversion	Success Tendencies				.139	.019	3,218	.023
	Learning tendency Approach	.096	2,113	.035				
	Tendency for performance Approach	.033	.719	.473				
	Avoidance of Performance Tendency	-.083	-1,844	.066				
Lie Personality	Success Tendencies				.128	.016	2,727	.044
	Learning tendency Approach	-.024	-.520	.603				
	Tendency for performance Approach	.120	2.628	.009				
	Avoidance of Performance Tendency	.040	.892	.373				
Neuroticism	Success Tendencies				.089	.008	1,298	.275
	Learning tendency Approach	.010	.211	.833				
	Tendency for performance Approach	.082	1,792	.074				
	Avoidance of Performance Tendency	.024	.532	.595				
Psychoticism	Success Tendencies				.161	.026	4,355	.005
	Learning tendency Approach	-.018	-,397	.691				
	Tendency for performance Approach	.155	3.429	.001				
	Avoidance of Performance Tendency	-.062	-1,390	.165				

F (3,493)

In Table 4, the model that was built between extraversion and success tendencies offers a meaningful relationship. ($R=.139$ $R^2=.019$; $p<.005$) in analysis of t-test results related to regression co-efficiencies' significance level; it was seen that learning tendency ($t=2,113$ $p=.005$) predicted extraversion dimension of success tendencies characteristics and explained 19% of total variance. ($F_{3,796}=3,218$ $p<.005$).

In Table 4, the model that was built between lie personality and success tendencies offers a meaningful relationship. ($R=.128$ $R^2=.016$; $p<.005$) in analysis of t-test results related to regression co-efficiencies' significance level; it was seen that tendency for performance approach ($t=2,628$ $p=.005$) predicted lie personality of success tendencies characteristics and explained 16% of total variance. ($F_{3,796}=2,727$ $p<.005$).

In Table 4, the model that was built between neuroticism and success tendencies does not offer a meaningful relationship. ($F_{3,796}=1.298$ $p>.005$)

In Table 4, the model that was built between psychoticism and success tendencies offers a meaningful relationship. ($R=.161$ $R^2=.026$; $p<.005$) in analysis of t-test results related to regression co-efficiencies' significance level; it was seen that tendency for performance approach ($t=3,429$ $p=.001$) predicted psychoticism dimension of success tendencies characteristics and explained 26% of total variance. ($F_{3,796}=4,355$ $p<.001$)

DISCUSSION AND CONCLUSION

It is very important for students in schools of physical education and sports successfully graduate and to ensure their sufficiency levels in professional working life to be the highest level. In this process, determining personal characteristics to identify effective factors and indirectly determining success tendencies has become an interesting subject. In this study, personal characteristics that were predictors of success tendencies were considered as highly associated with students' motivation and success levels, hence the relationship between personal characteristics and success tendencies was analyzed.

A positive relationship was found between extraversion dimension and learning tendency approach while a positive and low level relationship was found between extraversion dimension and avoidance of performance tendency, on the other hand a meaningful relationship was not found between extraversion dimension and tendency for performance approach. Extraversion dimension is characterized generally with social, entrepreneurial, friendly, leadership and active characteristics (Malak, 2012) Although learning tendency is identified with different concepts in literature, it reflects a learning approach which is characterized with that this kind of students use their highest level of cognitive abilities for an assignment, consider the assignment important as they try to complete it with the best possible ways with their efforts, positive attitudes and interests (Pintrich, 2000). As could be understood from these references, extraversion individuals are active, entrepreneurial and have positive attitudes to reach information, moreover they have ambitions and positive attitudes in using their abilities in learning tendencies. In this standpoint, individuals with high level of learning tendencies are thought to reflect their extraversion characteristics.

A meaningful relationship was found between lie personality and tendency for performance approach, on the other hand a meaningful relationship was not found between learning tendency approach and avoidance of performance tendency. Performance aimed orientation, which is also known as ability oriented aims, is highly associated with an individual to perform a duty better than others and to consider others' performance and capabilities. Although this feature of success tendencies is less associated with use of cognitive strategies, it is highly associated with emotional influences (Küçüoğlu & Kaya & Turan 2010). Researchers determined that individuals wanted to avoid possible negative conditions related to their capabilities while they wished to use their capabilities in tendency for performances (Dweck & Leggett 1988; Elliot & Dweck, 1988). Students who tend to performance approach try to have a better performance compared to others and they try to prove that they have better abilities. (Yıldızbaş, 2017) In Eysenck personality test, there are some questions as shown below; '*Do you always do what you suggest others?*', '*Have you ever cheated on a game?*', '*Have you ever abuse someone for your own interest?*' Lie personality scale aims to measure deception levels made by individuals to create a good image. Individuals tend not to express themselves as they are but in a way the occasion calls for (Tosunoğlu, 2008). Individuals with tendency for performances are individuals who would like to win on a competition as bringing themselves forward, as their characteristics are presented above. Similarly, individuals who have lie personality tend to show themselves as good individuals. Therefore, it is thought that prediction of tendency for performances by lie personality is meaningful.

A meaningful relationship was not found between neuroticism characteristics and learning tendency approach, tendency for performance approach and avoidance of performance tendency.

A positive directed meaningful relationship was found between psychoticism and tendency for performance approach while a meaningful relationship was not found between learning tendency approach and avoidance of performance tendency. Individuals with high psychoticism scores tend to have hostile attitudes toward others as well as their relatives and friends. They like to upset and stultify others as they do not care about danger (Koç 1994). They are individuals who do not care about others, are lonely, have always different difficulties, do not adapt anything, tend to have cruel behaviors, have apathy levels, tend to have hostile behaviors toward even their friends and relatives, and enjoy upsetting other people (Yavuzer 1982). Individuals with tendency for performances tend to prove their capabilities and tend to avoid conditions in which they might be seen as incapable (Dweck, 1988). Therefore, social comparison information is very important for individual who have tendency for performances (Butler, 1992). The highest level of success for individuals with tendency for performances is to perform duties that others could not do or to do duties as spending less effort compared to other people because success determinants for these kind of students are others' performance levels (Lemyre, Roberts and Ommundsen, 2002). It can be said that individuals with tendency for performances are external oriented (Kayış 2013). As presented in references, individuals who have high scores in psychoticism dimension tend to belittle others, act as if they are superior on others and see others unhappy, similarly, individuals who have tendency for performances tend to regard themselves as the best in a group, tend to become successful not for its benefits but for showing off and tend to prove themselves as better among other people. In this standpoint, it is thought that a meaningful relationship between psychoticism and tendency for performance approach is an expected result.

According to results of our study, personal characteristics affect students' success tendencies as they affect many other areas. Therefore, it is thought that personal differences and personal characteristics should be considered while preparing education programs. In literature review, it was seen that there were limited number of studies that focus on this subject and our study has been expected to contribute to literature in this manner.

SUGGESTIONS

- Students from three universities were included to this study. The number of volunteer participants could be increased to have better population representation level.
- Different aspects could be considered as conducting similar studies in affective and cognitive areas that predict success tendencies.
- Detailed trainings could be given to volunteers about the tests to be made.

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INVESTIGATION OF THE SUBJECTIVE WELL-BEING OF PSYCHOLOGICAL COUNSELLING CANDIDATES AND THE PERCEIVED SOCIAL SUPPORT LEVELS

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ABSTRACT

The purpose of this study is to examine the multidimensional perceived social support and subjective well-being within psychological counselling candidates. The population of the study is the students who are the consultant candidates at a university in Northern Cyprus. The study was a descriptive study and was conducted in Northern Cyprus consisting of 142 (51.8%) female participants and 134 (48.2%) male participants. The participants were from a university in Northern Cyprus. In this study, the 'Subjective Well-Being Scale' which is developed by Dost (2005) and the 'Multi-Dimensional Perceived Social Support Scale' that adapted to Turkish by Eker and Akar (1995) were drawn upon in order to determine the level of well-being among the research participants. In this study a Personal Information Form, which is developed by the researcher is also implemented.

According to the results of the research, there was a statistically significant difference in subjective well-being among students according to gender, class, father's education and relationship status. In addition to this when the level of multidimensional perceived social support was examined, statistically significant difference was found according to gender, number of siblings, mother's education and relationship status. Therefore, it has been found that there is a moderate positive correlation between subjective well-being and perceived social support.

Key Words: Subjective well-being, Perceived social support, Psychological counselling

INTRODUCTION

Researches on the concept of "happiness" which is explained as the pleasure felt with the complete and constant realisation of a desire or will date back to ancient times. Studies conducted on how people feel happiness continue until today, and leading a happy life is an essential desire for all individuals. The scientific term used for individuals evaluating their lives as social-cultural beings and ruling their own lives is "subjective well-being". Subjective well-being is defined as the subjective status of satisfaction consisting of cognitive and emotional components and a positive mental health (Deiner, 2001).

Subjective well-being is, first of all, subjective and is found in the experiences of individuals. In addition, it includes not only positive situations but also negative ones, as well as the evaluation of self-evaluation by the individuals of all aspects that affect their life. Therefore, self-evaluation by an individual of his/her life in cognitive and emotional terms is defined as his/her well-being. Subjective well-being has three essential elements, namely negative sensation, positive sensation and life satisfaction (Diener, 1984, cited in Eryilmaz 2011). Interest, trust, joy, pride reflect positive emotions whereas sorrow, hate, guilt and anger reflect negative emotions.

The positive and negative emotions in the lives of individuals constitute their subjective well-being levels as regards their own life satisfaction. The most important factor in people having a strong structure is the relation between their well-being, characters and their experiences. The situations where positive feelings are more compared to negative feelings show that subjective well-being is high, which is the most emphasised concept in positive psychology (Kaplan, 2016).

The happiness of individuals in their living area is affected by their mood, needs for social support, and communication and interaction with their environment. Every individual has an environment where s/he continues his/her life and personal characteristics. When these characteristics are evaluated, it can be seen that the situations in which an individual feels happy show difference depending on their unique living areas (Ekinici and Ekici, 2003).

Some situations related to a good life and, relatedly, a good mood, constitute the subjective area; however, subjective well-being concentrates on the evaluation of a person on his/her own life. In other words, subjective well-being is explained with the concept that happiness is a personal value and only s/he can decide on how happy he/she is (Türkdoğan, 2010).

As a result of the studies conducted, it is seen that health, working life, income, social relations and social benefits in the life of an individual make contribution to the subjective well-being of a person. Well-being also affects the social relations of a person. People with strong social environment can easily overcome both economic and legal issues and experience positive feelings. Social support provides such feelings as emotional, information, material, belonging and socialization (cited in Yalçın, 2014).

Social support which is based on Kurt Lewin's Field Theory is defined by Lewin as the change occurring in behavioural psychological environment. In order to eliminate non-conforming behaviours and acquire new behaviours, individual needs a social environment. Social environment and the resulting social support is provided by important people in the life of an individual such as father, mother, friend, lover, spouse, relatives, teachers, neighbourhoods. Social support is a multi-dimensional concept which is hard to define and measure; but it can be described as an individual satisfying his needs for belonging, being loved, being appreciated and self-realisation through interaction (Ekinci & Ekici, 2003).

Social support is defined as the support obtained by individuals from their social and psychological environments and affects and spreads to some profession groups rapidly in a short period of time. It is especially effective in such fields as health, sociology, guidance and psychological consulting. Being in social relations plays a key role in both psychological and physical health. It is known that social support has a protective impact against stress, and it has positive correlation with well-being. The well-being level of people with more family members and friends is higher (Diener and Ryan 2009).

Social relations has an essential place in all periods of life and it adds meaning to the lives of individuals. The quality of life, happiness and, as a result, psychology of individuals with less social support can be affected negatively (Yalçın, 2014).

Psychological consultancy and guidance services aim at ensuring that individuals understand themselves, solve their problems, give realistic decisions, improve and realise themselves, define their expectations and grow as satisfied and productive people. It is important that psychological consultant candidates who will serve professionally in this field have well-being so that they can help other people in a healthy manner. This concept includes not only physical situation but also psychological and social situations. For this reason, social support is essential in this field. Candidates who will work in this area must feel good so that they can give effective services. It is essential that psychological consultant candidates feel good and perceive high level of social support in terms of professional efficiency.

The purpose of this study is to examine the subjective well-being and perceived social support levels of psychological consultant candidates.

For this purpose, answers are sought to the following fundamental questions:

1. Is there a significant difference between the subjective well-being of candidate consultants and their age, gender, grade, area they live, economic status, education level of mother and father, number of siblings and personal relations?
2. Is there a significant difference between the perceived social support of candidate consultants and their age, gender, grade, area they live, economic status, education level of mother and father, number of siblings and personal relations?
3. Is there a correlation between subjective well-being and perceived social support of candidate consultants?

METHOD

RESEARCH MODEL

A descriptive study was conducted based on quantitative research data so as to determine the subjective well-being and perceived social support level of psychological consultant candidates. The population of the study is the students who are the consultant candidates at a University in Northern Cyprus. The sample of the research consists of 274 (142 female, 134 male) psychological consultant candidates who are studying at a university in Northern Cyprus.

It is found out that 26.6% of the candidate consultants covered by the study are 21 years old, 33.2% are junior students, and 63.1% have intermediate economic status. 93.8% of the participants do not receive psychological support, 27% have 2 siblings, and 43% are staying at dormitory during academic year. As regards the education status of mothers of the candidates, 27% are elementary school graduates whereas the fathers are mostly (32.5%)

university and vocational college graduates. In addition, it has been found out that 50.4% of psychological consultant candidates have a private affair.

Table.1. Socio-demographic characteristics of participants

		f (%)
Age	18	6 (2,2)
	19	21 (7,7)
	20	45 (16,4)
	21	73 (26,6)
	22	61 (22,3)
	23 and above	68 (24,8)
Gender	Female	142 (51,8)
	Male	134 (48,2)
Grade	1	47 (17,2)
	2	83 (30,3)
	3	91 (33,2)
	4	53 (19,3)
Economic status	Upper	8 (2,9)
	Upper-intermediate	85 (31,0)
	Intermediate	173 (63,1)
	Lower-intermediate	5 (1,8)
	Lower	3 (1,1)
Psychological support	Yes	17 (6,2)
	No	257 (93,8)
Number of siblings	None	12 (4,4)
	1	72 (26,3)
	2	74 (27,0)
	3	48 (17,5)
	4	20 (7,3)
	5 and more	48 (17,5)
Where does he/she stay during academic year	At home alone	31 (11,3)
	With family	12 (4,4)
	At home with friends	113 (41,2)
	At dormitory	118 (43,0)
Education status of mother	Illiterate	27 (9,9)
	Literate	17 (6,2)
	Elementary school graduate	74 (27,0)
	Secondary school graduate	39 (14,2)
	High school and equivalent graduate	71 (25,9)
	Undergraduate / graduate degree	46 (16,8)
Education status of the father	Illiterate	5 (1,8)
	Literate	11 (4,0)
	Elementary school graduate	65 (23,7)
	Secondary school graduate	35 (12,8)

	High school and equivalent graduate	69 (25,2)
	University / vocational college graduate	89 (32,5)
Private relationship	Yes	138 (50,4)
	No	136 (49,6)

DATA COLLECTION TOOL

In order to determine the subjective well-being, “subjective well-being scale” was used, and “multi-dimensional perceived social support scale”, which was used to measure social support perception and the “personal information form” developed by the researcher were used in collecting the data of this study.

Subjective well-being scale

Subjective well-being scale developed by Dost (2005) was applied so as to determine the subjective well-being levels of psychological consultant candidates. The scale measures the subjective well-being levels by determining the frequency and intensity of negative and positive emotions. The reliability and validity of the scale which consists of 46 items was determined by Dost. Each item is evaluated with 5-Likert type scale. Twenty-six items of the scale include negative expressions. As a result of the study, Cronbach alpha reliability coefficient of the scale was found as .93, and test-retest reliability coefficient was found as $r: .86$. The lowest and highest scores which can be obtained in the scale are 46 and 230, respectively, which indicate the level of subjective well-being (Dost, 2005).

Multi-dimensional perceived social support scale

In order to measure social support perception, “multiple-dimension perceived social support scale” was used which was developed by Zimet et al. (1988) and adapted to Turkish by Eker and Arkar (1995). This scale has three sub-dimensions, namely family, friends and special person. The scale consists of 12 items and 7-Likert type ranking is used. Each sub-dimension consists of four items, each of which indicate the score as regards the sub-dimension, and the total of all sub-dimensions give the scale score. Internal consistency reliability of the scale was found to be between .80 and .85, which is an acceptable internal consistency in the scale and sub-scales alike (Eker, Akar and Yaldiz, 2001).

Personal information form

The personal information form consisting of 10 items which was developed by the researcher was applied to psychological consultancy candidates in order to identify their age, gender, grade, economic status, psychological support, number of siblings, the place they stayed during academic year, education status of their parents and their private relationships.

ANALYSIS OF DATA

As regards analysis of the data, Mann-Whitney U test and Kruskal-Wallis H test were used in order to determine the differences between groups in non-parametric measurements. Pearson Correlation coefficient was used in order to identify the relation between perceived support and subjective well-being levels.

FINDINGS

The findings of this study are presented in order within the framework of the following research question.

1. *Is there a significant difference between the subjective well-being of candidate consultants and their age, gender, grade, area they live, economic status, education level of mother and father, number of siblings and personal relations?*

As a result of the obtained findings, subjective well-being level of candidate consultants does not show statistically significant difference according to their age [$\chi^2 (5)=1,63, p>.05$], economic status [$\chi^2 (4)=7,091, p>.05$], psychological support ($U=2060,50, p>.05$), number of siblings [$\chi^2 (5)=1,252, p>.05$], place where they stay during academic year [$\chi^2 (3)=6,548, p>.05$], and education status of the mother [$\chi^2 (5)=3,563, p>.05$]. On the other hand, statistically significant difference was found out according to the gender, education status of father and private relationship status of candidate consultants ($p<0.05$).

The results obtained as regards subjective well-being level and gender variable of psychological consultant candidates are provided in table 2.

Table 2. Mann Whitney- U Test results as regards subjective well-being level and gender variable of psychological consultant candidates

		N	Rank mean	Rank total	U	Z	p
Subjective well-being	Female	142	147,63	20964,00	7791,00	2,317	,020
	Male	132	125,47	16437,00			

p<0.05*

It has been found out that subjective well-being levels of psychological consultant candidates show statistically significant difference according to gender variable (p<0.05). It is identified that female psychological consultant candidates (\bar{x} =147,63) have higher subjective well-being level compared to male psychological consultant candidates (\bar{x} =125,47).

The results obtained as regards subjective well-being level and grade variable of psychological consultant candidates are provided in table 3.

Table 3. Kruskal Wallis Test results as regards subjective well-being level and grade variable of psychological consultant candidates

Grade	N	Rank mean	Sd	X²	P
1	47	148,71	3	7,901	,048
2	83	120,37			
3	91	150,55			
4	53	129,25			
Total	274				

p<0.05*

It has been found out that subjective well-being levels of psychological consultant candidates show statistically significant difference according to grade variable (p<0.05). Subjective well-being scores of junior students (\bar{x} =150,55) and freshman students (\bar{x} =148,71) are higher compared to sophomore (\bar{x} =120,37) and senior (\bar{x} =129,25) students.

Table 4. Kruskal Wallis Test results as regards subjective well-being level and education status of the father variable of psychological consultant candidates

Education	n	Rank mean	Sd	X²	P
Illiterate	5	88,40	5	12,692	,026
Literate	11	66,14			
Elementary school graduate	65	138,11			
	35	136,16			
Secondary school graduate	69	136,27			
High school and equivalent graduate	89	148,57			
	274				
University					
Total					

p<0.05*

When the education status of the fathers of candidate psychological consultants is examined, it is seen that the children of university graduate fathers have higher subjective well-being levels ($\bar{X}=148,57$). The lowest subjective well-being score belongs to the children of literate fathers ($\bar{X}=66,14$). The scores are increasing when one goes from secondary school graduate, high school graduate and university graduate fathers. However, the subjective well-being mean of elementary school graduate fathers ($\bar{X}=138,11$) is higher compared to secondary school graduates ($\bar{X}=136,16$) and high school graduates ($\bar{X}=136,27$).

Table 5. Mann Whitney- U Test results as regards subjective well-being level and private relationship variable of psychological consultant candidates

		n	Rank mean	Rank total	U	z	P
Private relationship	Yes	138	147,96	20418,00	7803,00	2,319	,020
	No	136	125,80	16983,00			

p<0.05*

When the subjective well-being scores of candidate consultants according to private relationship variable is examined, it is seen that the subjective well-being scores of consultants with private relationship ($\bar{X}=147,96$) is higher compared to subjective well-being scores of consultants with no private relationship ($\bar{X}=125,8$).

2. *Is there a significant difference between the perceived social support of candidate consultants and their age, gender, grade, area they live, economic status, education level of mother and father, number of siblings and personal relations?*

Statistically significant difference has not been identified in the perceived social support scores of candidate consultants in terms of their age [$\chi^2 (5)=4.89$, p>.05], grade [$\chi^2 (3)=3.88$, p>.05], and economic status [$\chi^2 (4)=2.06$, p>.05]. It is also seen that statistically significant difference does not exist in terms of age, grade and economic status in sub-scales of perceived social support.

The findings that were gathered show that there is no statistically significant difference in the perceived social support scores of candidate consultants in terms of the place where they stay during academic year [$\chi^2 (3)=2.21$, p>.05] and education status of the father [$\chi^2 (5)=8.60$, p>.05] and psychological support (U=2153.00, p>.05) variables. An examination of the sub-dimensions of perceived social support also shows that there is no statistically significant difference in the perceived social support scores of candidate consultants in terms of the place where they stay during academic year, education status of the father and psychological support variables.

According to gender variable, perceived social support did not show statistically significant difference in family sub-dimension (U=8187.00, p>.05) whereas significant difference was found in other sub-dimensions.

Table 6. Mann Whitney- U Test results as regards perceived social support level and friend and significant other sub-dimensions of psychological consultant candidates according to gender variable

		n	Rank mean	Rank total	U	z	p
Friends	Female	142	147,38	20928,50	7968,50	2,156	,031
	Male	132	126,87	16746,50			
Significant other	Female	142	146,56	20811,50	8085,50	1,990	,047
	Male	132	127,75	16863,50			

p<0.05*

As a result of the gathered data, it was found out that the perceived social support scores obtained by candidate psychological consultants at friend and significant other sub-dimension is higher in females compared to males.

Statistically significant difference was not seen in perceived social support significant other [$\chi^2(5)=1.76$, $p>.05$] and family s [$\chi^2(5)=6.14$, $p>.05$] sub-dimensions of candidate psychological consultants according to the number of siblings variable whereas significant difference was observed in friends dimension.

Table 7. Kruskal Wallis Test results of perceived social support level of candidate psychological consultants according to friendship sub-dimension siblings variable

Number of siblings	n	Rank mean	Sd	X ²	p
0	12	147,92	5	17,385	,004
1	72	154,40			
2	74	151,76			
3	48	120,27			
4	20	87,65			
5 and more	48	125,56			
Total	274				

$p<0.05^*$

When table 7 is examined, it is seen that the perceived social support level of candidate consultants with 1 sibling is higher in friendship sub-dimension ($\bar{x}=154,40$). The lowest perceived social support score is obtained by those with 4 siblings ($\bar{x}=87,65$).

Significant difference was found in all sub-dimensions of perceived social support of candidate's psychological consultants according to the education status of mother variable the results are given in table 8 accordingly.

Table 8. Kruskal Wallis results of perceived social support sub-dimensions of psychological consultant candidates according to the education status of mother variable

	Education	n	Rank mean	Sd	X ²	P
Friend	Illiterate	27	118,85	5	19,602	,001
	Literate	17	78,74			
	Elementary school graduate	74	129,41			
	Secondary school graduate	39	136,95			
	High school and equivalent graduate	71	163,07			
	University graduate	46	144,18			

Family	Illiterate	27	128,17	5	17,258	,004
	Literate	17	72,56			
	Elementary school graduate	74	139,43			
	Secondary school graduate	39	150,81			
	High school and equivalent graduate	71	154,13			
	University graduate	46	126,93			
Significant other	Illiterate	27	112,78	5	11,884	,036
	Literate	17	98,09			
	Elementary school graduate	74	134,22			
	Secondary school graduate	39	143,14			
	High school and equivalent graduate	71	157,23			
	University graduate	46	136,62			
Total	Illiterate	27	112,37	5	22,003	,001
	Literate	17	73,24			
	Elementary school graduate	74	133,25			
	Secondary school graduate	39	145,59			
	High school and equivalent graduate	71	163,15			
	University graduate	46	136,38			

p<0.05*

Statistically significant difference has been identified in all perceived social support sub-dimensions according to the education status of mother variable of candidate's consultants (p<0.05). Table 8 shows that the scores obtained by high school and equivalent graduates from perceived social support is higher in friend, family and significant other sub-dimensions. The lowest scores are obtained by literates.

When the perceived social support scores of psychological consultant candidates are examined according to significant other variable, no significant difference was witnessed in friend sub-dimension (U=8161, p>.05) whereas significant difference was found in family and significant other sub-dimensions.

Table 9. Mann Whitney U Test results of psychological consultant candidates from perceived social support family and significant other sub-dimensions according to private relationship variable

		N	Rank mean	Rank total	U	z	p
Family	Yes	138	146,74	20250,00	8109,00	1,966	,049

	No	136	128,13	17425,00			
Significant other	Yes	138	178,87	24684,00	3675,00	8,825	,000
	No	136	95,52	12991,00			
Total	Yes	138	165,10	22784,00	5575,00	5,813	,000
	No	136	109,49	14891,00			

$p < 0.05^*$

When the perceived social support family and significant other sub-dimension scores according to the private relationship variable of candidate's consultants is examined, it is observed that the perceived social support score of candidate's consultants with relationship is higher compared to those who does not have relationship in both sub-dimensions ($p < 0.05$).

3. *Is there a correlation between subjective well-being and perceived social support of candidate consultants?*

Table 10. Correlation between subjective well-being and perceived social support

		Subjective well-being total score	Perceived social support total score	Perceived social support friends sub-dimension score	Perceived social support family sub-dimension score	Perceived social support significant other score	
Subjective well-being total score	R p (2-tailed)	1	,512** ,000	,418** ,000	,502** ,000	,317** ,000	
Perceived social support total score	R p (2-tailed)		1	,783** ,000	,771** ,000	,793** ,000	
Perceived social support friends sub-dimension score	R p (2-tailed)			1	,566** ,000	,364** ,000	
Perceived social support family sub-dimension score	R p (2-tailed)				1	,352** ,000	
Perceived social support significant other score	R p (2-tailed)					1	

$p < 0.01^{**}$

It has been found out that there is a statistically significant relationship between subjective well-being and perceived social support of candidate's consultants. Positive medium-level correlation was identified between subjective well-being and perceived social support ($r = .51$, $p < 0.01^{**}$). Positive high correlation was found between perceived social support and sub-dimensions of friends ($r = .78$, $p < 0.01^{**}$), family ($r = .71$, $p < 0.01^{**}$) and significant other ($r = .79$, $p < 0.01^{**}$). In addition, positive medium-level correlation is detected between subjective well-being and perceived social support sub-dimensions of friends ($r = .41$, $p < 0.01^{**}$), family ($r = .52$, $p < 0.01^{**}$) and significant other ($r = .31$, $p < 0.01^{**}$).

DISCUSSION

According to the findings obtained in this study, it has been found out that the subjective well-being of females is higher compared to males. This finding is consistent with the results of studies conducted by Yavuzer and Gündoğdu (2012) and Güler and Gazioğlu (2008). When other studies in the literature are examined, different results can be observed as regards gender variable and subjective well-being. Some studies did not find significant difference as regards gender (Dilmaç and Bozgeyikli, 2009; Tümkaya, 2011; Saygın, 2008), whereas some others did. In some studies the results are in favour of females whereas in some others the results show the opposite direction (İlhan, 2005; Safoz and Güven, 2008). The reason for such inconsistency of results about gender can be associated with the cultural characteristics of the relevant society. In addition, considering that the study is conducted on candidates at education faculty and each candidate is also a teacher candidate, the higher level of subjective well-being in females can be explained by the perception that teaching is mostly seen as a female occupation.

According to the findings in grade variable, it has been found out that the subjective well-being scores of junior and freshman psychological consultant candidates are higher compared to sophomore and senior students. This finding can be related to the fact that candidates who just began university are enthusiastic about their profession and self-confident and courageous for being a freshman. At the second grade the candidates are getting used to the university, hence lower scores. In the third years the candidates are approaching to their professions step by step and feeling courageous. In the fourth year, scores are decreasing again probably due to the anxiety of finding a job after graduation and the public personnel selection examination (Public Personnel Selection Examination, PPSE).

When the obtained findings are examined, it is seen that the children of fathers who are university graduates have higher subjective well-being scores. The scores are increasing from secondary-high school graduates to university graduates. It can be assumed that as level of education increases, more conscious individuals are raised and the families with more conscious children are more satisfied; thus, the children in satisfied families are better and happier.

Another finding of the study in terms of private relationship and subjective well-being is that subjective well-being of candidates with private relationship is higher. This finding shows that, considering that significant other is the predictor of positive affection, intimacy, trust, and being loved bring happiness, and positively affects the well-being of the individual. According to Yetim (2001), a relationship in which individuals support each other in terms of emotions, develop deep understanding about the other and complete each other in a harmonious way increases the happiness and satisfaction of the individual which is considered to have a positive impact on the subjective well-being of the person.

When the findings as regards perceived social support are examined, it was seen that it showed statistically significant difference according to gender and the perceived social support of females is higher compared to males. This result is consistent with the studies of Yamaç (2009) and Eker and Arkar (1995).

When the obtained findings are examined in terms of the relationship between perceived social support and number of siblings, it is seen that the scores of candidates with one sibling are higher. This result is in conflict with the studies conducted by Demirtaş (2007) and Şahin (2011) but agrees with the research conducted by Şencan (2009). This result is found out to be statistically significant in friendship sub-dimension which can be associated with the fact that at university individuals are distant from their families and spending their time mostly with the friends in their social environments.

It has been identified that perceived social support provided statistically significant results according to the education status of mother variable. It is seen that the score of high school and equivalent graduates is higher. The findings are similar with some studies in the literature (Okanlı, 1999; Şahin, 2011) and conflict with others (Başer, 2006). It is expected that perceived social support would increase with the level of education. However, the scores of university and vocational college graduate mothers is lower than high school and equivalent graduate mothers, which can be explained with the assumption that usually university graduate mothers are working mothers who can spend less time with their children due to their workload.

Another finding which was obtained is that, as regards the relation between perceived social support and private relationship, it is seen that individuals with private relationship have higher levels of perceived social support. In a study conducted by Gallagher and Brodrick (2008) the support given by significant other was found as the predictor of positive affection. This result supports the obtained findings in this study. It can be claimed that people with private relationship enjoy higher levels of perceived social support and thus higher well-being levels.

Another finding obtained in the study is that there is a positive medium-level correlation between subjective well-being and perceived social support level. This result is similar with other studies in the literature (Yalçın, 2014; Şahin, 2011). It can be claimed that happy individuals are those who receive more social support and, thus, as the perceived social support increases, so does their subjective well-being.

CONCLUSION AND RECOMMENDATIONS

In the end of this study, statistically significant difference was not found between subjective well-being of psychological consultant candidates and such variables as their age, economic status, psychological support, number of siblings, place where they stay during academic year and education status of the mother. On the contrary, as regards gender variable, statistically significant difference was found in favour of females. Considering subjective well-being and grade variable, it was seen that the scores of freshman and junior students are higher compared to sophomore and senior students. Statistically significant difference was found between subjective well-being and education status of the father, as it was identified that children of university graduate fathers had higher subjective well-being levels and as level of education increased, so did well-being level. It was also found out that people with private relationship are happier and thus they enjoy higher levels of subjective well-being. Statistically significant difference was not found out between perceived social support levels of psychological consultant candidates and such variables as their age, grade, economic status, psychological support, place where they stay during academic year and education status of the father. It was seen that according to gender variable females had higher perceived social support levels than males. As per the variable of number of siblings, perceived social support level of candidates with one sibling was found out higher in friends sub-dimension whereas the candidates with four siblings revealed the lowest perceived social support level. It was found out that in all sub-dimensions of education status of mother perceived social support was statistically significant in that the children of high school and equivalent graduate mothers had higher perceived social support than others. It was also observed that individuals with private relationship had higher perceived social support levels which are statistically significant in family and significant other sub-dimensions and that their perceived social support level is higher compared to individuals who have no private relationship.

In conclusion, positive medium-level correlation was found out between perceived social support and subjective well-being of candidate psychological consultants.

Based on the obtained results, the following recommendations can be made:

- In order to make a more comprehensive study, a wider sample of psychological consultant candidates can be studied from different universities.
- Education programs can be developed especially in order to increase subjective well-being of senior psychological consultant candidates.
- This study which was conducted with quantitative method can be repeated with qualitative methods and new information can be gathered.
- Studies can be conducted on comparing the research performed in Turkey and abroad.

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INVESTIGATION ON THE EFFECT OF THE COLLEGE CURRICULUM OF PHYSICAL SCHOOL COLLEGE OF PHYSICAL EDUCATION ON COMMUNICATION SKILLS

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ABSTRACT

The aim of this research was to examine the effect of the students who attended the Erciyes University School of Physical Education and Sports on the communication skills of the courses they have taken. 600 randomly selected students participated in the research voluntarily. As means of data collection in the survey; Communication skills scale (Ersanlı and Balcı, 1998) and the personal information form prepared by the researcher. The obtained data were analyzed statistically with SPSS 20.0 package program. The personal information and inventory total scores and factor scores for the candidates were determined by determining frequency (f) and percent (%) values. While

Mann-Whitney U test statistic was used in comparison with gender, Kruskal Wallis test statistic was used in comparison according to ages, departments, classes and academic average.

As a result; When the levels of communication skills of physical education and sports college students are examined; There is no statistical difference according to the average academic grade average; Statistically significant differences were found according to gender, age, department and class variables.

Key words: Communication skills, student, physical education

INTRODUCTION

Communication, complex and multidimensional, is a process that exists in every cycle of life from the birth of man to his death. In addition to being a biological entity, it is necessary for a person who is a social and cultural entity to be in a healthy communication process, to transfer the experiences gained from the beginning (Güler, D.). For this reason, communication is a tool that a person needs to improve his technical knowledge and skills (Ersanlı, K., Balcı, S.). Since the time we passed from the age of industry to the age of information, the progress of technology and the increase in the application of social media means that the face-to-face communication skills have diminished and only written and verbal communication has increased through social media. We can see that the quality of the communication is also lowered because there is no emotional expression in the message which includes these communications made. However, it

can be said that in situations such as failure to communicate with the individual, communication or misrepresentation of the individual, the individual may become impatient and unhappy with loneliness over time. (Jones, W).

Communication: The interaction process is defined as the process of sharing and sharing the meanings of knowledge, ideas, attitudes, emotions and skills in order to create a change of behavior between the source and target.

It is the unit that transmits the source, the information, the message. (Demirel, Ö.) The message is the content of the communication. It is the part where the message to be sent (emotion, thought, intention, motive, action, etc.) occurs and is selected to be sent. The channel is the presentation of the message. The message can be sent verbally, non-verbally or in writing, and it functions as a channel for all visual and audiovisual means provided by today's technology. A receiver is a unit that receives messages from a source. It is the person who reads, listens and follows the message (Demirel, Ö, Tozluyurt E). The feedback is the response of the recipient to the message. It shows how the recipient interprets the message.

Demirel-Seferoğlu-Yağıcı (2001: 20), in addition to Çilenti (1988), which refers to the section where the living spaces of the source and the recipient intersect, as the "common living space"; The greater the extent to which the common areas of life are mentioned in the learning-teaching process, the greater the success will be. Teachers' morale, motivation, and psychological status influence the educational environment significantly at institutions where educational activities are conducted. As teachers feel peaceful and happy in their working environment, this situation will be reflected positively in the classroom environment and the success of educational activities will increase (Karaoglu et al., 2016). A message is a message to the symbols that enable the emotion and thought of a life to be encoded, verbally, non-verbally or in writing, to reach the recipient. The message is that the emotions and thoughts from the sender are perceived by the receiver's emotional organs. The more messages the message reaches to the sensory organ, the more successful the narration becomes (Baltaş, Z., Baltaş, A.) The ability to give messages in a way that is verbally, non-verbally or in writing can be made possible by the enhancement of sending skills. The person's ability to send messages is shaped by the social environment and personality characteristics experienced (Baltaş, Z., Baltaş, A.). In addition, according to Baltaş and Baltaş (1999), there are three main factors affecting the encoding of the message to be transmitted in the communication process. These; The format of the relationship, the context of the relationship and the purposes of the relationship. The roles that people play in society, the status and situation they are in, as well as the factors such as location, time and age, are factors that influence the coding of meaning. Nevertheless, the purpose of the

relationship in positive communication and in maintaining communication effectively plays a very important role. It is the basic characteristics that determine the encoding of the meaning of the purpose and the meaning of the recipient. (Baltas, Z., Baltas, A.).

Nowadays, it is inevitable that communication skills of people in an age when interpersonal communication is important should be at a high level. The reality is that these skills of university students who will guide the future of society are at the highest level. Particularly in the physical education and sports college, physical education and sports teachers, trainer training, sports management and recreation training programs are not jobs that require people to have any machinery or body power in their future fields and they will directly communicate with people and direct them. It is aimed to examine the effect of the communication skills of the courses taken in the programs they have studied for.

MATERIAL and METHOD

Creation of a Voluntary Group

Study group Erciyes University consists of students who are in 1st, 2nd, 3rd and 4th class in Physical Education and Sport Teacher Training, Coaching Education, Sports Management and Recreation Education departments of Physical Education and Sport College.

The student's universe is composed of 1440 students studying at physical education and sports college. The sample group consisted of 600 randomly selected students.

Data Collection Tools

As means of data collection in the survey; Communication skills scale and socio demographic information form were used.

Table 1. Participants' socio-demographic characteristics

Variable	Gruplar	N	%
Gender	Male	362	60,3
	Female	238	39,7
Age	18-21	311	51,8
	22-25	254	42,3
	26-29	35	5,8
Department	Physical Education Teaching	150	25,0
	Coaching Education	150	25,0
	Sport Management	150	25,0
	Recreation Education	150	25,0
Grade	1	136	22,7
	2	162	27,0
	3	163	27,2
	4	139	23,2

General Academic Average	1.25-1.99	90	15,0
	2.00-2.99	313	52,2
	3.00-4.00	197	32,8

When Table 1 is examined, it is seen that 60.3% of the volunteers participating in the study are male, 39.7% are female, 51.8% of the volunteers are 18-21, 42.3% of the volunteers are 22-25, 5.8% 25% of them are in the age of 26-29, 25% of them are in BES teacher education, 25.0% are in coaching education, 25.0% in sports management and 25% in recreation education. 27.2% of the 27.0% of the students were in the 3rd grade and 23.2% of the students were in the 4th grade, 27.0% of the students were in the 2nd grade, 1.25-1.99 of the 15.0%, 2.00- 2.99 and 32.8% have an average of 3.00-4.00.

Personal Information Form

A form developed by the researcher to collect data about participants' independent variables; It consists of 5 questions to determine students' age, gender, department, class and general weighted grade averages.

Communication Skills Scale

The "Communication Skills Inventory" developed by Ersanlı and Balcı (1998) consists of 45 likert type and 3 sub-dimensions. According to the content of these sub-dimensions; (Mental) cognitive, (emotional) affective and behavioral. There are 15 items measuring each dimension. Cronbach's alpha reliability coefficient was found to be .68, and Cronbach's alpha reliability coefficient was found to be .64 in the test using the test-retest method. The Cronbach Alpha coefficient applied to determine the internal consistency of the scale on the communication skills of emotional intelligence: University 371 C.16, S.1 was found to be .72. There was a .001 correlation between the total score of the communication skills inventory and the subscales and a .001 correlation within the subscales themselves (Ersan and Balcı, 1998).

Investigation of The Course Curriculum

Table2. Erciyes University School of Physical Education and Sports 2016-2017 Distribution of Lessons

		Physical Education Teaching	Coaching Education	Sport Management	Recreation Education
2016- 2017	Theoric	61 Saat	69 Saat	61 Saat	67 Saat
Yılı Fall	Practice	32 Saat	43 Saat	18 Saat	36 Saat
Semester	Total	93 Saat	112 Saat	79 Saat	103 Saat
2016- 2017	Theoric	72 Saat	73 Saat	57 Saat	65 Saat
Yılı Spring	Practice	44 Saat	34 Saat	22 Saat	35 Saat
Semester	Total	116 Saat	107 Saat	79 Saat	100 Saat
	The Overall Total	209 Saat	219 Saat	158 Saat	203 Saat

Fall Semester Evaluation

In the Department of Physical Education and Sports Teaching, there are 7 elective courses, 30 pens in total, for the period of 2016-2017. 61 hours of these courses are theoretical, 32 hours are applied and 93 hours in total.

In the Department of Coaching Education, there are 6 elective courses for the fall semester 2016-2017, total 44 courses. These courses cover 69 hours in theory and 43 hours in total and 112 hours in total.

There are 9 elective courses for the fall semester 2016-2017 in the Department of Sports Management. 61 hours of these courses are theoretical, 18 hours are applied and 79 hours in total.

In Recreation Department, for the fall semester of 2016-2017, there are 40 elective courses in total of 14 electives. 67 hours of these courses include 36 hours of theoretical hours and a total of 103 hours of lessons.

Spring Semester Evaluation

In the Department of Physical Education and Sports Teaching, there are 34 pens in 10 elective courses for the spring term of 2016-2017. 72 hours of theoretical and 44 hours of these courses cover 116 hours in total.

In the Department of Coaching Education, there are 42 practices in total for the 2016-2017 spring semester. These courses cover a total of 107 hours of theoretical hours with 73 hours applied and 34 hours applied.

There is 31 elective courses in 9 elective courses for the spring semester 2016-2017 in Sports Management Department. 57 hours of these courses are theoretical, 22 hours are applied and 79 hours in total.

There are 11 elective courses in the recreation department for the spring semester 2016-2017, with a total of 35 pens. These lessons include 65 hours of theoretical hours and 35 hours of total hours of lessons.

Erciyes University School of Physical Education and Sports Within the scope of the 2016-2017 academic year, 133 hours of theoretical and 76 hours of practical training are taught for the Department of Physical Education and Sports Teaching. For the Department of Coaching Education, 142 hours of theoretical and 77 hours of 219 hours of instruction are given. For Sports Management Department, 118 hours of theoretical and 40 hours of practice are taught for 158 hours in total. For the Recreation Department, 132 hours of theory and 71 hours of practical training are given for a total of 203 hours.

Analysis of Data

The data obtained from the personal information form and communication skills scale were coded and entered into the SPSS 20.0 package program and the analyzes were made through this program. The personal information and inventory total scores and factor scores for the candidates were determined by determining frequency (f) and percent (%) values. While Mann-Whitney U test statistic was used in comparison with gender, Kruskal Wallis test statistic was used in comparison with ages, departments, classes and general weighted grade averages.

FINDINGS

Table3. Descriptive statistic of the responses that students gave to the survey

	N	Min	Max	X±SS
Mental Communication Skill	600	26,00	26,00	53.35±6.43
Emotional Communication Skill	600	29,00	29,00	49.57±6.86
Behavioral Communication Skill	600	22,00	22,00	53.2±6.52
Communication Skill Total	600	79,00	79,00	156.11±16.84

When Table 2 is examined; Participants participating in the study were found to have mental communication skill score of 53.35 ± 6.43 , emotional communication skill score of $49.57 \pm$

6.86, behavioral communication skill score of 53.2 ± 6.52 and communication skill total score of 156.11 ± 16.84 .

Table4. Evaluation of Participants' Communication Skill Levels By Gender

Communication Skill	Gender	N	Median	Z	P
Mental Communication Skill	Male	362	53.00	-1.772	.076
	Female	238	53.00		
Emotional Communication Skill	Male	362	49.00	-2.13	0.33*
	Female	238	48.00		
Behavioral Communication Skill	Male	362	53.00	-.403	.687
	Female	238	53.00		
Communication Skill Total	Male	362	156.00	-1.579	.114
	Female	238	155.00		

p<0.005*

When Table 3 is examined, Statistically significant difference was found in the emotional communication skill score in comparing the participants according to their genders ($p < 0.05$). There was no statistically significant difference in mental communication skill, behavioral communication skill and communication skill total scores ($p > 0.05$).

Table5. Evaluation of Participants' Communication Skill Levels By Age

Communication Skill	Age Group	N	Median	X ²	P	U
Mental Communication Skill	18-21 ¹	311	53.00	5.376	.068	-
	22-25 ²	254	54.00			
	26-29 ³	35	52.00			
Emotional Communication Skill	18-21 ¹	311	49.00	8.103	.017*	1-2
	22-25 ²	254	50.00			
	26-29 ³	35	50.00			
Behavioral Communication Skill	18-21 ¹	311	53.00	4.127	.127	-
	22-25 ²	254	157.00			
	26-29 ³	35	51.00			
Communication Skill Total	18-21 ¹	311	154.00	4.574	.102	-
	22-25 ²	254	158.00			
	26-29 ³	35				

p<0.005*

When Table 4 is examined, Statistically significant difference was found between 18-21 and 22-25 years in the emotional communication skill score according to age of participants ($p < 0.05$). There was no statistically significant difference in mental communication skill, behavioral communication skill and communication skill total scores ($p > 0.05$).

Table6. Evaluation of Participants' Communication Skill Levels By Departments

Communication Skill	Departments	N	Median	X ²	p	U
Mental Communication Skill	PE Teaching ^a	150	53.00	7.542	.056	-
	Coaching Education ^b	150	53.00			
	Sport Management ^c	150	52.00			
	Recreation Education ^d	150	54.00			
Emotional Communication Skill	PE Teaching ^a	150	49.00	12.546	.006*	a-d
	Coaching Education ^b	150	49.00			b-d
	Sport Management ^c	150	49.00			c-d
	Recreation Education ^d	150	51.00			
Behavioral Communication Skill	PE Teaching ^a	150	54.00	9.600	.022*	
	Coaching Education ^b	150	52.00			a-b
	Sport Management ^c	150	52.50			b-d
	Recreation Education ^d	150	54.00			
Communication Skill Total	PE Teaching ^a	150	154.50	9.516	.023*	a-d
	Coaching Education ^b	150	155.00			b-d
	Sport Management ^c	150	153.00			c-d
	Recreation Education ^d	150	157.00			

$p < 0.005^*$

When Table 5 is examined; In the score of emotional communication skill according to the parts of the participants, between BES teacher training and recreation training, between coaching education and recreation training and between sport management and recreation training, between BES teacher training and coaching education and coaching education and recreation training in behavioral communication skill score, There was a statistically significant difference between recreation training, coaching education, recreation training and sport management training and recreation training ($p < 0.05$). There was no statistically significant difference in mental communication skill score ($p > 0.05$).

Table7. Evaluation of Participants' Communication Skill Levels By Grade

Communication Skill	Grade	N	Median	X ²	P	U
Mental Communication Skill	1. Class ^a	136	52.00	10.090	.018*	a-c
	2. Class ^b	162	53.00			
	3. Class ^c	163	49.00			
	4. Class ^d	139	53.00			
Emotional Communication Skill	1. Class ^a	136	48.00	4.407	.221	-
	2. Class ^b	162	49.00			
	3. Class ^c	163	50.00			
	4. Class ^d	139	49.00			
Behavioral Communication Skill	1. Class ^a	136	52.00	5.433	.143	-
	2. Class ^b	162	54.00			
	3. Class ^c	163	53.00			
	4. Class ^d	139	54.00			
Communication Skill Total	1. Class ^a	136	152.00	6.866	.076	-
	2. Class ^b	162	157.00			
	3. Class ^c	163	156.00			
	4. Class ^d	139	157.00			

p<0.005

When Table 6 is examined, Statistically significant difference was found between the first and third grades in the mental communication skill score according to the participants' classes ($p < 0.05$). It was found that there was no statistically significant difference in total scores of emotional communication, behavioral communication, and communication skills ($p > 0.05$).

Table8. Evaluation of Participants' Communication Skill Levels By General Academic Average

Communication Skill	GAA	N	Median	X ²	P	U
Mental Communication Skill	1.25-1.99	90	55.00	4.092	.129	-
	2.00-2.99	313	53.00			
	3.00-4.00	197	53.00			
Emotional Communication Skill	1.25-1.99	90	50.00	3.228	.199	-
	2.00-2.99	313	49.00			
	3.00-4.00	197	48.00			
Behavioral Communication Skill	1.25-1.99	90	52.00	.645	.724	-
	2.00-2.99	313	53.00			
	3.00-4.00	197	53.00			
Communication Skill Total	1.25-1.99	90	157.00	.929	.628	-
	2.00-2.99	313	155.00			
	3.00-4.00	197	155.00			

p<0.005

When Table 7 is examined, It was found that there was no statistically significant difference in total scores of mental communication skill, emotional communication skill, behavioral communication skill and communication skill according to the average academic grade points of the participants ($p > 0.05$).

DISCUSSION AND RESULT

The volunteers who participated in this study were found to have a communication skills score of 156.11 ± 16.84 . The highest score that can be taken from the communication skills scale is 225 and the lowest score is 45. Taking this into consideration, it is seen that the communication skill levels of volunteers participating in the study are moderate (Table 2). When the literature was examined, it was found that the communication skill total score was lower (Önay, N. (2014), Bilgen, H. (2014)).

A statistically significant difference was found in the emotional communication skill score between the participants according to gender ($p < 0.05$) (Table 2). There are also researches that show that communication skills do not differ according to sex (Özerbaş, Bulut, Usta, 2007; Özşaker, 2013; Çetinkaya, 2011; Erigüç, Şener and Eriş, 2013) as well as research findings consistent with our research findings in the field (Görmüş, Aydın, Ergin, 2013, Arslantaş, 1998,

Çağlayan, 2007, Bingöl and Demir, 2011, Özşaker, 2013, Erözkan, 2005, Gülbahçe, 2010). On the other hand, in some studies conducted on different study groups other than university students, women's communication skills scores were found to be higher than men's scores (Korkut, 2005, Durukan and Maden, 2010, Nacar, 2010, Reed, McLeod and McAllister, 1999). This finding is not parallel to our study. This inconsistency in the findings of the relationship between communication skills and gender can be explained by the use of different inventories to measure communication skills and the inclusion of these inventories in different sub-dimensions. At the same time, the multidimensionality of communication skills and the large number of factors that can influence these skills (differences in the possibilities of developing communication skills, differences in gender roles and socialization levels, etc.) can be considered as another reason for this difference (Koç, Terzi, Gül 2015).

Statistically significant difference was found between the ages of 18-21 and 22-25 years in the emotional communication skill score of the participants according to their ages and it was found that this difference was caused by the group of 22-25 years ($p < 0.05$) (Table 3). (1997), Bozkurt and others (2003), and Tepeköylü (2007) have found that the researches that reach the result of difference of communication skills according to age variable (Erigüç and Eriş (2013), Görür (2001) The difference in this study is that the students in the 22-25 age group are generally in the 3rd or 4th grade and they have to be more adaptive and accustomed to reading during the time they spend in school, They are more tolerant.

According to the findings of the study, there were significant differences in perceived communication skills perceptions among the participants who attended physical education teacher, coaching education, sports management and recreation education. (Table 4) ($p < 0.05$). When the literature was examined, Bingöl and Demir (2011) found that there were statistically significant differences according to departmental variable in university studies. This study is parallel to our findings. However, Tepeköy, Ö. (2007) found that there was no statistically significant difference in communication skills compared to departmental variables. It is thought that the difference in the present study is due to the fact that the course curriculum of the recreation department students is composed of lessons that are more social, fun and interpersonal communication.

Statistically significant differences were found between the 1st and 3rd classes in the mental communication skill score when comparing the participants according to their classes ($p < 0.05$) (Table 5). When the literature was examined, Pehlivan (2005) found that there was a significant difference in favor of the 4th grade between the 1st and 4th grade in the research conducted with the class teacher candidates. This study supports our work. However, Tepeköy, Ö. (2007)

and Korkut (1997) found that there were no statistically significant differences in their studies with respect to class variables. The difference in the presented study is due to the increase in the time and education process, the adaptation to the school, It is thought to be due to the increase of communication skills due to the situations.

According to the findings of the research, it was determined that there was no statistically significant difference between the communication skills according to the average academic grade points of the participants ($p > 0.05$). No research has been found in the literature on this subject. This is due to the nature of BESYO, which has an examination system for sportive practice, and it can be interpreted that regardless of which average the students have, they can not perceive themselves very differently in interpersonal communication.

As a result; When the levels of communication skills of physical education and sports college students are examined; There is no statistical difference according to the average academic grade average; Statistically significant differences were found according to gender, age, department and class variables.

SUGGESTION

- In the universities, courses can be given to improve communication skills for students. It will also provide university students with opportunities to develop social relationships, to get close to each other and to participate in friends' environments.
- In order to increase the knowledge and experience, it is necessary to provide more practice centered on written expression, oral expression and effective communication courses.
- Further studies should be undertaken on the adequacy of students' communication skills and on the various variables affecting them.

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İPEK YOLU, KÜLTÜR AKTARIMI VE EĞİTİM

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16. Yüzyılda tarihteki önemini kaybeden İpek Yolu'na yönelik bugün yeniden canlandırma girişimleri olmaktadır. Bu girişimler daha çok enerji nakil hataları ve Çin'den Avrupa ya olan ticarete yeni bir karayolu inşa etmeye yöneliktir. Ve bu yeniden canlandırmaya yönelik dünya genelinde birçok konferans, paneller düzenlenmekte bu yol üzerine kitaplar yazılmakta projeler hayata geçmektedir. Bu gelişmeler haliyle hem bölge ülkelerinin hem de bölge ile ilgili ülkelerinin eğitim ve kültür konusundaki çalışmalarını da etkilemektedir. Çalışmada konuyla ilgili yapılan eğitim çalışmalarına ABD, Rusya, Türkiye vb ülkelere örnekler verilecektir. Yeniden canlanan bu İpek Yolu'nun kültür aktarmada yararlanılması ve eğitime yansımaları üzerinde durularak Türkiye için konunun öneminin değerlendirilmesi yapılacaktır.

İSLAM EĞİTİMCİLERİNE GÖRE ÇOCUKLUK DÖNEMİ DİN EĞİTİMİ

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ÖZET

Bir bilim dalı olarak Din Eğitimi Biliminin ülkemizdeki geçmişi çok yenidir. Bununla birlikte bu durum, din eğitimi ile ilgili bilimsel çalışmaların yapılmadığı anlamına gelmemektedir. İslam eğitim tarihinde bir taraftan kurumsal açıdan kuttap, medrese gibi eğitime has mekânlarda dini içerikli eğitim-öğretim faaliyetleri yürütülürken bir taraftan da İslam eğitimcilerinin din eğitiminin içeriği, yöntemi, araç gereçleri, öğretmen ve öğrenci rolleri, din eğitimi alanları gibi pek çok konuyu ele alan müstakil olarak din eğitimi ile ilgili yazmış oldukları önemli eserler bulunmaktadır. İslam eğitimcilerinin yazmış oldukları bütün eserlerin günümüze kadar ulaşabildiğini söylemek mümkün değildir. Bu nedenle çalışmada Kabisi, İbn Miskeveyh, Gazali, Zernuci, İbn Sahnun, İbn Cema, el-Amasi gibi müstakil olarak din eğitimi- öğretimi ile ilgili eserler kaleme alan İslam düşünürlerinin günümüze ulaşan eserlerinden faydalanılarak çocuk ve çocukluk dönemi ile ilgili görüşleri ve bunun din eğitimine yansımaları ortaya çıkarılmaya çalışılacaktır.

Anahtar Kelimeler: Çocukluk, Din Eğitimi Bilimi, İslam Eğitimi.

ABSTRACT

The history of the Science of Religious Education is very new in our country. However, this does not mean that scientific studies on religious education have not been conducted. In the history of Islamic education, religious education activities are carried out in educational places such as kuttap and madrasa. On the other hand, Some Islamic thinkers have written important works on religious education, which deal with many issues such as the content, methodology, tools of education, teacher and student roles etc. In this study, Works of Islamic thinkers who wrote on religious education such as Kabisi, Ibn Miskeveyh, Ghazali, Zernuci, Ibn Sahnun, Ibn Cema, al-Amasi were used and it will be tried to be detected their views on religious education of childhood.

Key Words: Childhood, the Science of Religious Education, Islamic Education.

GİRİŞ

İslam, eğitime önem veren bir dindir. İslam'ın temel kaynakları incelendiğinde çocuğun eğitiminin önemi ve gerekliliğinden bahseden birçok ayet ve hadis bulmak mümkündür. Örneğin, “*Ey iman edenler! Kendinizi ve ailenizi, yakıtı insanlar ve taşlar olan ateşten koruyun.*” (Tahrim: 66/6) mealindeki ayet çocuğun eğitilmesi gerektiğini belirtmekte ve onun eğitiminden aileyi sorumlu tutmaktadır. Konuyla ilgili hadis külliyatında da bol miktarda rivayet mevcuttur. Örneğin Hz. Peygamberin: “*Güzel isim ve iyi terbiye çocuğun babası üzerindeki hakları arasındadır.*” (İbn Mace, “Edeb”, 3 (3671)) sözü din ve ahlak eğitimi babaya bir yükümlülük olarak vermektedir. Her ne kadar bu hadiste sadece “baba” kavramı geçse de bir başka hadiste hem anne hem de babadan bahsedilmekte ve ebeveynin çocuğuna bırakacağı “en güzel mirasın” terbiye olduğu belirtilmektedir (Tirmizî, “Birr”, 33).

İslam'da eğitime bu kadar vurgu yapılması, İslam alimlerinin de aynı hassasiyeti taşımalarını beraberinde getirmiştir. Nitekim eğitimle ilgilenen İslam alimleri eserlerinde genellikle İslam'ın eğitime verdiği önemden bahseden bölümlere yer vermiştir (örnekler için bkz. İbn Cema, 2009, 9-10; Zernuci, ty, 27-75). Bu çalışmanın problemi de bu eserlerde yer alan çocukluk dönemi ile ilgili görüşleri tespit etmektir. Kuşkusuz geçmişten günümüze İslam düşünürleri çok kapsamlı eserler ortaya koymuştur. Bununla birlikte İslam düşünürlerinin bütün eserleri değil, sadece eğitimle ilgili olup günümüze kadar ulaşabilenleri incelenecektir. Ayrıca bu eserleri incelerken düşünürlerin sadece çocuk, çocukluk ve çocuğun eğitimi ile ilgili görüşleriyle sınırlı kalınacaktır. Böylece İslam düşünürlerinin bu eserlerinden hareketle onların çocuk ve çocukluk dönemi ve bu döneme has eğitim özellikleriyle ilgili fikirleri ana hatlarıyla tespit edilmeye çalışılacaktır.

İnsan yaşamının gelişim dönemlerine ayrılarak incelenmesi, yapılacak din eğitimi ve öğretiminin bütün aşamalarının ona göre şekillendirilmesi açısından önem taşımaktadır. Bu açıdan çocuk ve çocukluk döneminin belirlenmesi önem taşımaktadır. Çünkü çocuk ile yetişkine verilecek eğitim arasında amaç, içerik, yöntem-teknik vb. alanlarda farklılaşmalar bulunmaktadır. Din eğitiminin hedef kitlesinin başında çocuklar gelmektedir. Nitekim eğitimin ve din eğitimine ne kadar erken dönemde başlanırsa o kadar iyi olduğu konusunda neredeyse bütün eğitimciler hemfikirler. Günümüzde “çocuk” kavramı ve eğitim açısından özellikleri ile ilgili oldukça fazla çalışma yapılması da konunun önemini açık bir göstergesidir. Bu noktada çalışmadaki temel amaç, İslam düşünürlerinin eğitimle ilgili eserlerinde çocuk ve çocukluk dönemlerine yükledikleri anlamı ve buradan hareketle çocuğun eğitimiyle ilgili düşüncelerini tespit edebilmektir. Böylece o günün eğitim ve din eğitimi anlayışını ve günümüze hangi süreçlerden geçerek geldiğimizi anlayabilmek mümkün hale gelecektir.

Araştırmada tarihi süreçte İslam eğitimiyle ilgili eserler yazan eğitimcilerin eserlerindeki çocuk eğitimiyle ilgili görüşler ele alınmaktadır. Dolayısıyla tarihi bir süreç incelemeye alındığı için tarihî metot kullanılacaktır. Tarihi metodun iki aşaması bulunmaktadır. Bunlardan ilki, ele alınan konu ile ilgili literatürün toplanması, diğeri ise literatürden elde edilen verilerin değerlendirilmesidir. Bu araştırmada da başlangıç aşamasında öncelikle konuyla ilgili kaynakları belirlemek için geniş bir literatür taraması yapılmıştır. Çalışmanın kaynakları arasında tarih, İslam tarihi, eğitim ve din eğitimi tarihi gibi bilimsel alanlarda gerçekleştirilen bilimsel çalışmalar bulunmaktadır.

İSLAM EĞİTİMCİLERİNE GÖRE ÇOCUKLUK DÖNEMİ

İslam hukukuna göre “çocukluk”, doğumla başlayıp ergenliğe kadar devam eder. Bu dönemi yaşayan kimseye de “çocuk” denir. Doğumu takip eden ilk yedi yaş “gayrimümeyyiz” dönemi olarak isimlendirilmektedir. Yedi yaşından erişkinliğe kadar olan dönem ise “temyiz çağı” diye nitelendirilmiştir (Memduhoğlu, 2010, 310). İslam hukukunda temyiz yaşının değişik ölçütleri vardır. En yaygın olanı, “söylenenleri doğru olarak anlayıp doğru olarak cevap verme” halinin belirmesidir. Bu safhanın başlangıcı yaklaşık 7 yaş olarak kabul edilmiştir. Çocuk bu yaşa kadar anne tarafından terbiye edilmelidir. Hatta anne-baba arasında çocuğun terbiyesi ile ilgili bir ihtilaf yaşanırsa, çocuk –ister kız ister erkek olsun – annenin sorumluluğu altındadır (Canan, 1981, 71).

Buluğ/rüşd dönemine giren çocuğun eğitim sorumluluğu aile üzerinden kalkar. Yaşla sınırlandırılmayan buluğ dönemi kızlarda hayız, erkeklerde ise ihtilamla başlamaktadır. Dönemin en belirgin özelliği bedensel olgunlaşmadır (Çeker, 1990, 61). Buluğ ile birlikte ailenin zorunlu terbiye sorumluluğu sona ermektedir. Çünkü balığ olan genç artık çocukluktan çıkmıştır. Dolayısıyla onun üzerinde kimsenin vesayeti kalmamıştır. Dini ve uhrevi konularda sorumluluk kendisine aittir (Canan, 1981, 72). Balığ olan genç artık akildir. Bununla birlikte aklın da olgunlaşmaya ihtiyacı vardır. Bu da “rüşd” kavramıyla ifade edilir (Çeker, 1990, 61). Nitekim çocuğun vesayetten kurtulmasının akil balığ olmasıyla değil, reşit olmasıyla mümkün olduğu yönündeki görüşler (Köse, 2008, 298-300) aile içi eğitimin buluğ ile bitmemesi gerektiğini vurgulamaktadır. Bu yaklaşım kanaatimizce daha makuldür. Çünkü buluğ dönemi çocuğun zihinsel olgunluğa değil bedensel olgunluğa eriştiğinin işaretidir. Çocuğun fiziksel gelişiminin, zorunlu olarak kendisiyle ilgili kararlar alabilme becerisini beraberinde getirdiği söylenemez. Sağlıklı kararlar alabilmek için zihinsel olgunluğa ihtiyaç vardır. Bu anlamda çocuğun eğitiminde ailenin sorumluluğunun çocuğun rüşd dönemine erişmesiyle sona ermesi daha makul görünmektedir.

İSLAM EĞİTİMCİLERİNE GÖRE ÇOCUKLUK DÖNEMİ DİN EĞİTİMİNİN TEMEL ÖZELLİKLERİ

İslam eğitimcileri çocukların eğitimine büyük önem vermiştir. Bununla birlikte çocukların eğitiminin başlamasıyla ilgili belirli asgari bir yaştan bahsedilmemiştir. Mesele çocuğun babasının rıza ve takdirine bırakılmıştır. Ancak çocuk, temyiz ve idrak etmeye başlayınca baba onu okula göndermekle sorumludur (Bayraktar, 2015, 238). Gazzâlî ise babaların çocuklarının eğitimiyle sorumlu olduklarını ve bunun için de dört yaşında dört ay dört günlük olunca öğretmene göndermeleri gerektiğini belirtmiştir. Aynı şekilde çocuğunun eğitimini üstlenmeyen baba onun olumsuz davranışlarından da sorumlu olur (Gazzâlî, 2014, 94, 114). Hiçbir baba, tembellik veya önemsememe gibi nedenlerle çocuğunu cahil bırakmamalı, kendisi yürütemiyorsa bu sorumluluğu öğretmene bırakmalı, ona yapacağı masraftan kaçınmamalıdır (Kabisi, 1995, 74-75, 80). Ayrıca çocukların eğitimi gerçekleştirilmek üzere kendisini sırf çocukların eğitime vakf edecek öğretmenlerin tutulması gerekir. Böylece bu öğretmenler, babaların çocukları yetiştirme sorumluluğunu üzerlerine almış olur (Kabisi, 1995, 80).

İslam eğitimcileri çocuk-aile ilişkisini büyük önem atfetmişlerdir. Hatta ana-babanın en temel vazifesinin çocuklarını terbiye etmek olduğunu ısrarla söylemişlerdir. Örneğin Gazâlî bu konuda şöyle demektedir: “Çocuk anne ve babasının yanında ilahi bir emanettir. Kendisine iyilik telkin edilir ve iyi işler yaptırılırsa, çocuk iyi bir insan olarak yetişir; dünya ve ahirette saadete ulaşır”. Gazâlî, çocuğun eğitimi hususunda aileye şöyle bir rol biçmektedir: “Anne-baba çocuğunu iyi yetiştirirse onun işlediği sevaplara ortaktır. Şayet çocuk ihmal edilir, terbiye edilmez ve kötü fiiller sergilerse onun alacağı vebal ve sorumluluktan ebeveyne de hisse düşmektedir.” Ahlakla ilgili çok sayıda eser kaleme alan Kınalızâde Ali de hemen hemen benzer düşünceleri savunmaktadır. Ona göre “ana-babaya, çocuklarının terbiyesi hem zorunluluk hem de gerekliliktir” (İçer, 2010, 70). Zira bu konuda ortaya konulacak herhangi bir ihmal veya eksiklik hem ferde hem de topluma zarar vermektedir (İbn Miskeveyh 1983, 58; Bayraktar, 2015, 254). Tüm bunların yanı sıra Kabisi (1995, 75-76) çocukların eğitimiyle ilgili sadece ailelerin değil, devlet yöneticilerinin de sorumluluk taşıdığını belirtmektedir.

Eğitimle ilgilenen hemen hemen her İslam düşünürü, eğitim aracılığıyla çocuğun İslam dininin gereklerine göre yetiştirilerek hem bu dünya hem de ahiret hayatındaki mutluluğunun hedeflenmesi gerektiğini belirtmektedir. Onlara göre insan cevherinin varlığı, Allah’ın kudretine bağlıdır. Ancak onun iyileştirilip geliştirilmesi insana ve

onun iradesine bırakılmıştır. Çocuğun ilk gelişmesi sırasındaki davranışlarının çoğu genellikle bilinçsizdir ve olumsuz olabilir. Bu durum çocuğun sürekli bir şekilde eğitilmesiyle yavaş yavaş değişir (İbn Miskeveyh, 1983, 42, 59). Bu nedenle eğitimin en temel amacı; bireyin fitratını geliştirmektir. Mesela çocuğun fitratının bozulmaması için küfründe devam eden kişiyi Müslümanların çocuklarına öğretmen olarak tutulmasının ayrıca Müslüman çocukların kafir çocukları arasına karıştırılmasının doğru olmadığı öne sürülmektedir (Kabisi, 1995, 96). Bu kapsamda çocuğun fitratının gelişimine yönelik yapılacak ilk işlerden birisi, çocuğun utanma duygusunun geliştirilmesidir. Çocukta ilk olarak ortaya çıkması gereken ve onun aklının varlığını gösteren şey utanma duygusudur. Çünkü ancak karşılaşılan şeyin istenmeyen bir durum olduğunu hisseden kişide utanma duygusu belirebilir. Eğer bu duygu geliştirilirse onun aracılığıyla çocuk kötülüklerden uzak durabilir (İbn Miskeveyh, 1983, 58).

Çocuğa hangi ilim dallarının öğretilmesi veya öğretilmemesi gerektiğiyle ilgili farklı görüşler ortaya atılmıştır (bkz. İbn Sahnun, 2014, 78, 90, 92; İbn Cemaa, 2009, 22-23, 68; Zernuci, 1993, 7; İbn Miskeveyh, 1983, 52, 59). Bununla birlikte İslam eğitimcilerinin hemen hemen hepsinin vurguladığı temel nokta; çocuğa başlangıç olarak Kur'an'ın öğretilmesi gerektiğidir (Kabisi, 1995, 74). Ayrıca çocuklara abdest, namaz, gibi günlük ibadetleri yerine getirirken kullanabilecekleri temel ilmi bilgilerin verilmesinin dışında hadis, usulu'd-din (kelam), fıkıh usulü, mezhep, ahlak (Kabisi, 1995, 73; İbn Cemaa, 1998, 68; 115; İbn Miskeveyh, 1983, 52) gibi dini ilimlerin öğretilmesi gerektiği belirtilmiştir. Dini ilimlerin dışında aritmetik, geometri, i'rab, hareke, hece, güzel yazı, tertil ile okumayı, yararlı olduğu bilinen güzel kıraatler, yazı ve hece (okuma), hitabet, şiir, edebiyat, hikâyeler, mecaz, Arapça, nahiv, hilaf, cedel gibi ilimlerin de isteğe bağlı olarak öğretilebileceği ifade edilmiştir (İbn Miskeveyh, 1983, 52; Kabisi, 1995, 90-91; İbn Sahnun, 2014, 66-67, 69, 72, 90; Gazzâlî, 2014, 110; İbn Cemaa, 1998, 68; 112).

İslam düşünürleri eğitimle ilgili eserlerinde çocuklara öğretilmesi ve öğretilmemesi gereken davranışları ayrıntılı bir şekilde örneklendirmiştir. Bunlardan bazıları aşağıda verilmiştir:

- Kullar üzerine ilk farz bilgi olan Kelime-i şehadetin manası daha sonra iman, ibadet ve muamelatla ilgili bilgiler,
- Öğrencinin en çok ihtiyaç duyduğu ve ona dünya ve ahirette fayda verecek en önemli konu,
- Güzel ve kibar kelimelerle konuşma; kötü, argo kelimelerden uzak durma,
- Ödev ve sorumlulukları yapma,
- Ahlaki açıdan güzel davranışlar,
- Allah'ı sevmeyi ve ona dua etmeyi, Allah'ın büyüklük ve yüceliği (ez-Zernûcî, 1993, 8; Gazzâlî, 2014, 84, 96; İbn Sahnun, 2014, 74-75; İbn Miskeveyh, 1983, 59).

İslam düşünürleri eserlerinde öğrencilerin eğitimi esnasında uygulanabilecek çeşitli öğretim ilke ve yöntemlerine de yer vermiştir. Bunlar ders içi ve ders dışı ilke ve yöntemler olarak sınıflandırılabilir. Bahsedilen ders içi ilke ve yöntemler maddeler halinde şöyle belirtilebilir:

- Okumaya yeni başlamış kimseler için dersin miktarı iki kere okuyunca öğrenecek ve ezberleyecek kadar olmalıdır. Bundan sonra her gün buna bir kelime ilave edilmelidir (ez-Zernûcî, 1993, 100).
- Öğrencinin önce edep bakımından eğitime başlanır. Sonra diğer ilimlerle ilgili eğitime geçilir. Çünkü eğitim ancak edepten sonra olur (Gazzâlî, 2014, 79-80).
- Öğretmen, öğrencinin faydadan mahrum olmaması için soruyu soran öğrenci küçük olsa bile onun yüzüne bakarak dinlemelidir (İbn Cemaa, 1998, 72).

Ders dışı bazı ilke ve yöntemleri de şu şekilde özetleyebiliriz:

- Eğitiminin başlangıcındaki bir öğrencinin eğitimle ilgili ileriye dönük niyet ve hedefleri istenildiği gibi olmayabilir. Öğretmen, böyle bir çocuğun eğitiminden uzak durmamalıdır. Çünkü ilme daha yeni başlayanların öğretiminde niyette ihlas şart koşulursa bu, birçok insanın eğitiminin başlamadan bitmesine sebep olabilir (İbn Cemaa, 1998, 76).
- Öğrenci, öğrenime başlamakta acele etmeli, işi geleceğe ertelememeli ve başarılı olmayı isteyip bunun için çaba göstermelidir (İbn Cemaa, 1998, 90).
- Öğrenci arkadaşlarıyla özellikle de karşı cinsle boş vakit geçirmeyi, oyunu ve az tefekkürü terk etmelidir. Ancak kimi vakitlerde eğitimin yorgunluğunu gidermek için faydalı oyunlara izin verilmelidir (İbn Cemaa, 1998, 95; İbn Miskeveyh, 1983, 63).
- Eğitim görülen mekan ancak eğitim öğretimi engelleyen hususlar olduğu zaman değiştirilmelidir. Bunun dışında sabırla eğitime devam edilmelidir. Ancak yeni başlayan öğrencilerin okul değişimi hoş değildir (İbn Cemaa, 1998, 38-139).

- Yeme-içmeye de dikkat edilmelidir. Çok yemek tembelleştirir, uyku getirir ve bu da anlayışı azaltır. Et yememek canlılık, uyanıklılık, hareketlilik ve çabukluk açısından daha yararlıdır. Tatlı ve meyve mümkünse hiç yenmemelidir. Yemek esnasında su içmemelidir. Şıra ve sarhoş edici içkilerden kaçınmalıdır. Çünkü bunlar bedene de nefse de zarar verir, onu çabuk öfkelenme, kötü ve çirkin şeylere atılma gibi beğenilmeyen işlere sürükler (İbn Miskeveyh, 1983, 60-61).
- Çok uykudan kaçınmalıdır. Çünkü çok uyku onu fenalaştırır, zihnini kalınlaştırır ve hafızasını öldürür. Yürümeye, hareket etmeye, biniciliğe, beden eğitimi yapmaya alıştırılmalıdır (İbn Miskeveyh, 1983, 61).
- Öğrenci ana-babasına, öğretmenlerine ve eğitimcilerine karşı itaatli olmaya, saygı duymaya ve onlardan korkmaya alıştırılmalıdır (İbn Miskeveyh, 1983, 63).
- Kızlarla erkeklerin birlikte okutulması hoş değildir bu bazılarının eğitimden uzaklaşmasına sebep olabilir (İbn Sahnun, 2014, 81).

Tüm bunların dışında öğretmenin çocuğa şefkatle davranması gerektiği belirtilmektedir. Çocuğun her güzel davranışı övülmeli ve o her iyi işinden dolayı ödüllendirilmelidir. Çocuk, doğru bir davranış sergilememişse hemen azarlanmamalıdır. Aksine çocuk, o işi bilerek yapmamışsa ve özellikle o yaptığı işi herkesten gizliyorsa, ona göz yummak gerekir. Çocuk onu tekrar yaparsa gizlice azarlanmalı, yaptığı işin kötülüğü anlatılmalı ve tekrar etmemesi söylenmelidir. Çünkü terbiye düşmanlık kapısı değildir. Ne tamamen çocukları nefret ettirecek biçimde surat asmalı ve ne de çocuklarla senli benli olmalıdır. Zira o azarlanmaya alıştırılırsa, bu onu utanmazlığa sevk eder ve kötü olarak gördüğü şeyleri tekrarlamaya zorlanmış olur (İbn Miskeveyh, 1983, 59; Kabisi, 1995, 102, 140). Çocuklara surat asmamak gerekir. Çocuklar buna alıştırlarsa öğretmene olan saygılarını kaybederler. Bu ancak çocuklar yanlış bir davranışta bulundukları zaman yapılabilir (Kabisi, 1995, 102, 140). Öğretmen öfkelenmediği zaman çocukları cezalandırmamalıdır. Öğretmenin yedi yaşına geldiklerinde çocuklara namazı emretmesi, on yaşında kılmazlarsa zorlaması ve hafifçe dövmesi gerekir (İbn Sahnun, 2014, 74-75). Öğrencilerin iyilikleri için zaman zaman çocuklara vurabilir ancak vuruşta üçü aşmamalıdır (İbn Sahnun, 2014, 53).

SONUÇ

Sonuç olarak İslam düşünürlerinin çocukluk dönemini doğumla başlatıp ergenliğe kadar devam ettirdikleri tespit edilmiştir. Bu dönemi de kendi içerisinde mümeyyiz (doğumdan 7 yaşa kadar) ve temyiz (7 yaştan erişkinliğe kadar) olmak üzere iki döneme ayırdıkları belirlenmiştir. Temyiz yaşının tespitinde en yaygın olan ölçüt, “söylenenleri doğru olarak anlayıp doğru olarak cevap verme” halinin belirmesi olarak ifade edilmiştir. İslam düşünürleri çocukluk dönemi özellikleriyle ilgili önemli tespitler yapmış ve bu dönemde çocuğun eğitimine dair önemli bilgilere yer vermişlerdir.

İslam eğitimcilerinin eğitimle ilgili verdiği bilgiler incelendiğinde çocuğun sadece dini eğitiminden bahsetmedikleri görülmektedir. Dolayısıyla İslam terbiyesinin sadece temel dini bilgiler ve Kur'an öğreniminden ibaret olduğu söylenemez. Özellikle çocuğun ahlaki açıdan gelişimi üzerinde en çok durulan konuların başında gelmektedir. Bunun dışında çocuğun günlük hayatını yürütebilmesi, fiziksel gelişimini sağlaması, kültürün aktarılması gibi farklı konulardaki bilgilere yer vermişlerdir. Bu bilgiler çerçevesinde İslam eğitimcilerinin eğitim ve din eğitimi şeklinde bir ayırım yapmadıkları, eğitimin kapsamına bireyin her açıdan gelişimini dahil ettikleri ifade edilebilir. Tüm bunlarla birlikte İslam eğitimcilerinin görüşlerinin bir kısmının günümüzde de geçerli olduğunu, bazılarının da uygulanabilir olmadığını söylemek durumundayız. Ancak bu durum, onların eğitim ve din eğitimiyle ilgili çok farklı alanlarda yaptıkları değerlendirmelerin önemsiz olduğunu göstermez. Ortaya konulan düşünceler, çocukluk dönemi eğitim ve din eğitiminde hangi aşamalardan geçerek günümüze geldiğini göstermesi açısından çok büyük öneme sahiptir.

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Bu bildiride, 490-628/1097-1231 yılları arasında Hârizm ve İran bölgesinde hüküm süren Hârizmşahlar Devleti'nin ikinci hükümdarı Alâeddin Atsız'ın (slt. 523-551/1128-1156) iktidar yıllarında kaleme alınan iki resmî davet mektubu incelenmiştir. Gürgeç'teki saltanat makamından sadır olan Arapça mektupları kaleme şahıs, Dîvân-ı İnşâ reisi ve meşhur şair Reşîdüddin Muhammed el-Vatvât'tır (ö. 573/1177). Çok sayıda resmî yazının bulunduğu bir mecmuada yer alan bu mektupların muhatapları, klasik dönem İslam tıp tarihinin iki büyük siması Ebü'l-Berekât el-Bağdâdî (ö. 547/1152) ile Hibetullah İbnü't-Tilmîz'dir (ö. 560/1165). Mektupların başında her iki tabip de uzun uzun övülmüştür. Ardından, Hârizm bölgesinde tıp sahasında yetkin bir ismin kalmadığı ifade edilmiş ve bu ihtiyacın sonlandırılması için her tabibin desteğinin beklendiği ifade edilmiştir. Talep, onların ilim ve şahsiyet olarak güven duydukları uzmanlaşmış öğrencilerini belirlemeleri ve yüksek bir mevki ve ücret ile istihdam edilmek üzere kendilerine göndermeleridir. İçerikteki ayrıntılardan, mektupların 531-547/1137-1152 yılları arasında yazılmış olması gerektiği sonucu çıkmaktadır. Ayrıca, övgü ifadeleri arasındaki farklılık, İbnü't-Tilmîz'in daha yetkin bir tabip olarak değerlendirildiğini göstermektedir. Not: Bu bildiri Ç.Ü. BAP Koordinasyon Birimi'nin SBA-2017-8485 kodlu bireysel araştırma projesi kapsamında sunulmuştur.

MESLEK YÜKSEKOKULLARININ SORUNLARI VE ÇÖZÜM ÖNERİLERİ

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ÖZET

Günümüzde Meslek Yüksekokullarının amacı sanayi, hizmet, üretim, ticaret sektörlerinin ihtiyaç duyduğu nitelikli, kaliteli, yeterli mesleki bilgiye ve beceriye sahip, sorumluluk duyacak meslek elemanları yetiştirmektir. Bu çalışmada yukarıda sayılan özelliklere sahip meslek elemanı yetiştirilebilmesi için Meslek Yüksekokullarında nasıl bir eğitim verilmesi gerektiği, bu eğitimin verilebilmesi içinde okullarda neler yapılması gerektiği üzerinde durulmuştur.

Bu çalışmada ayrıca, istenilen düzeyde eğitim verilebilmesi engelleyen sorunlar ve bu sorunların çözümleri için öneriler sunulmuştur. İstenilen özelliklere sahip meslek elemanı yetiştirebilmek için Meslek Yüksekokullarının sorunlarının çözülmesi önemlidir ve gereklidir. İyi bir meslek elemanı yetiştirebilmek için iyi bir eğitim, öğretim gereklidir. İyi, kaliteli bir mesleki eğitim de 3 önemli faktöre bağlıdır. Bunlar; Öğrenci, öğretim elemanı ve donanım, malzeme, atölye ve laboratuvarlardır. Bu üç faktörden bir tanesinde sorun olduğunda mesleki eğitimde hedeflenen amaca tam olarak ulaşılamamaktadır. Gerek basında, gerekse toplantılarda, çalışmalarda sanayiciler, işletmeciler istedikleri özelliklere sahip meslek elemanı bulamadıklarını dile getirmektedirler.

Meslek liselerinden sınavsız geçişin kaldırılması olumlu bir gelişmedir, böylece sorunlardan bir tanesi de çözülmüştür. Öğrencilerin yanı sıra öğretim elemanları, atölye ve laboratuvarlarla ilgili sorunlarda dile getirilip çözüm önerileri sunulacaktır.

Anahtar kelimeler: Öğrenci, öğretim elemanı, sorun, mesleki eğitim, öneriler, atölye

PROBLEMS AND SOLUTION PROPOSALS OF VOCATIONAL HIGHER EDUCATION

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ABSTRAC

Today, Vocational Schools are aimed to educate professional staff who have qualified, sufficient professional knowledge and skills required by industry, service, production and trade sectors. In this study, it is emphasized what kind of education should be given in Vocational Schools in order to train professional staff having the above mentioned characteristics and what should be done in the schools in order to be able to provide this education.

In this study, we also present suggestions for solving the problems that prevented the education at the desired level and solutions of these problems. It is important and necessary to solve the problems of the Vocational

Schools in order to be able to train the professional staff with the desired characteristics. Good education and training are necessary to be able to train a good professional. Good, quality vocational education depends on three important factors. These;

Students, teaching staff and hardware, materials, workshops and laboratories. When there is a problem in one of these three factors, the aim of vocational education is not fully achieved. At work, at meetings or at meetings, industrialists say that businessmen can not find professionals with the features they desire.

The removal of the vocational high school pass without examination is a positive development, so one of the problems has been solved. In addition to students, lecturers, workshops and laboratories will be addressed and problems will be presented and solution proposals will be presented.

Keywords: student, teaching staff, problem, vocational education, recommendations, workshop

GİRİŞ

Meslek Yüksekokulları da iş dünyasının ihtiyacı olan meslek elemanlarını yetiştirirler. Sanayi kuruluşlarının, işletmelerin nitelikli, mesleki yönden iyi yetişmiş teknik eleman ihtiyacının sürekli artması Meslek Yüksekokullarının önemini daha da arttırmaktadır

Teknolojideki hızlı değişimler, insan nüfusunun artışı ile birlikte çeşitlenen ilgi ve gereksinimler, iş dünyasındaki artan rekabet de dikkate alındığında, ekonomik gelişim ve kalkınma için gerekli olan nitelikli insan gücü gereksiniminin önümüzdeki süreçte daha yoğun bir şekilde devam edeceği kolaylıkla söylenebilir. Bu kapsamda özellikle iş dünyasının ihtiyaç duyduğu iş gücünün eğitimi ve yetiştirilmesinde mesleki ve teknik eğitim büyük ve önemli bir yer tutmaktadır(Alkan, vd.2014),

Eğitimde kalite denildiğinde, eğitim sisteminin beğenilmesi, eğitimin mükemmel olması, insanların meslekleri ile ilgili yeni gelişmeleri takip edebilecek bilgi ve beceriye sahip olması kısacası bu davranışları gösteren insanların yetişmesi akla gelmektedir.

Eğitimde kalite, mezuniyet sonrası çalışma hayatında ,iş dünyasında ortaya çıkan taleplerin mezun öğrenciler tarafından yerine getirilmesi, öğrenci performansı, deneyim, teorik ve pratik bilgi donanımıdır.

Mesleki eğitimin amacı, iş dünyasındaki işletmelerin, kuruluşların ihtiyaç duyduğu, kaliteli, vasıflı, nitelikli, yetenekli, yeterli mesleki bilgiye sahip insanlar yetiştirmektir.

Sanayi ve işletmelerin ihtiyaç duyduğu nitelikli insan gücünü yetiştiren en önemli kaynaklardan biri de Meslek Yüksekokullarıdır. Gelişen, büyüyen Türkiye Ekonomisinin uluslararası pazarlarda rekabet gücünün yükseltilmesi ancak Meslek Yüksekokullarında yetişen nitelikli, kaliteli elemanlarla üretilen mal ve hizmetlerle mümkün olabilecektir (Sarıbiyik,2013).

Şirketler ve sanayi kuruluşları, ihtiyaç duydukları nitelikli, vasıflı, yeterli mesleki bilgiye sahip insan gücünü bulamadıklarını, okulların yukarıda sayılan özelliklere sahip insan gücünü yetiştiremediklerini dile getirmektedirler.

Mesleki ve teknik eğitimin önemi ekonomik gelişme ile birlikte artmaktadır. Ekonomik gelişme daha çok işletme, daha çok iş ve daha çok meslek anlamına gelmektedir. Mesleki ve teknik eğitim bir anlamda ekonomik gelişmenin hızlandırıcısıdır (Özsoy,2015).

Eğitim sürecinin en önemli yönü eğitim kalitesidir. Eğitim kalitesi denilince, toplumun ihtiyaçlarına cevap verebilecek, beklenen düzeyde mesleki eğitim verebilen, insanları yeterli mesleki bilgi ve beceri ile donatan eğitim akla gelmektedir.

Gelişmiş ülkeler, hedefledikleri nitelik ve niceliğe göre insan kaynaklarını eğitirken, az gelişmiş ülkeler ülkenin ekonomisi için ülkenin ihtiyaç duyduğu insan kaynaklarını yetiştirememektedirler,

Meslek Yüksekokulları ülkelerin kalkınmasında etkili olan, üretimde ihtiyaç duyulan teknik insan gücünü karşılayan önemli okullardır.

Meslek Yüksekokulları da iş dünyasının ihtiyacı olan meslek elemanlarını yetiştirirler.

Ülkemizin 10.Kalkınma planı Türkiye Mesleki ve Eğitim Strateji Belgesi ve Eylem planı (2014-2018) ve Hükümet Programları gibi üst politika bölgelerinde mesleki ve teknik öğretimde yerel yönetimler ve sektör temsilcilerinizde içine alacak şekilde yönetimi esas alan yeni okul modelinin oluşturulması ön görülmüştür. Yerel yönetimler, meslek kuruluşları ve yerel sektörle işbirliğinin artırılması planlanmıştır (Milli Eğitim Bakanlığı,2013).

Sanayi kuruluşlarının, işletmelerin nitelikli, mesleki yönden iyi yetişmiş teknik eleman ihtiyacının sürekli artması Meslek Yüksekokullarının önemini daha da arttırmaktadır. Mesleki eğitim, ülkelerin kalkınmasında belirleyici ve etkili bir faktör olmuştur Mesleki eğitim, özellikleriyle, yapılış şekliyle genel eğitimden daha pahalı olan bir tür örgün eğitim şeklidir.

ÖNERİLER

Öğrenciler mezun olduktan sonra meslekleriyle ilgili bir alanda çalışmaya başladığında çabuk ve kolay uyum sağlayabilmeli ve mesleğe uyum sağlamak için öğrencilerin ilgi, yetenek ve kapasiteleri dikkate alınmalıdır.

Okulların ve öğrencilerin başarısını artırmak, toplumun beklentilerine cevap verebilmek için kaliteli bir mesleki eğitim yapılmalıdır.

Kaliteli eğitimin okullarda yapılabilmesi için kalite konseyi, kaliteli geliştirme ekipleri ve kalite halkaları oluşturulmalıdır. Yüksek kaliteli mesleki eğitim sunmak ve başarılı olmak için, danışmandan öğrencilerin bireysel yeteneklerine göre meslek seçimi için, anaokulundan başlanarak lise sonuna kadar rehberlik yapılmalıdır. . Sistemin yürütülmesinde yönetim, sanayiciler, program geliştirme, uygulama ve değerlendirmeye kadar her safhada işveren ve işçi kuruluşları, akademik kurumlar, meslek kuruluşları, öğrenci, öğretmen ve velilerle birlikte gönüllü kuruluşlarında katkılarının sağlanması gerekir (Binici ve Necdet, 2004).

Öğrenciler, mesleki yönden; hem okulda hem de meslek yaşamlarında başarılı olmaları için tesadüfen değil, ilgi, beceri ve yeteneklerine göre meslek seçimi yapmalıdırlar.

Kalite konseyleri, lider olarak hareket ederler, doğrudan, kaynak bulur ve toplam kalite yönetimi ile iletişimini oluşturur.

Kalite konseylerinden sonra oluşan kalite geliştirme ekipleri genellikle kalite konseylerinin belirlediği sorunları çözen ekiplerdir. Kalite halkaları, bölümde gönüllü olan küçük gruplardır ve hem kalite konseyi hem de kalite geliştirme ekiplerinin oluşturduğu yeni yaklaşımların sürekli olarak gelişmesine yardımcı olurlar. Genel olarak çalışma çevresi prosedürünü iyileştirmek ve diğer bölümlerle olan ilişkilerini geliştirmek için çalışırlar.

Eğitim de kaliteyi arttırmak için:

İşletmeler ile öğrenciler arasında iletişimin kurulması için çalışmalar yapılması gerekmektedir.

Eğitimde anlamlı bir kalite artışı gerçekten isteniyorsa, yukarıda belirtilen faktörlerin dikkate alınması gerekir. Mesleki eğitimde kalite, merkezden her şeyin programlandığı ve planlandığı bir yaklaşım ile elde edilemez. Okullarda verilen mesleki eğitimin kalitesi aynı zamanda okullarda verilen hizmet kalitesine de bağlıdır. Toplam kalite yönetimi ile okullarda verilen hizmetin yeterli olup olmadığı ,aksaklıklar, olumsuzluklar tespit edilmekte ve hizmet kalitesi yükseltilerek mesleki eğitiminde kalitesi yükseltilmektedir.

Okullardaki hizmet denildiğinde sınıfların fiziki durumundan ,aydınlatılmasına, yemeklerin kalitesine ,kütüphanesindeki ders çalışma ortamına kadar birçok faktörü anlamaktayız.Toplam kalite yönetiminin

uygulanabilmesi için kalite çemberleri oluşturulmalıdır. Kalite çemberleri benzer işleri yapan ,aynı sahada çalışan kendi alanları ile ilgili inceleme yapıp sorunları saptayan, çözen, sürekli gelişimi sağlayan gruplardır.

Birçok eğitimden tarafından, mesleki eğitimde öğrenmeye karşı genel olarak direnç olduğu bilinmektedir. Bunun nedeni, dinleyicilerin eğitimde her zaman pasif olmaları ve verilecek eğitimin sıkıcı, anlaşılabilir olması ve güncel olmamasıdır. Bu sorunun çözümünde öğrenci merkezli eğitim, eğlenceli ve öğrencinin derse katıldığı eğitim modelleri kullanılmalıdır. Mesleki teknik eğitim veren okullarda, şirketlerin,işletmelerin ihtiyaç duyduğu standartlara göre eğitim ve öğretim yapılabilmesi için:

Okullarda atölye ve laboratuvarlar en son teknoloji ile donatılmalı,

Okullar endüstri kuruluşları ve işletmelerle iletişim içinde olmalı,

Endüstri kuruluşlarının, işletmelerin,işverenlerin mesleki yönden hangi özelliklere sahip elemanlara ihtiyaçları oldukları okullar tarafından bilinmeli, Okuldaki atölye ve laboratuvarlar yetersiz kaldığı durumlarda, ilgili sanayi kuruluşlarının, şirketlerin, işletmelerin, laboratuvarları, atölyeleri ve uygulama alanları kullanılmalı,

Meslekleriyle ilgili alanlarda öğrencilere yönelik anket çalışması yapılmalı, bu anket çalışmasında öğrencilere meslekleri ile ilgili sorular sorulmalı . Sorular müfredatı, mesleki eğitimin yapılış şeklini, eğitimciler ile öğrenciler arasındaki iletişimi ve öğretim yöntemlerini, yani mesleki eğitimdeki tüm unsurları içermelidir,

Aynı programlara sahip Meslek Yüksekokulları kendi aralarında toplantılar yaparak eğitim öğretimle ilgili bilgi ve birikimlerini birbiri ile paylaşmalılar

Okullarda yapılan mesleki eğitimin amacına uygun olarak yapılıp yapılmadığının belirlemek için konusunda uzmanlardan oluşan bir komisyon, belirli aralıklarla okullarda incelemeler yapmalı, Bu komisyon, ilgili işletme, sanayi kuruluşları, meslek odaları temsilcilerini, ilgili okuldan mezun olupta serbest olarak çalışan ve mesleğinde belirli bir kariyere ulaşmış olan üyelerden ve akademisyenlerden oluşmalı,

Öğrenciler okuldan mezun olup çalışma hayatına başladıklarında başarılarını ölçen ve tespit eden yöntemler uygulanmalı,

Mezun olduktan sonra çalışma hayatına başlayan öğrencilerin, meslekleri ile ilgili alanlarda görüş ve önerileri alınmalı,

Mesleklerle ilgili güncel teknolojilerin okullara kurulması mali açıdan zor olmaktadır, Meslekleri ile ilgili temel bilgiler, okullarda verilmeli ileri düzeydeki bilgi ve ilgili uygulamalar iş yerinde verilmeli,

Müfredatı hazırlarken mesleki yeterlilikler dikkate alınmalı ve gelişen teknolojiye cevap verecek şekilde güncellenmeli,

Okulda Mesleki yabancı dil eğitimi verilmeli, çünkü öğrenciler mezun olup çalışmaya başladıklarında meslekleri ile ilgili projeleri, katalogları okuma ve yorumlama konusunda zorluk çekmektedirler.

İlk öğretimde Mesleki rehberlik birimleri kurulmalı bu birimler ilgili kurum ve kuruluşlarla iletişime geçerek okullarda meslek tanıtımları yapılmalı.

Mesleğini yeteneklerine, becerilerine ve ilgi alanlarına göre seçmeyen kişiler okul hayatında istenilen düzeyde başarılı olamamakta, okuldan mezun olduktan sonra kendi meslekleri ilgili alanda çalışmamakta ayrıca eğitim döneminde insan gücü israfına neden olmaktadır,

Eğitim kalitesini etkileyen faktörlerden biride eğitimcilerin mesleği hakkında yeterli bilgiye sahip olup olmadıklarıdır, Hem işletmelerde üretilen mallarda hem de elde edilen hizmetlerde kaliteyi yakalamak için öncelikle okullarda kaliteli mesleki eğitim yapılmalıdır.

Öğrenciler meslek yaşamındaki karşılaşılabilecekleri mesleki sorunlar konusunda bilgilendirilmeli ve motivasyonları artırılmalıdır,

Meslek eğitimde kalite için okul ve sanayi işbirliği muhakkak yapılmalıdır. Bu işbirliği, eğitim ve öğretimin tüm aşamalarını içermelidir. Bu aşamalar şunlardır:

- Öğrencilere işletmelerde teorik ve uygulamalı olarak eğitim verilmeli,
- Okullarda programlar açılırken, şirketlerin ve sanayi kuruluşlarının görüşleri alınmalı,

Programların müfredatları hazırlanırken sanayi kuruluşlarında , işletmelerde çalışan, mesleki yönden iyi yetiştirilmiş ve deneyimli yöneticilerin ve çalışanların görüş ve önerileri dikkate alınmalı, Mesleki eğitim veren kurumlar ile iş dünyası ile arasındaki karşılıklı güven ortamı sağlanmalı,

Üniversiteler ile iş dünyasının işbirliğini zorunlu hale getirecek yasal düzenlemeler yapılmalıdır.

.SONUÇ

Okullar ile sanayi, endüstri kuruluşları işbirliği yaptığında

- Öğretim elemanları belirli periyotlarda eğitime alınıp yeni teknolojileri öğrenip öğrencilere öğrettiklerinde ,
- Anket çalışmaları ve rehberlik hizmetleri yapıp öğrencilere doğru meslek seçimi yaptırıldığında
- Okullarda toplam kalite uygulaması yapıldığında,
- Mezun öğrencilerden mesleğini yapanların mesleki eğitim ile ilgili görüş ve önerileri alınıp uygulandığında,
- İstenilen kalite ve düzeyde bir mesleki eğitim yapılır,

Kaliteli bir mesleki eğitim yapıldığında da

- Endüstrinin . işletmelerin, sanayi kuruluşlarının istediği özelliklere sahip, kaliteli, yeterli mesleki bilgiye sahip, vasıflı, üretime katkıda bulunan, sorunları çözebilen, nitelikli,sahip,mesleğinde iyi yetiştirilmiş meslek elemanları yetiştirilir.

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İSTANBUL YÜKSEK İKTİSAT VE TİCARET MEKTEBİNE YÖNELİK BİR REFORM ÖNERİSİ

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Osmanlı Devleti'nde örgün mesleki eğitimin temelleri 19. Yüzyılda atılmıştır. Ekonominin ihtiyaçlarına göre şekillenen mesleki eğitim, teknik eğitim programları yanı sıra banka, finans, ticaret ve devletin bürokratik örgütlenmesine bağlı olarak hizmet sektörü ağırlıklı olarak şekillenmeye başlamış ve ticaret mektepleri ortaya çıkmıştır. Ticaret mekteplerinin öncüsü olan okul İstanbul Yüksek İktisat ve Ticaret Mektebi'dir. (Bu okul ilk kez 1883'de Hamidiye Ticaret Mektebi adı altında kurulmuştur. Günümüzde 1982 yılında kurulan Marmara Üniversitesi'nin temelini de bu okul oluşturmaktadır.)

Yüksek Ticaret Mektepleri ile ilgili planlanan reform çalışmaları doğrultusunda İstanbul Üniversitesi öğretim üyesi olan Prof. Dr. Şükrü Baban 1938-1939 yılları arasında vekâleten müdürlüğünü yaptığı bu okul hakkında bir değerlendirme raporu kaleme almıştır. Bu rapor, sadece reform çalışmalarının planlaması açısından değil aynı zamanda var olan mesleki eğitimin içeriği, başarısı, öğrenci profilini anlamak açısından da önem taşır. Bu çalışmada daha önce yayınlanmamış olan bu rapor üzerinden Yüksek İktisat ve Ticaret Okulu'nun yürüttüğü eğitim, insan kaynağı planlaması, öğrencilerin ihtiyaçları ve eğitimin daha ileri düzeye taşınması için yapılması gerekenler hakkında bilgi aktararak meslek okulları ile ilgili bir değerlendirme yapılması amaçlanmaktadır.

Close

KAIZEN AND INTUITION IN STRESS MANAGEMENT

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ABSTRACT

Kaizen is a Japanese word for 'continuous improvement'. “One small step can change your life” is the gentle but potent way to effect change. “A journey of a thousand miles must begin with a single step. If the steps are small, the stress mechanism is quiet and the brain develops new habits from the repetition of small steps. The term “kaizen”, also provides benefits in decision making. If someone has difficulty finding the purpose, the best Kaizen technique is asking a question each day, opening up the heart to hear the answer. Stress is an inevitable fact that's why there is stress management. Kaizen (small steps) and innovation (large steps) are both worthwhile strategies. Using big steps is fine but if the stress is too great or the motivation too little, Kaizen technique is necessary.

The term of “intuition” means an ability to understand or know something immediately based on the feelings rather than facts. Intuition means direct knowledge. Intuition has a metaphysical aspects. Intuitive decisions may be necessary against stress. Intuition is positively correlated with willpower and whereas it is also negatively correlated with stress. Intuition isn't always good. Sometimes intuition is insufficient to think about the situation. Therefore kaizen and intuition are complement techniques.

INTRODUCTION

Stress contains bad emotions. Hans Selye considered “Stress in health and disease is medically, sociologically, and philosophically the most meaningful subject for humanity that I can think of”. Selye's first definition of stress was “the non-specific neuroendocrine response of the body”. Later on he dropped “neuroendocrine” because he realized that in addition to the involvement of the neuroendocrine system, almost every other organ system (e.g. especially the cardiovascular, pulmonary, and renal systems) is affected in one or several stages of the stress response, i.e. in the alarm reaction, stage of resistance and/or stage of exhaustion (Szabo et al., 2012). Life Events are changing experiences that use energy and can cause stress. Life events can be joyous (marriage, birth of child, new job) or sad (death of loved one, loss of job). Readjustments are the body's physiological adaptations to life events. Stress can cause some diseases. Wellness is state of optimal health.

Many people say they constantly compare themselves to others and they tend to say they are unhappy. According to classic social comparison theory, people who make frequent social comparisons should be happy if they believe they are better off than the people to whom they compare themselves. Social comparison theory

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(Festinger, 1954) posits that individuals compare themselves to others when they need an external standard against which to judge their abilities or opinions. Unhappy people, not happy people, may be the ones who actually make spontaneous frequent social comparisons (Lyubomirsky & Ross, 1997; Lyubomirsky et al., 2001). In one study (Lyubomirsky & Ross, 1997), happy and sad people had the opportunity to compare themselves to a better or worse peer. Sad people felt worse when paired with a better performer, and better when paired with a worse performer. Happy people had less affective vulnerability to the available social comparison information; they simply did not pay as much attention to how well others were doing. Similarly, Giordano, Wood, and Michela (2000) found that unhappy people make more frequent social comparisons, and Swallow and Kuiper (1992) found that mildly depressed people made more frequent social comparisons. Gibbons and Buunk (1999) found the tendency to seek social comparison information is correlated with low self-esteem, depression and neuroticism. People make social comparisons when they need both to reduce uncertainty about their abilities, performance, and other socially defined attributes, and when they need to rely on an external standard against which to judge themselves. The implication is that people who are uncertain of their self-worth, who do not have clear, internal standards, will engage in frequent social comparisons. Although self-esteem has been found to correlate with positive aspects of well-being (Diener & Diener, 1995), there is some evidence that clarity of the self-concept, rather than high self-esteem per se, contributes to well-being (Campbell, 1990; Kernis, Paradise, Whitaker, Wheatman, & Goldman, 2000). Self-esteem may not be as good predictor of negative aspects of well-being as frequency of social comparisons. The consequences of social comparisons could act as reinforcement to teach the individual to make more, and more frequent, social comparisons, leading the individual to become dependent on social comparisons; in particular, on meeting external standards such as being better than others to renew a sense of well-being. People who tend to make spontaneous social comparisons, therefore, tend to be unhappy, more vulnerable to the affective consequences of such comparisons, and more likely to get caught in a cycle of constantly comparing themselves to others, being in a self-focused state, and consequently being unhappy. More social comparisons, rather than serving a useful, coping function, merely serve to reinforce the cycle tying social comparisons to diminishing well-being.

STRESS-RELATED SOME PHYSICAL PROBLEMS AND MINDFUL AWARENESS

It is an awareness to realize that stress leads to diseases. For example, high blood pressure, ulcers, colitis, heart disease, arthritis, skin diseases, allergies, headaches, neck and lower back pain, increase in infectious diseases. Mindfulness is “living in the moment.” Mindful awareness is the moment-by-moment process of actively and openly observing our mental, physical, and emotional experiences. These experiences must be “observed,” without a constant stream of internal comment or judgment. This moment-by-moment process of actively observing our experiences is a form of meditation that bears fruit: a sense of well-being, lower blood pressure, and a growing sense of peace and wellness in life. “Being aware of your breathing takes away from thinking and creates space. It is one way of generating consciousness.” Mindfulness is bringing alertness or awareness to every moment during the day. Mindfulness will make life in the office, and at home more fruitful, more productive, and happier (Esch, 2011).

TYPE OF OCCUPATION AND STRESS

Humans may experience various stresses throughout their lives and may be exposed to major or minor challenges inevitably. Stress develops as a consequence of some challenges and difficulties and a person's ability to cope with a challenge depends on some sources and their attitudes towards challenges. Stress sources and the situations perceived by a person are various. It may be a serious disease, a natural catastrophe like an earthquake, or an economic event like unemployment. Adaptation capacity develops as a consequence of mutual interaction between a person and the environment and, as a result, the person becomes more fragile or more flexible and compatible. The process of coping with various challenges and stress cognitively affects physiological responses. In adaptation to stress, the meaning of stress to the person and methods of coping are important. A person's occupation takes an important place in his/her life. An occupation is not only a means for making money, it is also an important factor in the structuring of personality, opinion on the situations and the reaction to the events. View of life, ideals, and some personality properties are determined by occupation (Özgüven, 2001). Among working conditions, working in shifts may lead to negative psychosocial effects. Working conditions and the risk of increasing natural stress depend on the various properties of each occupation. Low security is a factor increasing stress. Fear of making a mistake also increases stress. Overtime and the need for extra security result in cognitive exhaustion. The ambiguity of the limits of the duty and not being able to come to the desired position in the occupation also increase the level of anxiety. Excessive competition and the greed to make money that we see especially in self employment will lead to occupational stress. Retiring and leaving the work environment suddenly also lead to negative psychosocial effects, just as the work environment (Nevzat, 2002).

INTUITION

Intuition is often defined as the recognition of something without rational processes involved. Alternatively, it could be described as the subconscious sensation of reality. Intuition is not necessarily a step-by-step information processing state that builds on both intellectual and emotional elements and in fact leads to a concrete understanding without deliberate reasoning. In practice, intuition appears as the subconscious of decision-making, the basis of which is experience and accumulated judgment. Intuition is not the accidental product of imagination as it had been thought before. It has been proved, however, that intuitive processes build upon experience and knowledge built in the long-run and consist of a considerable number of facts, patterns, theories, abstraction and all sorts of things that could in short be labeled as the totality of presumptions. Importantly, a connected advantage is that intuition is capable of condensing experience and knowledge into seconds.

Computer systems are churning out so much information and data that, even to sift out the relevant information, use of intuition becomes essential (Hayashi 2001). With the media and internet contracting the globe into one well-knit communication network, the flow of relevant and irrelevant information has grown uncontrollably. It is particularly challenging for individual managers as this easily leads to the common pitfalls of losing sight of the 'big picture', priorities changing too quickly, and weakening of interpersonal relations. Intuitive ability may be an important skill which will keep managers abreast with the knowledge revolution. An analysis of managers' effectiveness, indicates that full information is not a sufficient condition for making the right decisions. An inverse relationship can be observed here: the greater the wealth of information that managers have, the more reduced their effectiveness and ability to make optimal decisions. This is due to the weakening and suppressing of their intuitive potential, which is often replaced by analytical work of little value. Many decision-makers do not appreciate the role of premonition, experience or anticipation skills in doing business, while these are inextricably linked to the use of intuition by managers. It is worth pointing out that the use of intuition is of particular importance, especially at the strategic level, when decision-makers are forced to solve individual, complex, and unstructured problems (Clarke, Mackaness, 2001). The power of intuition has been long discussed, and used, by the world's great philosophers, artists and teachers: "The power of intuitive understanding will protect you from harm until the end of your days.", Lao Tzu. "The only real, valuable thing is intuition.", Albert Einstein. "The intuitive mind is a sacred gift and the rational mind is a faithful servant. We have created a society that honors the servant and has forgotten the gift.", Albert Einstein.

The main functions that intuition fulfils in this process are the following (Malewska & Sajdak, 2014):

- Creative (generating a significant number of unconventional solutions),
- Integrative (allows for a smooth transition between the various stages of the decision-making process),
- Informative (allows the filling of the gap in an absence of information or the analysis of large amounts of information under conditions of information noise).

Intuition enhances analytic thinking and focuses on the present situation, providing insights as to timing, specific strategy and innovation (Khandelwal, 2010, p.151). The concept was derived from the medieval Latin word "intuitio", which means "whisper" or "premonition". The synonyms of "intuition" are words and phrases such as creative imagination, premonition, anticipation, instinctive knowledge, a sixth sense, and a sudden insight. It is a psychological concept meaning an immediate act of understanding or perception of a fact, existence, or the relationship between two phenomena or results. Therefore, it can be considered that intuition is a way of acquiring knowledge and it represents the thought process which results in the quick adjustment of a given situation, problem or phenomenon to previously known templates, patterns or relationships. It takes the form of a sudden flash of inspiration resulting in finding a solution to a problem or an answer to a question.

KAIZEN STRATEGY

Decision making is necessary to solve a problem. Kaizen concept is related to problems. A problem has basic specialities: Indecision situation, at least two solutions way, emotions which is disturbed physical or/and mental. It can be said that, the life is a problem solving process, also it is a kaizen process. Kaizen is not a new philosophy, the origins are in the midtwentieth century with Masaaki Imai and his book entitled "Kaizen: The Key to Japanese Competitive Advantage" which refers to the term kaizen having possible origin in Toyota Motor. After implementing a continuous improvement system, such as kaizen, there are several benefits gained, which are reflected in social, operational and technical aspect for the company, as well as for customer and partners (Garcia et al, 2014). Kaizen is a continuous improvement approach. Kaizen (small steps) and Innovation (large steps) are both worthwhile strategies. The question is, are you free to choose whichever is more useful at the moment. Using big steps is fine and if the fear is too great, or the motivation too little, fall back on Kaizen. It is the freedom to choose that is the goal. For many people, big steps are the one and only strategy. Kaizen approach can be practised even in personal life. Kaizen is a solution against fears, as following (Maurer, 2004):

- Big target → Fear → Access to the brain membrane is blocked (brain is disabled) → Failure
- Small target → Fear is overcome → Cortex is involved (brain is active) → Success

A problem is the present solution of the situation. The Plan-Do-Check-Act (PDCA) Cycle provides a simple but effective approach for problem solving and managing change. It is particularly effective for: Helping implement kaizen or continuous improvement approaches, when the cycle is repeated again and again as new areas for improvement are sought and solved.

Kaizen is a method and philosophy that is rooted in the foundation of incremental continuous improvement. It was originally implemented in post war Japan businesses to help improve productivity and worker morale and has since expanded into the realm of personal growth. Like Morita Therapy, Kaizen does not directly strive to reduce symptoms but looks first to create purposeful action through small steps. Instead of beginning a diet to lose 50 pounds and creating a disciplined routine to accomplish that goal, Kaizen would simply begin an action-oriented process of incremental change—walk in place for 45 seconds a day. The key is the repetition of an action -- not the big brass ring of losing 50 lbs. By keeping it small, the system—be it the workers in a manufacturing plant or an individual—naturally exhibits less resistance (fear of change) and is thus more open to improvement. If one has difficulty finding one's purpose, the best Kaizen technique is asking a question each day, opening up the heart to hear the answer. The possible questions include: What is the emotion I want to experience as I go through my day? What matters most to me in life? What am I here to be and to do? By asking the question each day, with calm curiosity, then answers will begin to appear. The repetition of the question is the key. Exercising one minute a day every day builds a habit. Increasing one minute a week and soon you have a habit.

CONCLUSION

Fear is the basic emotion of the brain. In the presence of fear we feel nothing else, in the absence of fear, everything else. It is a natural response when faced with challenges. The brain responds to big challenges by triggering the amygdala, the fear center in the brain. If the challenge is perceived as too great, if the person stumbles, the fear becomes crippling and the person gives up, often with despair or self criticism. If the steps are small, the fear mechanism is quiet and the brain develops new habits from the repetition of small steps.

Intuitive thinking is the need of the hour for managing in the new world order. It acts as a bridge between conscious and un-conscious decision making processes and plays a vital role in everyday decision making. Intuition and judgment are simply analyses frozen into habit and into the capacity for rapid response through recognition. Every manager needs to be able to analyze problems systematically. Every manager needs also to be able to respond to situations rapidly, a skill that requires the cultivation of intuition and judgment over many years of experience and training. The effective manager does not have the luxury of choosing between "analytic" and "intuitive" approaches to problems. Behaving like a manager means having command of the whole range of management skills and applying them as they become appropriate. It is evident that neither rationality nor intuition alone guarantee success. While the present day developments in the world economy make the coming of a new renaissance of rationality more probable, the power of intuition in the decision-making process of the businessperson must never be forgotten.

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KİŞİLERARASI İLETİŞİM BECERİSİ:

Sakarya Üniversitesi İletişim Fakültesi Öğrencilerinin Kişilerarası İletişim Becerilerine Yönelik Bir Çalışma

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ÖZET

İnsanlık var olduğu andan beri iletişimle hep iç içedir. Bir toplumun toplum olabilmesi için iletişim şarttır. Toplum içerisinde insanların karşılıklı iletişimini oluşturan ise kişilerarası iletişimdir. Kişilerarası iletişimin etkili bir şekilde gerçekleşebilmesi için belli unsurlar vardır. Bunlar; empati, dinleme, kendini açma, dürüstlük ve hoşgörüdür. Bu çalışmada bu unsurları ölçen sorular sorularak Sakarya Üniversitesi İletişim Fakültesi öğrencilerinin kişilerarası iletişim becerileri ölçülmüştür. Çalışmanın giriş bölümünde iletişim ve kişilerarası iletişim anlatılmıştır. Literatür taramasında kişilerarası iletişimle ilgili yapılan çalışmalar incelenmiştir. Kuramsal çerçevede kişilerarası iletişim becerisine yönelik olan iletişim yeterliliği teorisi anlatılmıştır. Daha sonraki üç başlıkta ise araştırmanın amacı, önemi ve yöntemi açıklanmıştır. Bulgular kısmında araştırmada elde edilen veriler açıklanmıştır ve sonuçlar başlığında son değerlendirme yapılmıştır.

Anahtar Kelimeler: İletişim, Kişilerarası İletişim, Kişilerarası İletişim Becerisi

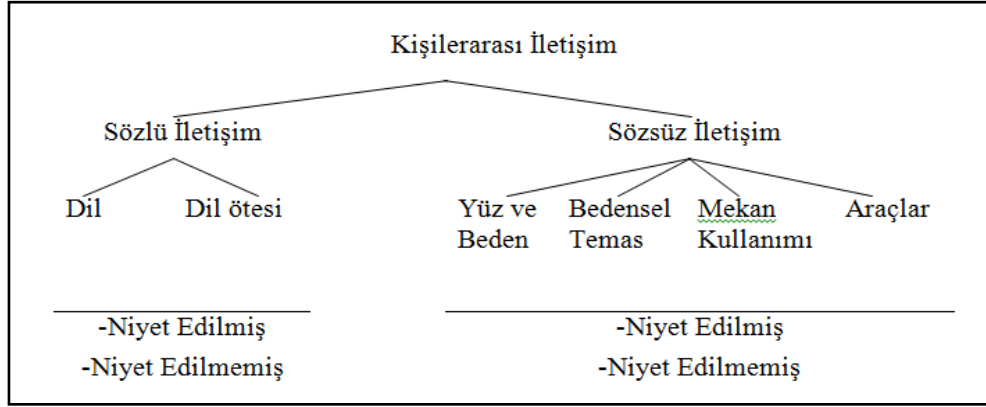
GİRİŞ

Yakın zamanlara kadar, dilimize Fransızca'dan geçen komünikasyon (communication) sözcüğü ile birlikte ve aynı anlamı karşılamak için haberleşme kavramı kullanılıyordu. Artık kullanılan iletişim sözcüğü ise haberleşmeyi de içeren daha geniş kapsamlı bir ileti alışverişi anlayışını oluşturmaktadır (Zillioğlu, 2010, s.22). “İnsanlar arasındaki her türlü bilgi, duygu ve düşünce alışverişine iletişim denilmektedir” (Işık, 2017, s.9). İletişim her zaman her yerdedir; insan istese de, istemese de bir iletişim ağı içinde yaşamaktadır ve iletişim kurmaması olanaksızdır (Zillioğlu, 2010,s.26). İletişimin gerçekleşebilmesi için en az iki birimin olması şarttır. İletişim için bir alışverişin olması gerekmektedir. İletişimde hem alış hem de veriş süreçleri aynı anda gerçekleşir (Işık, 2017, s.12).

Bir iletişim sürecinde dört temel unsur yer almaktadır. Bunlar; kaynak, mesaj, kanal, hedeftir. Kaynak, iletişimi başlatan mesajı gönderendir. Hedefe gönderilen her şey mesajdır. Mesajın taşınmasını sağlayan araç ise kanaldır. Kaynağın mesajını alan da “hedef” yani alıcıdır. Alıcının kaynağa verdiği cevap ise geribildirim (feedback)tir (Kaya'dan (2011) aktaran: Sert, 2015, s.7).

İletişim toplumsal yaşamı olanaklı kılar, bu nedenle toplumsal yaşamın temelidir. İletişim olmadan insan toplumu olmazdı. Bu anlamda kişilerarası iletişim, iletişim çeşitlerinde önemli bir yer arz etmektedir (Zillioğlu, 2010, s.28).

Bu çalışmanın konusunu kişilerarası iletişim oluşturmaktadır. Kişilerarası iletişim, insanların oluşturduğu bir iletişim türüdür. Bu süreçte hem kaynak hem de hedef insanlardan oluşmaktadır. Diğer bir ifadeyle kişilerarası iletişim en az iki kişi arasında sözlü veya sözsüz olarak gerçekleşmektedir (Işık, 2017, s.55). Yani kişilerarası iletişimde çift yönlü bir iletişim söz konusudur. Dökmen, yerli ve yabancı kaynaklarda ortaya konulan çeşitli görüşleri dikkate alarak kişilerarası iletişimle ilgili Şekil 1’de görülen kapsayıcı bir sınıflama ortaya koymuştur (Dökmen’den (1996) aktaran: Sert, 2015, s.7).



Şekil 1. Kişilerarası iletişim sınıflaması (Dökmen’den (1996) aktaran: Sert, 2015, s.8).

LİTERATÜR TARAMASI

Kişilerarası iletişim ile ilgili alanyazın tarandığında karşımıza çıkan çalışmalar, kişilerarası iletişimin kullanıldığı birçok yeri kapsamaktadır.

Günümüzde sosyal medya üzerinden yapılan kişilerarası iletişim çok yaygınlaşmıştır ve bu konuyla ilgili çeşitli akademik çalışmalar yapılmıştır. Sosyal medyadaki kişilerarası iletişime yönelik yapılan çalışmalar şu şekildedir:

Gümüşhane Üniversitesi İletişim Fakültesi öğrencilerinin, kişilerarası iletişim için kullandıkları, sosyal medya üzerine bir araştırma yapılmıştır. Çalışmada sosyal medyanın yaygınlaşmasıyla birlikte, kişilerarası iletişimde sosyal medyanın ne denli kullandığı ve öğrencilerin sosyal medya hakkındaki görüşleri araştırılmıştır. Araştırma için Gümüşhane Üniversitesi İletişim Fakültesi Halkla İlişkiler ve Tanıtım Bölümü öğrencilerinden 100 kişiye anket yapılmıştır. Anketten elde edilen verileri somutlaştırabilmek için daha sonra 10 öğrenci seçilip ayrıca bir yarı yapılandırılmış görüşme gerçekleştirilmiştir. Çalışma sonucunda araştırmaya katılan tüm öğrencilerden bir tanesi hariç hepsinin sosyal ağları kullandıkları tespit edilmiştir ayrıca sosyal medyanın kişilerarası iletişime olumlu ve olumsuz katkıları olduğu görüşlerine sahip öğrencilerin sosyal medyayı kişilerarası iletişimde kullandıkları bilgisine ulaşılmıştır (Çalışır, 2015, s. 115).

Fırat Üniversitesi İletişim fakültesinde de kişilerarası iletişimle ilgili bir çalışma yapılmıştır. Araştırmanın amacı Facebook’un kişilerarası iletişimdeki yerini ortaya koymaktır. Araştırmada anket yöntemi kullanılmıştır. Örneklem grup olarak Fırat Üniversitesi İletişim Fakültesi öğrencilerinden 413 kişi seçilmiştir. Anket sonuçları SPSS programından elde edilen sonuçlara göre yorumlanmıştır. Araştırmadan çıkan sonuca göre kişilerarası iletişimde yer alan mekan birliği kavramı Facebook ortamına taşınarak yeni bir anlam kazanmıştır. Bu her ne kadar eleştirilen bir şey olsa da bu Facebook kullanımını etkilememiştir (Çakar ve Yanlıç, 2014, s. 224,230,231,242).

Üniversite öğrencilerine yönelik yapılan kişilerarası iletişim araştırmalarından bir tanesi de anlık mesajlaşma uygulaması olan whatsapp üzerine yapılmıştır. Bu araştırmanın amacı

üniversite öğrencilerinin anlık mesajlaşma uygulamalarını kullanma biçimlerini ve amaçlarını ortaya koymaktır. Araştırmaya Kocaeli Üniversitesi İletişim Fakültesi Halkla İlişkiler ve Tanıtım Bölümü 1. ve 4. sınıf öğrencilerinden 152 kişi katılmıştır. Öğrencilere anket yapılmıştır ve sonuçlar SPSS’te yorumlanmıştır. Sonuç olarak whatsapp uygulamasını 129 öğrenci kullandığını belirtmiştir. Yani anlık mesajlaşma ile iletişim günümüzde yaygın hale gelmiştir (Yazıcı, 2015, s.1334,1352).

Kurumlardaki insanların birbirleriyle olan iletişimine yönelik belli akademik çalışmalar yapılmıştır bu çalışmalar kimi zaman bir öğretmen ve öğrenci arasındaki iletişimi ele alırken kimi zaman bir kamu çalışanı ve vatandaş arasındaki iletişimi ele almıştır. Belli kurumlardaki kişilerin kişilerarası iletişim becerilerine yönelik yapılan çalışmalar ise şu şekildedir:

Kişilerarası iletişim konusunda yapılan bir doktora tezi de kamu çalışanları ve vatandaş arasındaki kişilerarası iletişim unsurlarının kullanım biçimlerin ilişki üzerindeki etkisine yönelik olarak yapılmıştır. Kişilerarası iletişimi etkileyen faktörleri belirlemek amacıyla Konya Emniyet Müdürlüğü’ne bağlı birimlerde, 2004 yılı Kasım ayında 500 denekle anket çalışması yapılmıştır. Bu yapılan anketlerden 400 tanesi analize tutulmuştur. Anket toplam 86 sorudan oluşmaktadır. Araştırma sonuçları SPSS programında değerlendirilmiştir. Bu araştırma sonucunda kişilerarası iletişimi etkileyen altı temel faktör ortaya çıkmıştır. Bunlar; sözlü iletişim, sözsüz iletişim, yakınlık, sosyo-demografik, statü ve fiziksel görünüm faktörleridir. Araştırma sonucuna göre kişilerarası iletişimi en çok etkileyen faktör sözlü iletişim olmuştur (Taşdemir, 2004, s. 121, 154).

Kişilerarası iletişimde duygu yönetiminin rolü; öğretmen – öğrenci iletişimi üzerine yapılan yüksek lisans tezinde İstanbul Bakırköy’de bir meslek lisesinde çalışan 12 öğretmenle iki ayrı odak grup görüşmesi yapılmıştır. Çalışma 7 sorudan oluşmaktadır. Sonuç olarak öğretmenlerin farklılaşan kişilerarası davranışları, karşılaştığı koşullara göre değişmekte ve biçimlenmektedir (Demir, 2013, s.44,67).

Üniversite öğrencilerinin iletişim becerilerini ölçmeye yönelik yapılan bir diğer çalışmada araştırmaya 500 üniversite öğrencisi katılmıştır. 45 maddelik bir ölçek geliştirilmiş ve 500 öğrenciyle anket yapılmıştır. Araştırmanın sonucuna göre bireylerin iletişim becerisi düzeylerinin bilişsel, duygusal ve davranışsal olarak üç gruba ayrılarak veri toplanabileceği sonucu çıkmıştır. Çalışmanın başka gruplara bu şekilde uygulanarak daha yeterli hale gelebileceği sonucu çıkmıştır (Ersanlı ve Balcı, 1998, s. 7,11).

Kişilerarası iletişimde karşılıklı güven önemli bir unsurdur. Alanyazın tarandığında güven ve kişilerarası iletişimle ilgili karışımıza çıkan bir çalışma şu şekildedir:

Güven ve kişilerarası iletişim üzerine Sert (2015), bir çalışma gerçekleştirmiştir. Kocaeli Üniversitesi Akademik personeline yönelik yapmış olduğu araştırma, anket yöntemi kullanılarak yapılmıştır. Anketler mail yoluyla gönderilmiş ve toplam 136 kişiden yanıt alınmıştır. Sonuçlar SPSS programında değerlendirilmiştir. Araştırmada güven düzeyi ve kişilerarası iletişim düzeyi ölçülmüş ve bu iki düzey arasında bir korelasyon yapılmıştır. Sonuç olarak güven ve kişilerarası iletişim düzeyi arasında pozitif yönde anlamlı bir ilişki olduğu test edilmiştir. Katılımcıların güven düzeyi arttıkça kişilerarası iletişim düzeyleri de artmaktadır. Güvenin kişilerarası iletişim düzeyinde önemli bir kavram olduğu sonucu ortaya çıkmıştır (Sert, 2015, s. 14, 21).

Kişilerarası iletişimin bir diğer önemli unsuru içsel iletişimde dediğimiz empatidir. Empati ile ilgili yapılan çalışmalar ise şu şekildedir:

Ankara’da, iletişim meslek lisesi öğrencilerinin kişilerarası iletişime etki eden önemli bir unsur olan empatik iletişim becerilerini ölçmeye yönelik bir araştırma yapılmıştır. Çalışmaya

Ankara’da yer alan üç iletişim meslek lisesi öğrencilerinin tamamı yani toplam 526 öğrenci katılmıştır. Öğrencilere beşli likert tipi 45 sorudan oluşan bir anket yapılmıştır. Araştırma sonuçları SPSS programından elde edilen sonuçlara göre yorumlanmıştır. Araştırmanın sonucuna göre, öğrencilerin empatik iletişim becerileri cinsiyete göre anlamlı bir farklılık göstermektedir. Ayrıca babanın ve annenin eğitim durumu empatik iletişim beceri puanlarını anlamlı bir şekilde etkilemektedir (Karcı, 2011, s.155).

Gaziantep ilinde, kişilerarası iletişimle bağlantılı renk olgusunun bireysel çağrışım boyutuna yönelik bir araştırma yapılmıştır. Bu çalışma içsel iletişimin bir unsuru olan renklerin algılanmasına yöneliktir. Araştırma için Gaziantep iline anket çalışması yapılmıştır ve anket verileri SPSS programından yararlanılarak değerlendirilmiştir. Araştırmadan çıkan sonuçlara göre, cinsiyet ile en sevilen ve sevilmeyen renkler arasında anlamlılık ilişkisi gözlenmiştir. Çalışmadan çıkan diğer bir önemli sonuç bir denek için en sevilen rengin diğer bir denek için en sevilmeyen renk olmasıdır. Bu çalışmanın genel amacı ise renkler konusunda psikolojik ve sosyopsikolojik veri oluşturmaktır (Ustakara, 2011, s.138).

Kişilerarası iletişimle ilgili alanyazın tarandığında karşımıza çiftler arası iletişimle ilgili bir çalışma çıkmıştır. Çalışma şu şekildedir:

Kişilerarası iletişim sürecinde romantik eşlerde iletişimötesi iletişim aktörlerinin kullanımı isimli doktora tezinde: Çalapkulu (2015), Anadolu Üniversitesi İletişim Bilimleri Fakültesi öğrencilerinden örneklem grubu olarak araştırma gerçekleştirmiştir. Araştırma 285 kişi üzerinde anket yöntemi ile gerçekleştirilmiştir. Ölçek olarak araştırmada Tana Mann tarafından 2003 yılında geliştirilen 20 maddelik iletişimötesi iletişim ölçeği kullanılmıştır. Araştırma sonucunda veriler SPSS programında analiz edilerek yorumlanmıştır. Ayrıca 6 öğrenci ile derinlemesine görüşme yapılmıştır. Sonuç olarak araştırmaya katılan öğrencilerin romantik bir ilişkisi olduğu ve bu katılımcıların cinsiyet dağılımının dengeli olduğu gözlemlenmiştir. Bu araştırma sonucunda iletişimötesi iletişim aktörlerinin romantik ilişki deneyimlerine ve buna bağlı olarak ilişki uyumlarına, ilişki mutluluklarına, eşlerine yakınlıklarını attırdığı sonucuna ulaşılmıştır (Çalapkulu, 2015, s. 179,181,251).

Yapılan bu çalışmanın, (Sakarya Üniversitesi İletişim Fakültesi Öğrencilerinin Kişilerarası İletişim Becerileri) alanyazındaki çalışmalarla benzerlikleri olmakla birlikte aynı zamanda kişilerarası iletişimin önemli unsurları olan: Empati, dinleme, kendini açma, dürüstlük, hoşgörü unsurlarını ölçmeye yönelik olduğu için farklılık göstermektedir. Bu çalışma tamamen kişilerarası iletişim becerisini ölçmeye yöneliktir. İletişim yeterliliği teorisi göz önünde bulundurularak gerçekleştirilmiştir.

KURAMSAL ÇERÇEVE

Kişilerarası iletişim becerisine yönelik kuramsal çerçeve tarandığında karşımıza iletişim yeterliliği teorisi çıkmaktadır.

İletişim yeterliliği teorisi, 1984 yılında B.H. Spilzberg ve W. R Cupach’ın “Interpersonal Communication” adlı eseri ile ortaya konulmuştur. Bu teori kişilerin bulunduğu koşula uygun iletişim davranışını seçebilmesinin iletişim yeteneğine ve becerisine bağlı olduğunu söylemektedir. İletişim yeterliliğini tarif eden üç bileşen vardır. Bunlar; bilgi, beceri, motivasyondur (Gürüz ve Eğinli, 2014, s.81).

Hangi iletişim bileşenine uygun olduğunu tanımlamak (bilgi), uygulamayı gerçekleştirme yeteneğine sahip olmak (beceri), uygun ve etkili tarzda iletişim kurmak (motivasyon) olarak tanımlanır. (Gürüz ve Eğinli, 2014, s.81).

Kişilerarası iletişimde sözlü iletişimin yeri çok büyüktür. Bu araştırma da ölçmeye çalıştığımız: Empati, dinleme, kendini açma, dürüstlük, hoşgörü sözlü iletişimde önemli şekilde ifade edilmektedir. Erdoğan, sözlü iletişimin kullanıldığı örgüt ve mekanlarda kişilerarası ilişkilerle ilgili amaçları gerçekleştirirken aşağıdaki işlevlerin yerine getirildiğini vurgulamıştır:

- Söz fiziksel objeleri, duygusal durumları ve karmaşık ilişkileri temsil ederek insanlar arası ilişkiyi gerçekleştirir.
- Söz amaçlara ulaşma ve gereksinimleri gidermede vazgeçilmez ve zorunlu bir araçsal rol oynar.
- Söz diğer insanlarla olan ilişkilerin düzenlenmesini gerçekleştirir.
- Söz bireyin kendi kimliğini ve kişiliğini geliştirmeye yardım eder.
- Sözlü iletişim kendini, sosyal ve fiziksel çevreyi anlama ve kontrolle düzenlemeye yardım eder (Erdoğan' dan (2002) aktaran: Çalapkulu, 2015, s.41-42)

Yapılan bu çalışmada Sakarya Üniversitesi İletişim Fakültesi öğrencilerine, kişilerarası iletişimin önemli unsurları olan empati, dinleme, kendini açma, dürüstlük, hoşgörü unsurlarının ölçümleri yapılmıştır. İletişim yeterliliği teorisine göre kişinin iletişime dair bilgi, beceri ve motivasyon durumu ortaya çıkmaktadır. Bunlar karşılıklı iletişimde büyük önem göstermektedir. Kişinin iletişim becerisini ifade eden kuram iletişim yeterliliği teorisidir. Kişi iletişime yeterli olduğu derecede karşısındaki kişiyle doğru bir iletişim gerçekleştirecektir. Bir iletişimin gerçekten düzgün bir ilerleyiş sağlayabilmesi için karşılıklı hoşgörü, empati, dinleme çok önemlidir. Özellikle kişilerarası iletişimin en önemli unsuru dinlemedir. Doğru bir dinleme gerçekleştirildiğinde iletişim de en iyi şekilde sonuca ulaşacaktır.

ARAŞTIRMANIN AMACI

Kişilerarası iletişim, iki ya da daha fazla kişi arasında gerçekleşen kimsenin aracılık etmediği, kişilerarası ilişkilerin doğası gereği, karşılıklı olarak ilgi, samimiyet, açıklığın vurgulandığı bir iletişim biçimidir (Ruffner ve Burgoon'dan (1981) aktaran: Gürbüz ve Eğinli, 2014, s. 51).

Kişilerarası iletişim kendi içinde sözlü ve sözsüz iletişim olarak ikiye ayrılmaktadır. En genel anlatımla sözlü iletişim sözcüklerle gerçekleştirilen bir iletişim türüdür. Hem kaynak hem de hedef kitle insandır. Kişiler arasında gerçekleşen her türlü karşılıklı konuşmalar ve yazışmalar sözlü iletişim kapsamı içerisinde değerlendirilmektedir. Sözsüz iletişim adından da anlaşılacağı üzere sözcüklerle değil, hareket ve davranışlarla gerçekleşen bir iletişim türüdür. Sözlü iletişimi pekiştirmek amacıyla kullanılır ve duygu ve tavırların düzenlenmesi suretiyle sözlü iletişim desteklenir (Işık, 2017, s.56- 60).

Kişilerarası iletişim yüz yüze ya da aracı kanallar yoluyla yapılan bir iletişim sürecidir.(Hartley'den (1999) aktaran: Gürüz ve Eğinli, 2014, s. 51). Bir iletişimin kişilerarası iletişim sayılabilmesi için Tubss ve Moss'a göre şu üç ölçütü taşıması gerekmektedir (Dökmen'den (1994) aktaran: Gürüz ve Eğinli, 2014, s.51):

- Kişilerarası iletişime katılanlar, belli bir yakınlık içinde yüz yüze olmalıdır.
- Katılımcılar arasında tek yönlü değil, karşılıklı mesaj alışverişi olmalıdır.
- Söz konusu mesajlar sözlü ve sözsüz nitelikte olmalıdır.

Kişilerarası iletişim süreci, Harold Laswell'in geliştirdiği iletişim modelinde “kim?, kiminle?, hangi kanalla?, niçin?, hangi etkiyle?, ne söylüyor?” bu sürece göre şekillenmektedir (Devito'dan (1995) aktaran: Gürüz ve Eğinli, 2014, s.57) .

Bu araştırmanın temel amacı Sakarya Üniversitesi İletişim Fakültesi öğrencilerinin kişilerarası iletişim becerilerini ortaya koymaktır. Literatürü taradığımızda karşımıza çıkan bu

tarz çalışmalarda kişilerarası iletişimin toplumda ne denli önemli bir olgu olduğu sonucu ortaya çıkmıştır. Özellikle sözlü iletişim olgusu kişilerarası iletişimde önemli bir yere sahiptir.

ARAŞTIRMANIN ÖNEMİ

İnsanlar arasındaki, bilgi, duygu ve düşünce alışverişine iletişim denmektedir. İletişim her zaman her yerdedir. İnsan istese de istemese de bir iletişim ağı içerisinde yaşamaktadır ve iletişim kurmaması olanaksızdır. İletişim toplumsal yaşamı olanaklı kılar, bu nedenle toplumsal yaşamın temelidir. İletişim olmasaydı insan toplumu olmazdı (Zıllıoğlu, 2010, s.26, 28). İşte bu yüzden yani toplumun toplum olabilmesi için karşılıklı iletişim önemlidir ve bu da kişilerarası iletişimle mümkün olmaktadır. Bu araştırma da kişilerarası iletişim becerisinin düzeyini öğrenme açısından önemli bir çalışmadır.

Kişilerarası iletişim, insanların oluşturduğu bir iletişim türüdür. Bu süreçte hem kaynak hem de hedef insanlardan oluşmaktadır. Diğer bir ifadeyle kişilerarası iletişim en az iki kişi arasında sözlü veya sözsüz olarak gerçekleşmektedir (Işık, 2017, s.55). Yani kişilerarası iletişimde çift yönlü bir iletişim söz konusudur. Kişilerarası iletişim süreci kaynak, alıcı, kodlama, kod açma, yeterlilik, mesajlar ve geri bildirim basamaklarından oluşmaktadır. Bu aşamaların her biri iletişimin gerçekleşmesi için önemlidir.

Bu araştırma sonucu Sakarya Üniversitesi İletişim Fakültesi öğrencilerinin empati, dinleme, kendini açma, dürüstlük, hoşgörü seviyeleri yani kişilerarası iletişim becerileri ortaya çıkacaktır. Bu unsurlar yani empati, dinleme, kendini açma, dürüstlük, hoşgörü kişilerarası iletişim için büyük önem taşıyan unsurlardır. Bunlar doğru şekilde gerçekleştirilmezse kişilerarası iletişim süreci de başarısızlığa uğrayacaktır. Bu araştırmayla birlikte öğrencilerin kişilerarası iletişim becerileri ölçülmüştür ve eksi yönde bir sonuç çıkarsa iyileştirme yönünde çalışmaların gerçekleştirilmesi hedeflenmiştir.

İnsanlar iletişim kurarak birçok şeyi gerçekleştirir. İki insan arasında olan iletişim şekli ise kişilerarası iletişimidir. Bu iletişim çift yönlü bir iletişim şeklidir. Bu araştırma sonucu Sakarya Üniversitesi İletişim Fakültesi öğrencilerinin kişilerarası iletişim becerileri düzeyi ortaya çıkmıştır bu açıdan özel bir önem taşımaktadır. Literatürü taradığımızda benzer çalışmalar birçok üniversitede yapılmıştır fakat bu çalışma diğerlerinden farklı olarak sadece kişilerarası iletişim becerisini ölçmeye yöneliktir.

ARAŞTIRMANIN YÖNTEMİ

Bu araştırmada nicel bir araştırma yöntemi olan anket kullanılmıştır. Araştırma ile ilgili veriler beşli likert ölçeğinden oluşan anketle toplanmıştır.

Problem Cümlesi

Sakarya Üniversitesi İletişim Fakültesi öğrencilerinin kişilerarası iletişim becerileri konusunda ki görüşleri.

Alt Problemler

1. Öğrencilerin görüşleri arasında cinsiyete göre anlamlı bir farklılık var mıdır?
2. Öğrencilerin görüşleri arasında yaşa göre anlamlı bir farklılık var mıdır?
3. Öğrencilerin görüşleri arasında bölüme göre anlamlı bir farklılık var mıdır?
4. Öğrencilerin görüşleri arasında sınıf düzeyine göre anlamlı bir farklılık var mıdır?

Araştırma Modeli

Bu çalışma nicel bir araştırma olup genel tarama modellerinden tekli tarama modelidir.

Evren

Araştırmanın evreni olarak 677 kişiden oluşan Sakarya Üniversitesi İletişim Fakültesi öğrencileri seçilmiştir.

Örneklem

Örneklem olarak ise Sakarya Üniversitesi İletişim Fakültesi öğrencilerinden rastgele örneklem yöntemiyle 100 öğrenci seçilmiştir.

Veri Toplama Aracı

Bu çalışmada, Sert (2015)'in: "Güven ve Kişilerarası İletişim İlişkisi: Kocaeli Üniversitesi Akademik Personeline Yönelik Bir Araştırma" adlı makalesinde oluşturduğu kişilerarası iletişim becerisi ölçeği kullanılmıştır (Sert, 2015).

Bu çalışmada kullanılan ölçeğin Cronbach Alpha değeri 0,820 olarak yüksek güvenilirlikte bulunmuştur. Örneklem büyüklüğünün uygunluğu için yapılan Keiser-Meyer-Olkin (KMO) değeri 0,752 olarak bulunmuştur. Barlett değerinin ise, 0,05 den küçük olduğu ve faktör analizinin yapılabilir olduğu görülmüştür. Faktör analizi sonucunda toplam varyansı, % 63,428 olarak belirlenmiştir (Sert, 2015, s.17).

Veri Analizi

Bu çalışmada elde edilen veriler SPSS programının 20.0 versiyonunda değerlendirilmiştir. Bu çalışmada öğrencilerin kişilerarası iletişim becerilerini ölçmek için verilerin frekans dağılımına bakılmıştır ayrıca T-testi ve Anova analizi yapılmıştır.

Varsayımlar

1. Sakarya Üniversitesi İletişim Fakültesi öğrencileri anket sorularını içtenlikle cevaplamıştır.
2. Araştırma sorularının, öğrencilerin kişilerarası iletişim becerilerini ölçtüğü kabul edilmektedir.

Sınırlılıklar

Bu çalışmada çeşitli sınırlılıklar bulunmaktadır.

1. Bu çalışma Sakarya Üniversitesi İletişim Fakültesi öğrencilerine yapılmıştır.
2. Ankete toplam 100 öğrenci katılmıştır.
3. Araştırma 01.04. 2017 tarihinde 2016-2017 Bahar Döneminde yapılmıştır.

Tanımlar

İletişim: İnsanlar arasındaki bilgi, duygu ve düşünce alışverişine iletişim denilmektedir.

Kişilerarası İletişim: Kişilerarası iletişim en az iki kişi arasında sözlü veya sözsüz olarak gerçekleşen iletişim şeklidir.

Kişilerarası İletişim Becerisi: Kişilerarası iletişimin etkili bir şekilde gerçekleşebilmesi için empati, dinleme, kendini açma, dürüstlük ve hoşgörü gibi unsurların doğru bir şekilde gerçekleşebilmesi gerekmektedir. Bu unsurların varlığının derecesi kişiler arası iletişim becerisinin seviyesini belirtmektedir.

BULGULAR

Ankete verilen cevapların yüzdelikleri hesaplanmıştır. Bu hesaplamalar aşağıdaki gibidir.

Tablo 1. Katılımcı Cinsiyeti

	Frequency	Percent	Valid Percent	Cumulative Percent
Erkek	43	43,0	43,0	43,0
Valid Kadın	57	57,0	57,0	100,0
Total	100	100,0	100,0	

Tablo 1 'e bakıldığında ankete cevap veren katılımcıların %43'ü (43 kişi) erkek ve %57'si (57kişi) kadındır.

Tablo 2. Katılımcı Yaşı

	Frequency	Percent	Valid Percent	Cumulative Percent
18	4	4,0	4,0	4,0
19	23	23,0	23,0	27,0
20	28	28,0	28,0	55,0
21	30	30,0	30,0	85,0
Valid 22	8	8,0	8,0	93,0
23	3	3,0	3,0	96,0
25	2	2,0	2,0	98,0
26	2	2,0	2,0	100,0
Total	100	100,0	100,0	

Tablo 2'ye bakıldığında ankete cevap veren katılımcıların %4'ü (4 kişi) 18 yaşında, %23'ü (23 kişi) 19 yaşında, %28'i (28 kişi) 20 yaşında, %30'u (30 kişi) 21 yaşında, %8'i (8 kişi) 22 yaşında, %3'ü (3kişi) 23 yaşında, %2'si (2 kişi) 25 yaşında, %2'si (2 kişi) 26 yaşındadır.

Tablo3. Katılımcıların Öğrenim Gördüğü Bölüm

	Frequency	Percent	Valid Percent	Cumulative Percent
Halkla İlişkiler ve Reklamcılık	49	49,0	49,0	49,0
Valid İletişim Tasarımı ve Medya	25	25,0	25,0	74,0
Gazetecilik	26	26,0	26,0	100,0
Total	100	100,0	100,0	

Tablo 3'e bakıldığında ankete cevap veren katılımcıların %49'u (49 kişi) Halkla İlişkiler ve Reklamcılık bölümünde, %25'i (25 kişi) İletişim Tasarımı ve Medya bölümünde, %26'sı (26 kişi) Gazetecilik bölümünde öğrenim görmektedir.

Tablo 4. Katılımcıların Sınıf Düzeyi

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Birinci Sınıf	29	29,0	29,0	29,0
İkinci Sınıf	64	64,0	64,0	93,0
Üçüncü Sınıf	7	7,0	7,0	100,0
Total	100	100,0	100,0	

Tablo 4'e bakıldığında ankete cevap veren katılımcıların %29'u (29 kişi) üniversite birinci sınıf, %64'ü (64 kişi) üniversite ikinci sınıf, %7'si (7 kişi) üniversite üçüncü sınıf öğrencisidir.

Tablo 5. Üzgün birini gördüğümde ona yardım etme isteği duyarım.

	Frequency	Percent	Valid Percent	Cumulative Percent
Katılmıyorum	3	3,0	3,0	3,0
Kararsızım	7	7,0	7,0	10,0
Valid Katılıyorum	38	38,0	38,0	48,0
Kesinlikle Katılıyorum	52	52,0	52,0	100,0
Total	100	100,0	100,0	

Üzgün birini gördüğünde yardım etme isteği duyarım sorusu ile ilgili olan Tablo 5'e bakıldığında ankete cevap verenlerin %3'ü (3 kişi) katılmıyorum, %7'si (7 kişi) kararsızım, %38'i (38 kişi) katılıyorum, %52'si (52 kişi) kesinlikle katılıyorum şeklinde fikirlerini ifade etmişlerdir. Sonuç olarak, katılımcıların % 90'ı üzgün birini gördüğünde ona yardım etme isteği duymaktadır.

Tablo 6. Anlattıkları şeyleri sıkıcı bulsam bile insanları can kulağıyla dinlerim.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılmıyorum	6	6,0	6,0	6,0
Katılmıyorum	11	11,0	11,0	17,0
Kararsızım	17	17,0	17,0	34,0
Valid Katılıyorum	49	49,0	49,0	83,0
Kesinlikle Katılıyorum	17	17,0	17,0	100,0
Total	100	100,0	100,0	

Anlattıkları şeyleri sıkıcı bulsam bile insanları can kulağıyla dinlerim sorusu ile ilgili olan Tablo 6'ya bakıldığında ankete cevap verenlerin %6'sı (6kişi) kesinlikle katılmıyorum, %11'i (11 kişi) katılmıyorum, %17'si (17 kişi) kararsızım, %49'u (49 kişi) katılıyorum, %17'si (17 kişi) kesinlikle katılıyorum ifadelerini cevaplamıştır. Sonuç olarak, katılımcıların %66'sı anlattıkları şeyli sıkıcı bulsalar bile insanları can kulağıyla dinlemektedir.

Tablo 7. Kişisel yaşantılarım sonucu edindiğim deneyimleri başkalarıyla paylaşırım.

	Frequency	Percent	Valid Percent	Cumulative Percent
Katılmıyorum	1	1,0	1,0	1,0
Kararsızım	10	10,0	10,0	11,0
Valid Katılıyorum	46	46,0	46,0	57,0
Kesinlikle Katılıyorum	43	43,0	43,0	100,0
Total	100	100,0	100,0	

Kişisel yaşantılarım sonucu edindiğim deneyimleri başkalarıyla paylaşırım sorusu ile ilgili olan Tablo 7'ye bakıldığında ankete cevap verenlerin %1'i (1kişi) katılmıyorum, %10'u (10 kişi) kararsızım, %46'sı (46 kişi) katılıyorum, %43'ü (43 kişi) kesinlikle katılıyorum ifadelerini cevaplamıştır. Sonuç olarak, katılımcıların %89'u kişisel yaşantıları sonucu edindikleri deneyimleri başkalarıyla paylaşmaktadır.

Tablo 8. Otoriter konumdaki birinin görüşlerine katılmıyorsam bu konuda ki kendi düşüncelerimi kibarca belirtirim.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılmıyorum	3	3,0	3,0	3,0
Katılmıyorum	1	1,0	1,0	4,0
Valid Kararsızım	10	10,0	10,0	14,0
Katılıyorum	45	45,0	45,0	59,0
Kesinlikle Katılıyorum	41	41,0	41,0	100,0
Total	100	100,0	100,0	

Otoriter konumdaki birinin görüşlerine katılmıyorsam bu konuda ki kendi düşüncelerimi kibarca belirtirim sorusu ile ilgili olan Tablo 8'e bakıldığında ankete cevap verenlerin %3'ü (3 kişi) kesinlikle katılmıyorum, %1'i (1 kişi) katılmıyorum, %10'u (10 kişi) kararsızım, %45'i (45 kişi) katılıyorum, %41'i (41 kişi) kesinlikle katılıyorum ifadelerini belirtmiştir. Sonuç olarak, katılımcıların %86'sı otoriter konumdaki birinin görüşlerine katılmıyorsa bu konuda ki kendi düşüncelerini kibarca belirtmektedir.

Tablo 9. İnsanları yaşam tarzlarıyla yargılamam.

	Frequency	Percent	Valid Percent	Cumulative Percent
Katılmıyorum	2	2,0	2,0	2,0
Kararsızım	20	20,0	20,0	22,0
Valid Katılıyorum	26	26,0	26,0	48,0
Kesinlikle Katılıyorum	52	52,0	52,0	100,0
Total	100	100,0	100,0	

İnsanları yaşam tarzlarıyla yargılamam sorusu ile ilgili Tablo 9'a bakıldığında ankete cevap verenlerin %2'si (2 kişi) katılmıyorum, %20'si (20 kişi) kararsızım, %26'sı (26 kişi)

katılıyorum, %52'si (52 kişi) kesinlikle katılıyorum şeklinde fikirlerini ifade etmiştir. Sonuç olarak, katılımcıların %78'i insanları yaşam tarzlarıyla yargılamamaktadır.

Tablo 10. Biriyle konuşurken kendimi onun yerine koyabilirim.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılmıyorum	2	2,0	2,0	2,0
Katılmıyorum	1	1,0	1,0	3,0
Kararsızım	4	4,0	4,0	7,0
Katılıyorum	41	41,0	41,0	48,0
Kesinlikle Katılıyorum	52	52,0	52,0	100,0
Total	100	100,0	100,0	

Biriyle konuşurken kendimi onun yerine koyabilirim sorusu ile ilgili Tablo 10'a bakıldığında ankete cevap verenlerin %2'si (2 kişi) kesinlikle katılmıyorum, %1'i (1 kişi) katılmıyorum, %4'ü (4 kişi) kararsızım, %41'i (41 kişi) katılıyorum, %52'si (52 kişi) kesinlikle katılıyorum şeklinde fikirlerini ifade etmiştir. Sonuç olarak, katılımcıların %93'ü biriyle konuşurken kendini onun yerine koyabilmektedir.

Tablo 11. Bir insanın kullandığı ifadelerle hiç katılmasam bile cümlesini kesmem.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılmıyorum	3	3,0	3,0	3,0
Katılmıyorum	15	15,0	15,0	18,0
Kararsızım	14	14,0	14,0	32,0
Katılıyorum	34	34,0	34,0	66,0
Kesinlikle Katılıyorum	34	34,0	34,0	100,0
Total	100	100,0	100,0	

Bir insanın kullandığı ifadelerle hiç katılmasam bile cümlesini kesmem sorusu ile ilgili Tablo 11'e bakıldığında ankete cevap verenlerin %3'ü (3 kişi) kesinlikle katılmıyorum, %15'i (15 kişi) katılmıyorum, %14'ü (14 kişi) kararsızım, %34'ü (34 kişi) katılıyorum, %34'ü (34 kişi) kesinlikle katılıyorum şeklinde fikirlerini belirtmiştir. Sonuç olarak, katılımcıların %68'i bir insanın kullandığı ifadelerle hiç katılmasa bile cümlesini kesmemektedir.

Tablo 12. İnsanlara kendimi kolaylıkla açarım.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılmıyorum	12	12,0	12,0	12,0
Katılmıyorum	32	32,0	32,0	44,0
Kararsızım	13	13,0	13,0	57,0
Katılıyorum	28	28,0	28,0	85,0
Kesinlikle Katılıyorum	15	15,0	15,0	100,0
Total	100	100,0	100,0	

İnsanlara kendimi kolaylıkla açarım sorusu ile ilgili Tablo 12'ye bakıldığında ankete cevap verenlerin %12'si (12 kişi) kesinlikle katılmıyorum, %32'si (32 kişi) katılmıyorum, %13'ü (13 kişi) kararsızım, %28'i (28 kişi) katılıyorum, %15'i (15 kişi) kesinlikle katılıyorum şeklinde fikirlerini ifade etmiştir. Sonuç olarak, katılımcıların %44'ü insanlara kendilerini kolaylıkla açamamaktadır.

Tablo 13. Kırılacaklarını düşünsem de insanlara kendilerinde gördüğüm hatalı davranışlar konusunda uyarırım.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılmıyorum	1	1,0	1,0	1,0
Katılmıyorum	16	16,0	16,0	17,0
Kararsızım	23	23,0	23,0	40,0
Katılıyorum	40	40,0	40,0	80,0
Kesinlikle Katılıyorum	20	20,0	20,0	100,0
Total	100	100,0	100,0	

Kırılacaklarını düşünsem de insanlara kendilerinde gördüğüm hatalı davranışlar konusunda uyarırım sorusu ile ilgili Tablo 13'e bakıldığında ankete cevap veren katılımcıların %1'i (1 kişi) kesinlikle katılmıyorum, %16'sı (16 kişi) katılmıyorum, %23'ü (23 kişi) kararsızım, %40'ı (40 kişi) katılıyorum, %20'si (20 kişi) kesinlikle katılıyorum şeklinde sorulara cevap vermiştir. Sonuç olarak, katılımcıların %60'ı kırılacaklarını düşünseler de insanların kendilerinde gördükleri hatalı davranışlar konusunda uyarılmaktadır.

Tablo 14. İnsanların etnik kökenleriyle ilgili olumsuz eleştiriler yapmam.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılmıyorum	1	1,0	1,0	1,0
Katılmıyorum	5	5,0	5,0	6,0
Kararsızım	13	13,0	13,0	19,0
Katılıyorum	25	25,0	25,0	44,0
Kesinlikle Katılıyorum	56	56,0	56,0	100,0
Total	100	100,0	100,0	

İnsanların etnik kökenleriyle ilgili olumsuz eleştiriler yapmam sorusu ile ilgili Tablo 14'e bakıldığında ankete cevap veren katılımcıların %1'i (1 kişi) kesinlikle katılmıyorum, %5'i (5 kişi) katılmıyorum, %13'ü (13 kişi) kararsızım, %25'i (25 kişi) katılıyorum, %56'si (56 kişi) kesinlikle katılıyorum şeklinde fikirlerini belirtmiştir. Sonuç olarak, katılımcıların %81'i insanların etnik kökenleriyle ilgili olumsuz eleştiriler yapmamaktadır.

Tablo 15. Sohbet ettiğim insanların ruh hallerini anlayabilirim.

	Frequency	Percent	Valid Percent	Cumulative Percent
Katılmıyorum	2	2,0	2,0	2,0
Kararsızım	6	6,0	6,0	8,0
Valid Katılıyorum	49	49,0	49,0	57,0
Kesinlikle Katılıyorum	43	43,0	43,0	100,0
Total	100	100,0	100,0	

Sohbet ettiğim insanların ruh hallerini anlayabilirim sorusu ile ilgili Tablo 15'e bakıldığında ankete cevap verenlerin %2'si (2 kişi) katılmıyorum, %6'sı (6 kişi) kararsızım, %49'u (49 kişi) katılıyorum, %43'ü (43 kişi) kesinlikle katılıyorum şeklinde fikirlerini belirtmiştir. Sonuç olarak, katılımcıların %92'si sohbet ettiği insanların ruh hallerini anlayabilmektedir.

Tablo 16. Biriyle konuşurken anlatılanlara odaklanmakta zorlanmam.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılmıyorum	1	1,0	1,0	1,0
Katılmıyorum	8	8,0	8,0	9,0
Valid Kararsızım	12	12,0	12,0	21,0
Katılıyorum	46	46,0	46,0	67,0
Kesinlikle Katılıyorum	33	33,0	33,0	100,0
Total	100	100,0	100,0	

Biriyle konuşurken anlatılanlara odaklanmakta zorlanmam sorusu ile ilgili Tablo 16'ya bakıldığında ankete cevap verenlerin %1'i (1 kişi) kesinlikle katılmıyorum, %8'i (8 kişi) katılmıyorum, %12'si (12 kişi) kararsızım, %46'sı (46 kişi) katılıyorum, %33'ü (33 kişi) kesinlikle katılıyorum şeklinde fikirlerini belirtmiştir. Sonuç olarak, katılımcıların %79'u biriyle konuşurken anlatılanlara odaklanmakta zorlanmamaktadır.

Tablo 17. Kendimi ifade etmekte, düşüncelerimi karşımdaki insana aktarmakta güçlük çekmem.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılmıyorum	1	1,0	1,0	1,0
Katılmıyorum	13	13,0	13,0	14,0
Valid Kararsızım	13	13,0	13,0	27,0
Katılıyorum	38	38,0	38,0	65,0
Kesinlikle Katılıyorum	35	35,0	35,0	100,0
Total	100	100,0	100,0	

Kendimi ifade etmekte, düşüncelerimi karşımdaki insana aktarmakta güçlük çekmem sorusu ile ilgili Tablo 17'ye bakıldığında cevap veren katılımcıların %1'i (1 kişi) kesinlikle katılmıyorum, %13'ü (13 kişi) katılmıyorum, %13'ü (13 kişi) kararsızım, %38'i (38 kişi) katılıyorum, %35'i (35 kişi) kesinlikle katılıyorum şeklinde fikirlerini belirtmiştir. Sonuç

olarak, katılımcıların %73'ü kendini ifade etmekte, düşüncelerini karşısındaki insana aktarmakta güçlük çekmemektedir.

Tablo 18. İnsanların benimle ilgili ne düşündüğünü umursamam, doğru bildiğimi söylerim.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılmıyorum	5	5,0	5,0	5,0
Katılmıyorum	17	17,0	17,0	22,0
Kararsızım	13	13,0	13,0	35,0
Katılıyorum	29	29,0	29,0	64,0
Kesinlikle Katılıyorum	36	36,0	36,0	100,0
Total	100	100,0	100,0	

İnsanların benimle ilgili ne düşündüğünü umursamam, doğru bildiğimi söylerim sorusu ile ilgili Tablo 18'e bakıldığında cevap veren katılımcıların %5'i (5 kişi) kesinlikle katılmıyorum, %17'si (17 kişi) katılmıyorum, %13'ü (13 kişi) kararsızım, %29'u (29 kişi) katılıyorum, %36'sı (36 kişi) kesinlikle katılıyorum şeklinde fikirlerini belirtmiştir. Sonuç olarak, katılımcıların %65'i insanların kendileriyle ilgili ne düşündüğünü umursamadan doğru bildiklerini söylemektedirler.

Tablo 19. Farklı inançlardaki insanlara hoşgörüyle bakarım.

	Frequency	Percent	Valid Percent	Cumulative Percent
Katılmıyorum	1	1,0	1,0	1,0
Kararsızım	4	4,0	4,0	5,0
Katılıyorum	35	35,0	35,0	40,0
Kesinlikle Katılıyorum	60	60,0	60,0	100,0
Total	100	100,0	100,0	

Farklı inançlardaki insanlara hoşgörüyle bakarım sorusu ile ilgili Tablo 19'a bakıldığında cevap veren katılımcıların %1'i (1 kişi) katılmıyorum, %4'ü (4 kişi) kararsızım, %35'i (35 kişi) katılıyorum, %60'ı (60 kişi) kesinlikle katılıyorum şeklinde fikirlerini belirtmiştir. Sonuç olarak, katılımcıların %95'i farklı inançlardaki insanlara hoşgörüyle bakmaktadır.

Tablo 20. Çevremdeki insanların duygusallaşmasından rahatsız olurum.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılmıyorum	14	14,0	14,0	14,0
Katılmıyorum	37	37,0	37,0	51,0
Kararsızım	24	24,0	24,0	75,0
Katılıyorum	17	17,0	17,0	92,0
Kesinlikle Katılıyorum	8	8,0	8,0	100,0
Total	100	100,0	100,0	

Çevremdeki insanların duygusallaşmasından rahatsız olurum sorusu ile ilgili Tablo 20'ye bakıldığında cevap veren katılımcıların %14'ü (14 kişi) kesinlikle katılmıyorum, %37'si (37

kişi) katılmıyorum, %24'ü (24 kişi) kararsızım, %17'si (17 kişi) katılıyorum, %8'i (8 kişi) kesinlikle katılıyorum şeklinde fikirlerini belirtmiştir. Sonuç olarak, katılımcıların %51'çevresindeki insanların duygusallaşmasından rahatsız olmamaktadır.

Tablo 21. Yeterince bilgili olmadığım konulardaki konuşmaları çabuk sonlandırırım.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılmıyorum	9	9,0	9,0	9,0
Katılmıyorum	19	19,0	19,0	28,0
Kararsızım	23	23,0	23,0	51,0
Katılıyorum	34	34,0	34,0	85,0
Kesinlikle Katılıyorum	15	15,0	15,0	100,0
Total	100	100,0	100,0	

Yeterince bilgili olmadığım konulardaki konuşmaları çabuk sonlandırırım sorusu ile ilgili Tablo 21'e bakıldığında cevap veren katılımcıların %9'u (9 kişi) kesinlikle katılıyorum, %19'u (19 kişi) katılmıyorum, %23'ü (23 kişi) kararsızım, %34 (34 kişi) katılıyorum, %15'i (15 kişi) kesinlikle katılıyorum şeklinde fikirlerini belirtmiştir. Sonuç olarak, katılımcıların %49'u (49 kişi) yeterince bilgili olmadığı konulardaki konuşmaları çabuk sonlandırmaktadır.

Tablo 22. Üzgün olduğum zamanlarda bunu kimseye belli etmem.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılmıyorum	5	5,0	5,0	5,0
Katılmıyorum	27	27,0	27,0	32,0
Kararsızım	25	25,0	25,0	57,0
Katılıyorum	20	20,0	20,0	77,0
Kesinlikle Katılıyorum	23	23,0	23,0	100,0
Total	100	100,0	100,0	

Üzgün olduğum zamanlarda bunu kimseye belli etmem sorusu ile ilgili Tablo 22'ye bakıldığında cevap veren katılımcıların %5'i (5 kişi) kesinlikle katılmıyorum, %27'si (27 kişi) katılmıyorum, %25'i (25 kişi) kararsızım, %20'si (20 kişi) katılıyorum, %23'ü (23 kişi) kesinlikle katılıyorum şeklinde fikirlerini belirtmiştir. Sonuç olarak, katılımcıların %43'ü (43 kişi) üzgün olduğu zamanlarda bunu kimseye belli etmemektedir.

Tablo 23. Din, siyasi görüş veya cinsel tercihler gibi hassas konulardaki fikirlerimi direk açıklamaktan sakınırım.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılmıyorum	18	18,0	18,0	18,0
Katılmıyorum	29	29,0	29,0	47,0
Kararsızım	21	21,0	21,0	68,0
Katılıyorum	23	23,0	23,0	91,0
Kesinlikle Katılıyorum	9	9,0	9,0	100,0
Total	100	100,0	100,0	

Din, siyasi görüş veya cinsel tercihler gibi hassas konulardaki fikirlerimi direk açıklamaktan sakınırım sorusu ile ilgili Tablo 23'e bakıldığında cevap veren katılımcıların %18'i (18 kişi) kesinlikle katılmıyorum, %29'u (29 kişi) katılmıyorum, %21'i (21 kişi) kararsızım, %23'ü (23 kişi) katılıyorum, %9'u (9 kişi) kesinlikle katılıyorum şeklinde fikirlerini belirtmiştir. Sonuç olarak, katılımcıların %47'si din, siyasi görüş veya cinsel tercihler gibi hassas konulardaki fikirlerini direk açıklamaktan sakınmamaktadır.

Tablo 24. Farklı fikir ve düşüncelere sahip insanlara mesafeli davranırım.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılmıyorum	36	36,0	36,0	36,0
Katılmıyorum	34	34,0	34,0	70,0
Kararsızım	12	12,0	12,0	82,0
Katılıyorum	16	16,0	16,0	98,0
Kesinlikle Katılıyorum	2	2,0	2,0	100,0
Total	100	100,0	100,0	

Farklı fikir ve düşüncelere sahip insanlara mesafeli davranırım sorusu ile ilgili Tablo 24'e bakıldığında cevap veren katılımcıların %36'sı (36 kişi) kesinlikle katılmıyorum, %34'ü (34 kişi) katılmıyorum, %12'si (12 kişi) kararsızım, %16'sı (16 kişi) katılıyorum, %2'si (2 kişi) kesinlikle katılıyorum şeklinde fikirlerini belirtmiştir. Sonuç olarak, katılımcıların %70'i farklı fikir ve düşüncelere sahip insanlara mesafeli davranmamaktadır.

Tablo 25. Film izlerken ağlayan insanları hiç anlamamışım.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılmıyorum	45	45,0	45,0	45,0
Katılmıyorum	26	26,0	26,0	71,0
Kararsızım	12	12,0	12,0	83,0
Katılıyorum	11	11,0	11,0	94,0
Kesinlikle Katılıyorum	6	6,0	6,0	100,0
Total	100	100,0	100,0	

Film izlerken ağlayan insanları hiç anlamamışım sorusu ile ilgili Tablo 25'e bakıldığında cevap veren katılımcıların %45'i (45 kişi) kesinlikle katılmıyorum, %26'sı (26 kişi) katılmıyorum, %12 (12 kişi) kararsızım, %11'i (11 kişi) katılıyorum, %6'sı (6 kişi) kesinlikle katılıyorum şeklinde fikirlerini belirtmiştir. Sonuç olarak, katılımcıların %71'i film izlerken ağlayan insanları anladıklarını belirtmiştir.

Tablo 26. Birini dinlerken sonrasında kendi kuracağım cümleleri düşünürüm.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılmıyorum	7	7,0	7,0	7,0
Katılmıyorum	2	2,0	2,0	9,0
Kararsızım	13	13,0	13,0	22,0
Katılıyorum	49	49,0	49,0	71,0
Kesinlikle Katılıyorum	29	29,0	29,0	100,0
Total	100	100,0	100,0	

Birini dinlerken sonrasında kendi kuracağım cümleleri düşünürüm sorusu ile ilgili Tablo 26'ya bakıldığında cevap veren katılımcıların %7'si (7 kişi) kesinlikle katılmıyorum, %2'si (2 kişi) katılmıyorum, %13'ü (13 kişi) kararsızım, %49'u (49 kişi) katılıyorum, %29'u (29 kişi) kesinlikle katılıyorum şeklinde fikirlerini belirtmiştir. Sonuç olarak, katılımcıların %78'i birini dinlerken sonrasında kendi kuracağım cümleleri düşünmektedir.

Tablo 27. Sorunlarımı başkalarından yardım istemeden kendi başıma çözmeyi tercih ederim.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılmıyorum	5	5,0	5,0	5,0
Katılmıyorum	17	17,0	17,0	22,0
Kararsızım	16	16,0	16,0	38,0
Katılıyorum	30	30,0	30,0	68,0
Kesinlikle Katılıyorum	32	32,0	32,0	100,0
Total	100	100,0	100,0	

Sorunlarımı başkalarından yardım istemeden kendi başıma çözmeyi tercih ederim sorusu ile ilgili Tablo 27'ye bakıldığında cevap veren katılımcıların %5'i (5 kişi) kesinlikle katılmıyorum, %17'si (17 kişi) katılmıyorum, %16'sı (16 kişi) kararsızım, %30'u (30 kişi) katılıyorum, %32'si (32 kişi) kesinlikle katılıyorum şeklinde fikirlerini belirtmiştir. Sonuç olarak, katılımcıların %62'si sorunlarını başkalarından yardım istemeden kendi başlarına çözmeyi tercih etmektedir.

Tablo 28. Fikrimi soran birine kıyafeti yakışmamışsa bunu direk söylemek istemem.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılmıyorum	11	11,0	11,0	11,0
Katılmıyorum	27	27,0	27,0	38,0
Kararsızım	12	12,0	12,0	50,0
Katılıyorum	33	33,0	33,0	83,0
Kesinlikle Katılıyorum	17	17,0	17,0	100,0
Total	100	100,0	100,0	

Fikrimi soran birine kıyafeti yakışmamışsa bunu direk söylemek istemem sorusu ile ilgili Tablo 28'e bakıldığında cevap veren katılımcıların %11'i (11 kişi) kesinlikle katılmıyorum, %27'si (27 kişi) katılmıyorum, %12'si (12 kişi) kararsızım, %33'ü (33 kişi) katılıyorum, %17'si (17 kişi) kesinlikle katılıyorum şeklinde fikirlerini ifade etmiştir. Sonuç olarak, katılımcıların %50'si fikrini soran birine kıyafetinin yakışmadığını direk söylemek istememektedir.

Tablo 29. Yan dairemde farklı cinsel tercihi olan insanların yaşamasından rahatsızlık duyarım.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılmıyorum	33	33,0	33,0	33,0
Katılmıyorum	23	23,0	23,0	56,0
Kararsızım	24	24,0	24,0	80,0
Katılıyorum	11	11,0	11,0	91,0
Kesinlikle Katılıyorum	9	9,0	9,0	100,0
Total	100	100,0	100,0	

Yan dairemde farklı cinsel tercihi olan insanların yaşamasından rahatsızlık duyarım sorusu ile ilgili Tablo 29'a bakıldığında cevap veren katılımcıların %33'ü (33 kişi) kesinlikle katılmıyorum, %23'ü (23 kişi) katılmıyorum, %24'ü (24 kişi) kararsızım, %11'i (11 kişi) katılıyorum, %9'u (9 kişi) kesinlikle katılıyorum şeklinde fikirlerini ifade etmiştir. Sonuç olarak, katılımcıların %56'sı yan dairesinde farklı cinsel tercihi olan insanların yaşamasından rahatsızlık duymamaktadır.

Tablo 30. Olaylara başkalarının açısından bakmayı çok zor buluyorum.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılmıyorum	38	38,0	38,0	38,0
Katılmıyorum	34	34,0	34,0	72,0
Kararsızım	12	12,0	12,0	84,0
Katılıyorum	12	12,0	12,0	96,0
Kesinlikle Katılıyorum	4	4,0	4,0	100,0
Total	100	100,0	100,0	

Olaylara başkalarının açısından bakmayı çok zor buluyorum sorusu ile ilgili Tablo 30'a bakıldığında cevap veren katılımcıların %38'i (38 kişi) kesinlikle katılmıyorum, %34'ü (34 kişi) katılmıyorum, %12'si (12 kişi) kararsızım, %12'si (12 kişi) katılıyorum, %4'ü (4 kişi) kesinlikle katılıyorum şeklinde fikirlerini belirtmiştir. Sonuç olarak, katılımcıların %72'si olaylara başkalarının açısından bakmayı zor bulmamaktadır.

Tablo 31. Beni ilgilendirmeyen konuları başka tarafa yönlendirmeye çalışırım.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılmıyorum	17	17,0	17,0	17,0
Katılmıyorum	30	30,0	30,0	47,0
Kararsızım	24	24,0	24,0	71,0
Katılıyorum	24	24,0	24,0	95,0
Kesinlikle Katılıyorum	5	5,0	5,0	100,0
Total	100	100,0	100,0	

Beni ilgilendirmeyen konuları başka tarafa yönlendirmeye çalışırım sorusu ile ilgili Tablo 31'e bakıldığında cevap veren katılımcıların %17'si (17 kişi) kesinlikle katılmıyorum, %30'u (30 kişi) katılmıyorum, %24'ü (24 kişi) kararsızım, %24'ü (24 kişi) katılıyorum, %5'i (5 kişi) kesinlikle katılıyorum şeklinde fikirlerini belirtmiştir. Sonuç olarak, katılımcıların %47'si kendilerini ilgilendirmeyen konuları başka tarafa yönlendirmeye çalışmamaktadır.

Tablo 32. Zayıf ya da eksik yönlerimi herkesten gizlerim.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılmıyorum	17	17,0	17,0	17,0
Katılmıyorum	20	20,0	20,0	37,0
Kararsızım	27	27,0	27,0	64,0
Katılıyorum	19	19,0	19,0	83,0
Kesinlikle Katılıyorum	17	17,0	17,0	100,0
Total	100	100,0	100,0	

Zayıf ya da eksik yönlerimi herkesten gizlerim sorusu ile ilgili Tablo 32'ye bakıldığında cevap veren katılımcıların %17'si (17 kişi) kesinlikle katılmıyorum, %20'si (20 kişi) katılmıyorum, %27'si (27 kişi) kararsızım, %19'u (19 kişi) katılıyorum, %17'si (17 kişi) kesinlikle katılıyorum şeklinde fikirlerini belirtmiştir. Sonuç olarak, katılımcıların %37'si zayıf ya da eksik yönlerini herkesten gizlememektedir.

Tablo 33. Karşımdakilerle tartışmak ya da onları rahatsız etmemek için düşüncelerimi saklarım.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılmıyorum	26	26,0	26,0	26,0
Katılmıyorum	31	31,0	31,0	57,0
Kararsızım	13	13,0	13,0	70,0
Katılıyorum	22	22,0	22,0	92,0
Kesinlikle Katılıyorum	8	8,0	8,0	100,0
Total	100	100,0	100,0	

Karşımdakilerle tartışmak ya da onları rahatsız etmemek için düşüncelerimi saklarım sorusu ile ilgili Tablo 33'e bakıldığında cevap veren katılımcıların %26'sı (26 kişi) kesinlikle katılmıyorum, %31'i (31 kişi) katılmıyorum, %13'ü (13 kişi) kararsızım, %22'si (22 kişi) katılıyorum, %8'i (8 kişi) kesinlikle katılıyorum şeklinde fikirlerini belirtmiştir. Sonuç olarak, katılımcıların %57'si karşımdakilerle tartışmak ya da onları rahatsız etmemek için düşüncelerini saklamamaktadır.

Tablo 34. Siyasi görüş ayrılıkları yaşadığım kişilerle sohbet ederken kendimi sınırlı hissederim.

	Frequency	Percent	Valid Percent	Cumulative Percent
Kesinlikle Katılmıyorum	22	22,0	22,0	22,0
Katılmıyorum	28	28,0	28,0	50,0
Kararsızım	17	17,0	17,0	67,0
Katılıyorum	17	17,0	17,0	84,0
Kesinlikle Katılıyorum	16	16,0	16,0	100,0
Total	100	100,0	100,0	

Siyasi görüş ayrılıkları yaşadığım kişilerle sohbet ederken kendimi sınırlı hissederim sorusu ile ilgili Tablo 34'e bakıldığında cevap veren katılımcıların %22'si (22 kişi) kesinlikle katılmıyorum, %28'i (28 kişi) katılmıyorum, %17'si (17 kişi) kararsızım, %17'si (17 kişi) katılıyorum, %16'sı (16 kişi) kesinlikle katılıyorum şeklinde fikirlerini belirtmiştir. Sonuç olarak, katılımcıların %50'si siyasi görüş ayrılıkları yaşadığı kişilerle sohbet ederken kendilerini sınırlı hissetmemektedir.

Ankete verilen cevaplar, alt problemlere göre anlamlı bir farklılık olup olmadığını ortaya çıkarmak için t-testi ya da Anova ile karşılaştırılmıştır. Anlamlı farklılık bulunan sorular tablo ile gösterilmiştir.

Tablo 35. Üzgün Birini Gördüğümde Ona Yardım Etme İsteği Duyarım Independent Samples Test Cinsiyet

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
1. Üzgün birini gördüğümde ona yardım etme isteği duyarım.	Equal variances assumed	3,572	,062	-2,128	98	,036	-,317	,149	-,613	-,021
	Equal variances not assumed			-2,038	73,752	,045	-,317	,156	-,627	-,007

Tablo 35'e bakıldığında hesaplanan α 0,036, normal α 0,05'ten küçük olduğu için üzgün birini gördüğümde ona yardım etme isteği duyarım sorusunda cinsiyete göre anlamlı bir farklılık bulunmuştur. Kadınların aritmetik ortalaması 4.53 olduğu için üzgün birini gördüğünde yardım etme isteği duyma oranı kadınlarda erkeklere göre daha fazladır.

Tablo 36. Anlattıkları Şeyleri Sıkıcı Bulsam Bile İnsanları Can Kulağıyla Dinlerim Independent Samples Test Cinsiyet

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
2. Anlattıkları şeyleri sıkıcı bulsam bile insanları can kulağıyla dinlerim.	Equal variances assumed	3,742	,056	-2,448	98	,016	-,522	,213	-,946	-,099
	Equal variances not assumed			-2,409	84,645	,018	-,522	,217	-,953	-,091

Tablo 36'ya bakıldığında hesaplanan α 0,016 normal α 0,05'ten küçük olduğu için anlattıkları şeyleri sıkıcı bulsam bile insanları can kulağıyla dinlerim sorusunda cinsiyete göre anlamlı bir

farklılık bulunmuştur. Kadınların aritmetik ortalaması 3,82 olduğu için anlattıkları şeyleri sıkıcı bulsalar bile insanları can kulağıyla dinleme oranı erkeklere göre daha fazladır.

Tablo 37. Biriyle Konuşurken Kendimi Onun Yerine Koyabilirim Independent Samples Test Cinsiyet

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
6. Biriyle konuşurken kendimi onun yerine koyabilirim.	Equal variances assumed	2,923	,090	-3,262	98	,002	-,498	,153	-,801	-,195
	Equal variances not assumed			-3,016	60,091	,004	-,498	,165	-,828	-,168

Tablo 37'ye bakıldığında hesaplanan α 0,002 normal α 0,05'ten küçük olduğu için biriyle konuşurken kendimi onun yerine koyabilirim sorusunda cinsiyete göre anlamlı bir farklılık bulunmuştur. Kadınların aritmetik ortalaması 4,61 olduğu için biriyle konuşurken kendilerini onun yerine koyma oranı erkeklere göre daha yüksektir.

Tablo 38. Yan Dairemde Farklı Cinsel Tercihi Olan İnsanların Yaşamasından Rahatsızlık Duyarım

Independent Samples Test Cinsiyet

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
25. Yan dairemde farklı cinsel tercihi olan insanların yaşamasından rahatsızlık duyarım.	Equal variances assumed	13,924	,000	2,877	98	,005	,726	,252	,225	1,227
	Equal variances not assumed			2,722	68,798	,008	,726	,267	,194	1,258

Tablo 38'e bakıldığında hesaplanan α 0,005 normal α 0,05'ten küçük olduğu için yan dairemde farklı cinsel tercihi olan insanların yaşamasından rahatsızlık duyarım sorusunda cinsiyete göre anlamlı bir farklılık bulunmuştur. Erkeklerin aritmetik ortalaması 2,81 olduğu

için yan dairelerinde farklı cinsel tercihi olan insanların yaşamasından rahatsızlık duyma oranı kadınlara göre daha fazladır.

Tablo 39. Olaylara Başkalarının Açısından Bakmayı Çok Zor Buluyorum Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
26. Olaylara başkalarının açısından bakmayı çok zor buluyorum.	Equal variances assumed	12,954	,001	3,028	98	,003	,681	,225	,235	1,128
	Equal variances not assumed			2,890	72,179	,005	,681	,236	,211	1,151

Tablo 39'a bakıldığında hesaplanan α 0,003 normal α 0,05'ten küçük olduğu için olaylara başkalarının açısından bakmayı çok zor buluyorum sorusunda cinsiyete göre anlamlı bir farklılık bulunmuştur. Erkeklerin aritmetik ortalaması 2,49 olduğu için olaylara başkalarının açısından bakmayı zor bulma oranı kadınlara göre daha yüksektir.

Tablo 40. Karşımdakilerle Tartışmak Ya Da Onları Rahatsız Etmek İçin Düşüncelerimi Saklıyorum.

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
29. Karşımdakilerle tartışmak ya da onları rahatsız etmemek için düşüncelerimi saklıyorum.	Equal variances assumed	5,354	,023	2,101	98	,038	,545	,259	,030	1,059
	Equal variances not assumed			2,043	79,968	,044	,545	,267	,014	1,075

Tablo 40'a bakıldığında hesaplanan α 0,038 normal α 0,05'ten küçük olduğu için karşıdakilerle tartışmamak ya da onları rahatsız etmemek için düşüncelerimi saklarım sorusunda cinsiyete göre anlamlı bir farklılık bulunmuştur. Erkeklerin aritmetik ortalaması 2,86 olduğu için karşıdakilerle tartışmamak ya da onları rahatsız etmemek için düşüncelerini saklama oranı kadınlara göre daha fazladır.

Araştırmada yer alan diğer diğer anket sorularında ise hesaplanan α değeri normal α 0,05 değerinden büyük olduğu için cinsiyete göre anlamlı bir farklılık bulunmamıştır.

Tablo 41. Kişisel Yaşantılarım Sonucu Edindiğim Deneyimleri Başkalarıyla Paylaşım

ANOVA Yaş					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7,503	7	1,072	2,472	,023
Within Groups	39,887	92	,434		
Total	47,390	99			

Tablo 41'e bakıldığında hesaplanan α 0,023 normal α 0,05 değerinden küçük olduğu için kişisel yaşantıları sonucu edindiği deneyimleri başkalarıyla paylaşma durumu yaşa göre anlamlı bir farklılık göstermektedir. Bu anlamlı farklılıklar 18-19, 18-20, 18-21, 18-22, 18-25, 19-20, 20- 22, 20-25 yaşları arasında bulunmaktadır.

Tablo 42. Karşıdakilerle Tartışmak Ya Da Onları Rahatsız Etmemek İçin

Düşüncelerimi Saklarım ANOVA Yaş					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	23,970	7	3,424	2,176	,043
Within Groups	144,780	92	1,574		
Total	168,750	99			

Tablo 42'ye bakıldığında hesaplanan α 0,043 normal α 0,05 değerinden küçük olduğu için karşıdakilerle tartışmak ya da onları rahatsız etmemek için düşüncelerini saklama durumu yaşa göre anlamlı bir farklılık göstermektedir. Bu anlamlı farklılık 19-23, 20-23, 21-23, 23-26 yaşları arasında bulunmaktadır.

Araştırmada yer alan diğer anket sorularında ise hesaplanan α değeri normal α 0,05 değerinden büyük olduğu için yaşa göre anlamlı bir farklılık bulunmamıştır.

Tablo 43. Kişisel Yaşantılarım Sonucu Edindiğim Deneyimleri Başkalarıyla Paylaşım

ANOVA Bölüm					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3,502	2	1,751	3,870	,024
Within Groups	43,888	97	,452		
Total	47,390	99			

Tablo 43'e bakıldığında hesaplanan α 0,024, normal α 0,05 değerinden küçük olduğu için kişisel yaşantıları sonucu edindiği deneyimleri başkalarıyla paylaşma durumu bölüme göre anlamlı bir farklılık göstermektedir. Bu anlamlı farklılık İletişim Tasarımı ve Medya Bölümü

ile Gazetecilik Bölümü arasında ve ayrıca Halkla İlişkiler ve Reklamcılık Bölümü ile İletişim Tasarımı ve Medya Bölümü arasında bulunmaktadır.

Tablo 44. Otoriter Konumdaki Birinin Görüşlerine Katılmıyorsam Bu Konuda Ki Kendi Düşüncelerimi Kibarca Belirtirim ANOVA Bölüm

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5,005	2	2,502	3,325	,040
Within Groups	72,995	97	,753		
Total	78,000	99			

Tablo 44'e bakıldığında hesaplanan α 0,040, normal α 0,05 değerinden küçük olduğu için otoriter konumdaki birinin görüşlerine katılmayıp bu konudaki kendi düşüncelerini kibarca belirtme durumu bölüme göre anlamlı bir farklılık göstermektedir. Bu anlamlı farklılık İletişim Tasarımı ve Medya Bölümü ile Gazetecilik Bölümü arasında bulunmaktadır.

Tablo 45. Kendimi İfade Etmekte, Düşüncelerimi Karşımdaki İnsana Aktarmakta Güçlük Çekmem ANOVA Bölüm

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8,149	2	4,075	3,938	,023
Within Groups	100,361	97	1,035		
Total	108,510	99			

Tablo 45'e bakıldığında hesaplanan α 0,023, normal α 0,05 değerinden küçük olduğu için kendini ifade etmekte, düşüncelerini karşındaki insana aktarmada güçlük çekme durumu bölüme göre anlamlı bir farklılık göstermektedir. Bu anlamlı farklılık bütün bölümler arasında mevcuttur yani İletişim Tasarımı ve Medya Bölümü ile Gazetecilik Bölümü arasında, İletişim tasarımı ve Medya Bölümü ile Halkla İlişkiler ve Reklamcılık Bölümü arasında, Gazetecilik Bölümü ile Halkla İlişkiler ve Reklamcılık Bölümü arasında bulunmaktadır.

Tablo 46. Siyasi Görüş Ayrılıkları Yaşadığım Kişilerle Sohbet Ederken Kendimi Sinirli Hissederim Anova Bölüm

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	19,638	2	9,819	5,535	,005
Within Groups	172,072	97	1,774		
Total	191,710	99			

Tablo 46'ya bakıldığında hesaplanan α 0,005, normal α 0,05 değerinden küçük olduğu için siyasi görüş ayrılıkları yaşadığı kişilerle sohbet ederken kendini sinirli hissetme durumu bölüme göre anlamlı bir farklılık göstermektedir. Bu anlamlı farklılık İletişim Tasarımı ve Medya Bölümü ile Gazetecilik Bölümü arasında ve ayrıca Halkla İlişkiler ve Reklamcılık Bölümü ile İletişim Tasarımı ve Medya Bölümü arasında bulunmaktadır.

Araştırmada yer alan diğer anket sorularında ise hesaplanan α değeri normal α 0,05 değerinden büyük olduğu için bölüme göre anlamlı bir farklılık bulunmamıştır.

Araştırmada yer alan alt problemlerden biri olan sınıf düzeyi ile ilgili yapılan Anova testinde her hangi bir anlamlı farklılığa rastlanılmamıştır. Başka bir ifadeyle anket sorularında

hesaplanan α değeri normal α 0,05 değerinden büyük olduğu için sınıf düzeyine göre anlamlı bir farklılık bulunmamıştır.

Kişilerarası iletişim becerisini ölçmeye yönelik yapılan bu çalışmada, katılımcılara yapılan anket sorularında olumlu ve olumsuz (italik olarak yazılmıştır) ifadelerin yer aldığı, toplamda 30 soru bulunmaktadır. Araştırmanın verilerini belirlemek amacıyla oluşturulan ifadelerden toplam 15 adet olumsuz ifade bu aşamadan sonra recode (yeniden kodlama) yapılarak ters kodlanmıştır (Sert, 2015, s.13).

Tablo 47. Kişilerarası İletişim Becerisi Düzeyi

	N	En düşük	En yüksek	Toplam	Ort.	Std. Sapma
1. Üzgün birini gördüğümde ona yardım etme isteği duyarım.	100	1	5	439	4,39	0,751
2. Anlattıkları şeyleri sıkıcı bulsam bile insanları can kulağıyla dinlerim.	100	1	5	360	3,60	1,082
3. Kişisel yaşantılarım sonucu edindiğim deneyimleri başkalarıyla paylaşıyorum.	100	1	5	431	4,31	0,692
4. Otoriter konumdaki birinin görüşlerine katılmıyorsam bu konuda ki kendi düşüncelerimi kibarca belirtirim.	100	1	5	420	4,20	0,888
5. İnsanları yaşam tarzlarıyla yargılamam.	100	1	5	428	4,28	0,854
6. Biriyle konuşurken kendimi onun yerine koyabilirim.	100	1	5	440	4,40	0,791
7. Bir insanın kullandığı ifadelere hiç katılmasam bile cümlesini kesmem.	100	1	5	381	3,81	1,152
8. İnsanlara kendimi kolaylıkla açarım.	100	1	5	302	3,02	1,303
9. Kırılacaklarını düşünsem de insanları kendilerinde gördüğüm hatalı davranışları konusunda uyarırım.	100	1	5	362	3,62	1,013
10. İnsanların etnik kökenleriyle ilgili olumsuz eleştiriler yapmam.	100	1	5	430	4,30	0,948
11. Sohbet ettiğim insanların ruh hallerini anlayabilirim.	100	1	5	433	4,33	0,682
12. Biriyle konuşurken anlatılanlara odaklanmakta zorlanmam.	100	1	5	402	4,02	0,932
13. Kendimi ifade etmekte düşüncelerimi karşımdaki insana aktarmakta güçlük çekmem.	100	1	5	393	3,93	1,047
14. İnsanların benimle ilgili ne düşündüğünü umursamam, doğru bildiğimi söylerim.	100	1	5	374	3,74	1,252
15. Farklı inançlardaki insanlara hoşgörüyü bakarım.	100	1	5	454	4,54	0,626
16. Çevremdeki insanların duygusallaşmasından rahatsız olurum.	100	1	5	332	3,32	1,154
17. Yeterince bilgili olmadığım konulardaki konuşmaları çabuk sonlandırırım.	100	1	5	273	2,73	1,196
18. Üzgün olduğum zamanlarda bunu kimseye belli etmem.	100	1	5	271	2,71	1,233
19. , siyasi görüş veya cinsel tercihler gibi hassas konulardaki fikirlerimi direk açıklamaktan sakınırım.	100	1	5	324	3,24	1,248

20. Farklı fikir ve düşüncelere sahip insanlara mesafeli davranırım.	100	1	5	386	3,86	1,137
21. Film izlerken ağlayan insanları hiç anlamamışumdur.	100	1	5	393	3,93	1,249
22. Birini dinlerken sonrasında kendi kuracağım cümleleri düşünürüm.	100	1	5	209	2,09	1,065
23. Sorunlarımı başkalarından yardım istemeden kendi başıma çözmeyi tercih ederim.	100	1	5	233	2,33	1,231
24. Fikrimi soran birine kıyafeti yakışmamışsa bunu direk söylemek istemem.	100	1	5	282	2,82	1,306
25. Yan dairemde farklı cinsel tercih olan insanların yaşamasından rahatsızlık duyarım.	100	1	5	360	3,60	1,295
26. Olaylara başkalarının açısından bakmayı çok zor buluyorum.	100	1	5	390	3,90	1,159
27. Beni ilgilendirmeyen konuları başka tarafa yönlendirmeye çalışırım.	100	1	5	330	3,30	1,159
28. Zayıf ya da eksik yönlerimi herkesten gizlerim.	100	1	5	301	3,01	1,330
29. Karşımdakilerle tartışmamak ya da onları rahatsız etmemek için düşüncelerimi saklarım.	100	1	5	345	3,45	1,306
30. Siyasi görüş ayrılıkları yaşadığım kişilerle sohbet ederken kendimi sinirli hissederim.	100	1	5	323	3,23	1,392
TOPLAM	100	2,80	4,43	360,03	3,60	1,08243

Tablo 47'ye bakıldığında kişilerarası iletişim becerilerini ölçmeye yönelik yapılan ankette katılımcıların cevapları en yüksek değer olan 5 üzerinden değerlendirilmiştir. Kişilerarası iletişim becerisi ile ilgili genel ortalamaya bakıldığında 5 üzerinden 3,60 olarak bulunmuştur. Bu sonuca göre araştırmaya katılan öğrencilerin kişilerarası iletişim becerileri genel olarak yüksektir. Kişilerarası iletişim becerisi ortalaması 5 üzerinden en düşük 2,80, en yüksek kişilerarası iletişim becerisi ortalaması ise 4,43 olarak bulunmuştur.

Kişilerarası iletişim becerisinin cinsiyete göre dağılımına bakmak için kişilerarası iletişim becerisi ölçeğiyle cinsiyet arasında T-testi yapılmıştır. Buna göre;

Tablo 48. Kişilerarası İletişim Becerisi Independent Samples Test Cinsiyet

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Kişilerarası İletişim Becerisi	Equal variances assumed	,461	,499	-3,149	98	,002	-,23042	,07318	-,37565	-,08519

Equal variances not assumed			- 3,114	86,582	,003	-,23042	,07400	-,37752	-,08332
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Tablo 48'e bakıldığında hesaplanan α 0,002, normal α 0,05'ten küçük olduğu için kişilerarası iletişim becerisi seviyesinde cinsiyete göre anlamlı bir farklılık bulunmuştur. Kadınların aritmetik ortalaması 3,69 olduğu için kişilerarası iletişim becerisi oranı kadınlarda erkeklere göre daha fazladır.

Kişilerarası iletişim becerisi ölçeğiyle alt problemler arasında Anova yapıldığında her hangi bir anlamlı farklılık bulunmamıştır. Yani hesaplanan α değeri normal α 0,05 değerinden büyük olduğu için kişilerarası iletişim ölçeği ile alt problem olan yaş, sınıf düzeyi ve bölüme göre anlamlı bir farklılık bulunmamıştır.

Kişilerarası iletişim becerisini ölçmeye yönelik yapılan bu çalışmada katılımcılara, kişilerarası iletişimin etkili bir şekilde gerçekleşebilmesini sağlayan; empati, dinleme, kendini açma, dürüstlük, hoşgörü unsurları anket içerisinde test edilmiştir. Her unsur için toplam 6 soru sorulmuştur. Her unsura ait soruların üçü olumlu üçü olumsuz (italik olarak yazılmıştır) şekilde hazırlanmıştır. Bu sorular sonucunda öğrencilerin, kişilerarası iletişim becerisini sağlayan unsurlar olan empati, dinleme, kendini açma, dürüstlük, hoşgörü seviyeleri en yüksek değer olan 5 üzerinden değerlendirilmiştir. Her unsorda bulunan üç olumsuz soru yani toplamda 15 olumsuz soru ifade recode (yeniden kodlama) yapılarak ters kodlanmıştır. Kişilerarası iletişim becerilerini ölçmeye yönelik unsurların soru tablosu ve değerleri şu şekildedir:

Tablo 49. Öğrencilerin Empati Düzeyi

Empati İle İlgili Anket Soruları	N	En düşük	En yüksek	Toplam	Ort.	Std. Sapma
Kişisel yaşantılarım sonucu edindiğim deneyimleri başkalarıyla paylaşıyorum.	100	1	5	431	4,31	0,692
Biriyle konuşurken kendimi onun yerine koyabilirim.	100	1	5	440	4,40	0,791
Sohbet ettiğim insanların ruh hallerini anlayabilirim.	100	1	5	433	4,33	0,682
<i>Çevremdeki insanların duygusallaşmasından rahatsız olurum.</i>	100	1	5	273	2,73	1,196
<i>Film izlerken ağlayan insanları hiç anlamamışımdır.</i>	100	1	5	393	3,93	1,249
<i>Olaylara başkalarının açısından bakmayı çok zor buluyorum.</i>	100	1	5	390	3,90	1,159
TOPLAM	100	2,33	5,00	404,50	4,045	0,9713

Tablo 49'a bakıldığında öğrencilerin empati seviyeleri 5 üzerinden en düşük 2,33, en yüksek ise 5,00 olarak bulunmuştur. Empati unsuru ile ilgili genel ortalamaya bakıldığında 5 üzerinden 4,045 bulunmuştur. Bu sonuca göre öğrencilerin empati seviyeleri yüksektir.

Tablo 50. Öğrencilerin Dinleme Düzeyi

Dinleme İle İlgili Anket Soruları	N	En düşük	En yüksek	Toplam	Ort.	Std. Sapma
Anlattıkları şeyleri sıkıcı bulsam bile insanları can kulağıyla dinlerim.	100	1	5	360	3,60	1,082

Bir insanın kullandığı ifadelerle hiç katılmasam bile cümlesini kesmem.	100	1	5	381	3,81	1,152
Biriyle konuşurken anlatılanlara odaklanmakta zorlanmam.	100	1	5	402	4,02	0,932
Yeterince bilgili olmadığım konulardaki konuşmaları çabuk sonlandırırım.	100	1	5	273	2,73	1,196
Birini dinlerken sonrasında kendi kuracağım cümleleri düşünürüm.	100	1	5	209	2,09	1,065
Beni ilgilendirmeyen konuları başka tarafa yönlendirmeye çalışırım.	100	1	5	330	3,30	1,159
TOPLAM	100	1,50	4,50	325,83	3,258	0,48743

Tablo 50'ye bakıldığında öğrencilerin dinleme seviyeleri 5 üzerinden en düşük 1,50, en yüksek ise 4,50 olarak bulunmuştur. Dinleme unsuru ile ilgili genel ortalamaya bakıldığında 5 üzerinden 3,258 bulunmuştur. Bu sonuca göre öğrencilerin dinleme seviyeleri yüksektir.

Tablo 51. Öğrencilerin Kendini Açma Düzeyi

Kendini Açma İle İlgili Anket Soruları	N	En düşük	En yüksek	Toplam	Ort.	Std. Sapma
Kişisel yaşantılarım sonucu edindiğim deneyimleri başkalarıyla paylaşıyorum.	100	1	5	431	4,31	0,692
İnsanlara kendimi kolaylıkla açarım.	100	1	5	302	3,02	1,303
Kendimi ifade etmekte düşüncelerimi karşımdaki insana aktarmakta güçlük çekmem.	100	1	5	393	3,93	1,047
Üzgün olduğum zamanlarda bunu kimseye belli etmem.	100	1	5	271	2,71	1,233
Sorunlarımı başkalarından yardım istemeden kendi başıma çözmeyi tercih ederim.	100	1	5	233	2,33	1,231
Zayıf ya da eksik yönlerimi herkesten gizlerim.	100	1	5	301	3,01	1,330
TOPLAM	100	1,50	4,50	321,83	3,218	0,59161

Tablo 51'e bakıldığında öğrencilerin kendini açma seviyeleri 5 üzerinden en düşük 1,50, en yüksek ise 4,50 olarak bulunmuştur. Kendini açma unsuru ile ilgili genel ortalamaya bakıldığında 5 üzerinden 3,218 bulunmuştur. Bu sonuca göre öğrencilerin kendini açma seviyeleri yüksektir.

Tablo 52. Öğrencilerin Dürüstlük Düzeyi

Dürüstlük İle İlgili Anket Soruları	N	En düşük	En yüksek	Toplam	Ort.	Std. Sapma
Otoriter konumdaki birinin görüşlerine katılmıyorsam bu konuda ki kendi düşüncelerimi kibarca belirtirim.	100	1	5	420	4,20	0,888
Kırılacaklarını düşünsem de insanları kendilerinde gördüğüm hatalı davranışları konusunda uyarırım.	100	1	5	362	3,62	1,013
İnsanların benimle ilgili ne düşündüğünü umursamam, doğru bildiğimi söylerim.	100	1	5	374	3,74	1,252
Din, siyasi görüş veya cinsel tercihler gibi hassas konulardaki fikirlerimi direk açıklamaktan sakınıyorum.	100	1	5	324	3,24	1,248
Fikrimi soran birine kıyafeti yakışmamışsa bunu direk söylemek istemem.	100	1	5	282	2,82	1,306
Karşımdakilerle tartışmamak ya da onları rahatsız etmemek için düşüncelerimi saklarım.	100	1	5	345	3,45	1,306

TOPLAM	100	2,00	5,00	351,17	3,51	0,68052
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Tablo 52'ye bakıldığında öğrencilerin dürüstlük seviyeleri 5 üzerinden en düşük 2,00, en yüksek ise 5,00 olarak bulunmuştur. Dürüstlük unsuru ile ilgili genel ortalamaya bakıldığında 5 üzerinden 3,51 bulunmuştur. Bu sonuca göre öğrencilerin dürüstlük seviyeleri yüksektir.

Tablo 53. Öğrencilerin Hoşgörü Düzeyi

Hoşgörü İle İlgili Anket Soruları	N	En düşük	En yüksek	Toplam	Ort.	Std. Sapma
İnsanları yaşam tarzlarıyla yargılamam.	100	1	5	428	4,28	0,854
İnsanların etnik kökenleriyle ilgili olumsuz eleştiriler yapmam.	100	1	5	430	4,30	0,948
Farklı inançlardaki insanlara hoşgörüyle bakarım.	100	1	5	454	4,54	0,626
Farklı fikir ve düşüncelere sahip insanlara mesafeli davranırım.	100	1	5	386	3,86	1,137
Yan dairemde farklı cinsel tercih olan insanların yaşamasından rahatsızlık duyarım.	100	1	5	360	3,60	1,295
Siyasi görüş ayrılıkları yaşadığım kişilerle sohbet ederken kendimi sinirli hissederim.	100	1	5	323	3,23	1,392
TOPLAM	100	2,50	5,00	396,83	3,96	0,63727

Tablo 53'e bakıldığında öğrencilerin hoşgörü seviyeleri 5 üzerinden en düşük 2,50, en yüksek ise 5,00 olarak bulunmuştur. Hoşgörü unsuru ile ilgili genel ortalamaya bakıldığında 5 üzerinden 3,96 bulunmuştur. Bu sonuca göre öğrencilerin hoşgörü seviyeleri yüksektir.

Kişilerarası iletişimin önemli unsurları olan empati, dinleme, kendini açma, dürüstlük, hoşgörü için Tablo 49, 50, 51, 52 ve 53'e bakıldığında bu unsurlar arası bir kıyas yapacak olursak, 5 üzerinden en yüksek ortalama 4,045 ile empati unsuruna aittir. Yine aynı tablolara bakacak olursak en düşük ortalama 3,21 ile kendini açma unsuruna aittir. Genel olarak bütün unsurlar ve ölçeğin tamamının ortalaması 2.50'den yüksek olduğu için Sakarya Üniversitesi İletişim Fakültesi öğrencilerinin kişilerarası iletişim becerileri yüksektir.

Kişilerarası iletişim seviyesinin önemli unsurları olan empati, dinleme, kendini açma, dürüstlük, hoşgörü unsurlarında alt problemlere göre anlamlı bir farklılık olup olmadığını ortaya çıkarmak için T-testi ile karşılaştırma yapılmıştır.

Tablo 54. Independent Samples Test Cinsiyete Göre Empati

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal Empati variances assumed	9,059	,003	-3,197	98	,002	-,35775	,11190	-,57981	-,13568

Equal variances not assumed			- 3,023	68,495	,004	-,35775	,11834	-,59385	-,12164
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Tablo 54'e bakıldığında hesaplanan α 0,002 normal α 0,05'ten küçük olduğu için empati unsurunda cinsiyete göre anlamlı bir farklılık bulunmuştur. Kadınların aritmetik ortalaması 4,198 olduğu için kadınların empati düzeyi erkeklere göre daha yüksektir.

Tablo 55. Independent Samples Test Cinsiyete Göre Dinleme

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	,045	,832	- 2,009	98	,047	-,19482	,09698	-,38727	-,00237
Dinleme Equal variances not assumed			- 1,991	87,361	,050	-,19482	,09787	-,38933	-,00031

Tablo 55'e bakıldığında hesaplanan α 0,047 normal α 0,05'ten küçük olduğu için dinleme unsurunda cinsiyete göre anlamlı bir farklılık bulunmuştur. Kadınların aritmetik ortalaması 3,34 olduğu için kadınların dinleme düzeyi erkeklere göre daha yüksektir.

Empati ve Dinleme unsurları ile cinsiyet arasında anlamlı bir farklılık gözlenirken, kendini açma, dürüstlük ve hoşgörü unsurları ile cinsiyet arasında anlamlı bir farklılık bulunmamıştır.

SONUÇ VE ÖNERİLER

Bir toplumun toplum olabilmesi için iletişim en önemli unsurdur. Toplum içerisindeki insanlar karşılıklı iletişimle bir arada olur ve varlıklarını sürdürürler. Karşılıklı iletişime yani çift yönlü olan iletişime kişilerarası iletişim denmektedir ve insanlık için vazgeçilmez olan bir iletişim türüdür. Kişilerarası iletişim kendi içinde çeşitli kollara ayrılır bunlar sözlü ve sözsüz iletişimdir. Kişilerarası iletişimde söz ne kadar önemliyse jest ve mimiklerde o derece önemlidir. Kişilerarası iletişimin doğru ve etkili bir şekilde gerçekleşebilmesi için belli başlı unsurları içerisinde barındırması gerekmektedir. Bu çalışmada bu unsurlardan empati, dinleme, kendini açma, dürüstlük ve hoşgörü üzerinde durulmuş ve araştırma soruları bu kapsamda oluşturulmuştur. Kişilerarası iletişim becerisinin yüksek olabilmesi için bu unsurların bir kişide fazlasıyla yetkin bir şekilde bulunması gerekmektedir.

Araştırmaya katılan katılımcıların cevapları en yüksek değer olan 5 üzerinden değerlendirilmiştir ve kişilerarası iletişim becerisi ile ilgili genel ortalamaya bakıldığında 5 üzerinden 3,60 olarak bulunmuştur. Bu sonuca göre araştırmaya katılan öğrencilerin kişilerarası iletişim becerileri genel olarak yüksektir. Kişilerarası iletişim becerisi ortalaması 5

üzerinden en düşük 2,80, en yüksek kişilerarası iletişim becerisi ortalaması ise 4,43 olarak bulunmuştur.

Kişilerarası iletişimin unsurları olan empati, dinleme, kendini açma, dürüstlük ve hoşgörü seviyesine bakıldığında ise en yüksek seviye empatide en düşük seviye ise kendini açma unsurunda bulunmaktadır. Genel olarak bu unsurların hepsi yüksek çıksa da öğrenciler kendini açma yani kendileri ile ilgili, iç dünyaları ile ilgili iletişimi diğer unsurlara oranla biraz daha düşüktür. Kadın katılımcıların empati düzeyi ve dinleme düzeyi erkeklere oranla daha yüksektir.

Araştırmanın bulgularına göre, Sakarya Üniversitesi İletişim Fakültesi öğrencilerinin kişilerarası iletişim becerileri düzeyi 5 üzerinden 3,60 oranında bulunmuştur ve bu sonuca göre Sakarya Üniversitesi İletişim Fakültesi öğrencilerinin kişilerarası iletişim becerileri genel olarak yüksektir. Ayrıca kadın katılımcıların kişilerarası iletişim becerileri erkek katılımcılara oranla daha yüksektir.

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KİTLE KÜLTÜRÜ, POPÜLER KÜLTÜR VE HALK KÜLTÜRÜ EKSENİNDE SOSYAL ETKİLEŞİM

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Kitle kavramı 1900'lerde ön plana çıkan bir kavram olarak dönemin sosyolojik gerçekliği içinde önemli bir yer tutmuştur. Özellikle Batı'da modernite sonrasında kitle kavramı daha fazla ön plana çıkmış toplumsal yapının inşasında ve her tür değişimde kitle etkisinin olduğu ortaya konulmuştur. Kitle kendine ait kültürel formu içinde toplumsal gerçekliği anlama noktasında önemli bir yere sahiptir. Bu kültür bağlamında kitle kültürü; sanat, estetik, din, felsefe ve sosyoloji alanlarında daha önceki çağların düşünce sistemlerini arkada bırakmış daha büyük çaptaki paradigmalara, ideolojilere, toplumsal hareketlere açık hale gelen bir yapı ortaya koymuştur. Öte yandan popüler kültür ise özellikle 20. yüzyılda etkisini gösteren ve toplumsal modernleşmenin yan etkileri arasında yer alan bir kavram olarak üzerinde oldukça tartışılmış ve kapitalist ekonomi modeli içinde besleyici unsur olarak değerlendirilmiştir. Halk kültürü ise Türkoğlu'nun da belirttiği gibi bir nitelikçerçevesi oluşturmaktadır. Bu nitelik içinde gelenek değerleri dahilinde nitelikli unsurlar barındıran ve o halka ait değerleri yansıtabilen bir yapıya sahiptir. Bu bağlamda, kitle kültürü ise daha ziyade nicelik-yığın kavramıyla belirlenmektedir. Çalışmada kitle-popüler ve halk kültürü özellikleri, paralellik gösteren ve ayrışan unsurlar ile bu kültürler ekseninde sosyal etkileşimin de geçirdiği farklılık ortaya konmuştur. Buna göre halk kültürü ekseninde sosyal etkileşim değer temelli unsurlar çerçevesinde iken popüler kültür ve kitle kültürü ekseninde sosyal etkileşim ise daha çok kapitalist ekonomik model inşası ile ortaklık gösteren bir formdadır.

KNOWLEDGE AND SKILLS TRANSFER FOR SUSTAINABLE RURAL TOURISM IN THE BALTIC SEA COUNTRIES

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ABSTRACT

Due to increasing global competition, tourist visits to the Baltic Sea countries from neighbouring European countries are declining, therefore sustainable and well educated clusters with skills, knowledge and understanding how to enter new challenging markets such as Japan are required. Although Japanese tourist market is attractive, specific knowledge and joint strategy to increase Japanese tourist visits are necessary. Rural tourism has a huge potential owing to natural and heritage culture potential, which could be an absolutely new and exciting experience for Japanese tourists. However, most rural tourism companies are small and lack specific knowledge and market intelligence how to deal with cultural differences. In 2016, a new ambitious INTERREG Central Baltic project CAITO “Meta cluster for attracting Japanese tourism market” was started with active participation of three countries of the Baltic Sea region. The overall objective of this project is to promote and support rural tourism companies to enter Japanese tourism market by strengthening their capacity and cooperation in the three Baltic Sea countries (Latvia, Estonia, and Finland). The aim of the current research is to present the data obtained in the initial phase of the project on the specifics and latest trends regarding Japanese traveller attraction to the Baltic Sea countries in particular focusing on Latvia. The specific research tasks are: 1) to characterize Japanese tourists’ interest areas in the Baltic Sea region countries; 2) to analyse the experience of Latvian rural tourism companies in dealing with Japanese tourists; 3) to develop proposals for knowledge and skills transfer to improve rural tourism products and their marketing communication according to Japanese travellers’ expectations. The research employed monographic, statistical analysis, descriptive and sociological research (questionnaire) methods.

INTRODUCTION

A tourism region is a geographical region that has been designated by a governmental organization or tourism bureau as having common cultural or environmental characteristics. These regions are often named after a geographical, former, or current administrative region or may have a name created for tourism purposes. The names often evoke certain positive qualities of the area and suggest a coherent tourism experience to visitors. Countries, states, provinces, and other administrative regions are often carved up into tourism regions to facilitate attracting visitors (Tourism Region, 2017).

Depending on the context, the Baltic region might stand for different various groups of countries:

- the countries that have shorelines along the Baltic Sea: Denmark, Estonia, Latvia, Finland, Germany, Lithuania, Poland, Russia, and Sweden;
- the group of countries presently referred to by the shorthand Baltic states: Estonia, Latvia, and Lithuania;
- Estonia, Latvia, Lithuania and Kaliningrad Oblast of Russia, exclaved from the remainder of Russia;
- historic East Prussia and the historical lands of Livonia, Courland and Estonia (Swedish Estonia and Russian Estonia);
- the former Baltic governorates of Imperial Russia: Today's Estonia and Latvia (excluding parts of modern Eastern Latvia that were part of Vitebsk Governorate);
- the countries on the historical British trade route through the Baltic Sea, i.e. including the Scandinavian Peninsula (Sweden and Norway);
- the Council of the Baltic Sea States, comprised by the countries with shorelines along the Baltic Sea, in addition to Norway, Iceland and the rest of European Union;
- the islands of the Euroregion B7 Baltic Islands Network, which includes the islands and archipelagos Åland (autonomous), Bornholm (Denmark), Gotland (Sweden), Hiiumaa (Estonia), Öland (Sweden), Rügen (Germany), and Saaremaa (Estonia) (The Baltic Sea Region..., 2002).

Today, the tourism industry in the Baltic Sea region contributes significantly to the economies of the countries in the region. With about 73 million international arrivals in the region – equivalent to 7 per cent of all international arrivals – the tourism industry generates growth, wealth and jobs to more than 1.4 million people (Tourism in the Baltic..., s.a.). However, the tourism industry in the Baltic Sea region, especially rural tourism that complies with sustainable development principles need a stronger voice at both regional and European level addressing the opportunities and challenges of the industry. Politicians often underestimate the importance and impact of tourism on the economy. Raising awareness of rural tourism industry would increase the possibilities for elimination of regional disparities and generation of jobs in rural areas, which is particularly serious problem in Latvia and

Estonia.

The Baltic Sea Action Plan (BSAP) is an ambitious programme to restore the good ecological status of the Baltic marine environment by 2021. The future vision of the Baltic Sea countries is focused on healthy Baltic Sea environment, with diverse biological components functioning in balance, resulting in good environmental/ecological status and supporting a wide range of sustainable human economic and social activities. The Plan, adopted by all the coastal states and the EU in 2007, provides a concrete basis for The Baltic Marine Environment Protection Commission (HELCOM) work. It incorporates the latest scientific knowledge and innovative management approaches into strategic policy implementation, and stimulates goal-oriented multilateral cooperation around the Baltic Sea region. A highlight of the elaboration of the HELCOM Baltic Sea Action Plan has been the active participation of all major stakeholder groups in the region. Such participation ensures that the plan is truly relevant and can be effectively implemented in practice. The choices that we make reflect the choices of society as a whole. For this reason, the common vision of the healthy Baltic Sea has been defined together with all participating stakeholders – from governments, through industry and NGOs, right down to individual citizens, including older and younger generations, and organisations in both the private and the public sectors. Today, many stakeholders are engaged in implementation of the Action Plan, and the approaches and principles of the BSAP have for instance been utilized when developing the EU Strategy for the Baltic Sea Region (Interreg Baltic Sea..., 2014).

In 2016, a new ambitious INTERREG Central Baltic project CAITO “Meta cluster for attracting Japanese tourism market” was started with active participation of three countries of the Baltic Sea region. The overall objective of this project is to promote and support rural tourism companies to enter Japanese tourism market by strengthening their capacity and cooperation in the three Baltic Sea countries (Latvia, Estonia, and Finland). The project was funded by the Interreg Central Baltic programme and involves 7 partners from Finland, Estonia and Latvia, the lead partner being the Estonian University of Life Sciences.

The *aim* of the current research is to present the data obtained in the initial phase of the project on the specifics and latest trends regarding Japanese traveller attraction to the Baltic Sea countries in particular focusing on Latvia. The specific *research tasks* are: 1) to characterize Japanese tourists’ interest areas in the Baltic Sea region countries; 2) to analyse the experience of Latvian rural tourism companies in dealing with Japanese tourists; 3) to develop proposals for future improvement of rural tourism products and their marketing communication according to Japanese travellers’ expectations. The research employed monographic, statistical analysis, descriptive and sociological research (questionnaire) methods.

INCREASING INTEREST OF JAPANESE TOURISTS IN THE BALTIC SEA COUNTRIES AND THE SPECIFICS OF JAPANESE TRAVELLERS

Lately, Japanese tourists’ activity in travelling around the Baltic Sea region countries, including Latvia, Estonia and Finland, is increasing. Compared to Central Europe and Western Europe, the Baltic Sea region is comparatively safer and stands out with diverse tourism opportunities. Safety, including low natural disaster risk, alongside with beautiful unspoiled nature landscapes, rich cultural heritage and high quality accommodation services and direct flights are highly important factors for Japanese tourists while taking decision of tourism destinations. In 2015, Latvia was visited by 21 575 tourists from Japan, which is 39% more compared with 2014 (Tourism Statistics, 2016). Estonia has attracted more Japanese tourists 2015 – 96 044 (21% increase compared with 2014) (Statistics Estonia, 2017). This could be explained by Estonia’s geographic location and available infrastructure – Estonia is closer to Finland, which is the main tourism destination in the Baltic Sea region. Direct flights from the largest Japanese cities are organized only to Helsinki and are provided by Finnair. Thus, Finland is the country that can be proud of comparatively large number of Japanese tourists – 5% of the total number of tourists (454 000 tourists in 2015). In Latvia and Estonia, Japanese tourists constitute a comparatively small proportion of all inbound tourists (1.5-2%). Due to long distances and high costs, 67% of Japanese tourists usually plan to visit more than just one country. Typical travel route for a Japanese tourist in the Baltic Sea Region starts in Helsinki and can take two possible directions – to the south (Estonia, Latvia and Lithuania) or to the north (Sweden and Norway). Japanese travellers are mainly interested in the culture of the Baltic countries, experience sauna or bath-house or SPA treatments as well as visit islands with their unique flora and sauna. Moreover, Japanese tourists are interested in rural tourism – they want to enjoy good rest, walking and nature observing. During the last years, the tourists’ wish to participate in different workshops is increasing, e.g. making themselves some crafts or cooking culinary delights. The tenth of the Japanese tourists with pleasure participate in such traditional activities in the Baltics as mushroom picking, collecting of seasonal berries and distilling birch tree juice. Tourists from Japan usually belong to 60+ age group and travel together with family or tourist group; individual way of travelling is not typical for Japanese tourists. Language barrier is an aspect that most of all upsets tourists, thus travel is usually arranged in groups with the guide that speaks Japanese language. Most often travels are organized in summer months or beginning of autumn (August and September). The total length of the travel most often is 11-14 days with spending 1-2 days in each country (Suvanto et. al, 2017).

LATVIAN RURAL TOURISM COMPANIES' EXPERIENCE WITH JAPANESE TOURISTS

In autumn 2016, Latvian Country Association "Lauku celotajs" conducted in-depth survey with 35 Latvian rural entrepreneurs who had received Japanese tourists. The survey results revealed that the tourism brochures and maps that are usually available in English, German and Russian languages and are widely used by other European tourists are not so popular and reliable information sources among Japanese tourists. Also tourism agencies and direct reservation systems most probably due to language barrier do not serve as a meaningful source of information. This means that webpages, Facebook pages and online reservation systems of rural enterprises should be informative, fresh and in many languages. Language is often a problem for Japanese tourists (Konu, 2015). The majority of respondents claimed that they had received information about the particular rural tourism enterprise in other source of information, which most probably has been in Japanese language and distributed by larger tourism information centres outside Latvia.

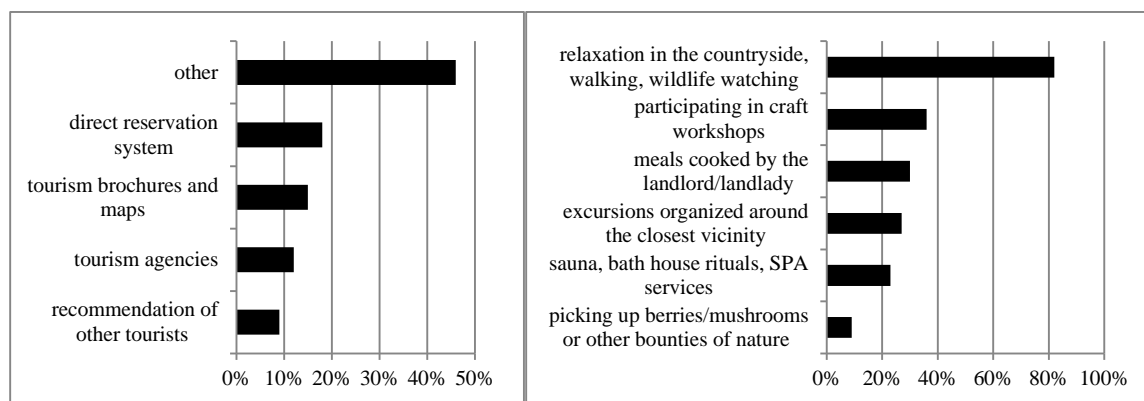


Fig. 1. (a) Japanese tourists' information sources about rural tourism enterprises in Latvia, %; (b) Most popular activities of Japanese tourists during rural tourism visits in Latvia, %

Source: authors' design based on Latvian Country Association "Lauku celotajs" data, 2016

The most popular activities in which Japanese tourists have participated include relaxation in the countryside, walking, wildlife watching, in which more than 80% of travellers participated. This gives evidence that rural tourism, which is an environmentally friendly form of tourism, is attractive for Japanese tourists who highly appreciate opportunity to enjoy harmony with nature. It is generally known that Japanese mind is flexible and absorbent, which is characteristic of Japanese culture. Japanese like to borrow some ideas from other cultures, transforming and adapting them for Japanese needs, without losing their cultural heritage. Since Sinti are very responsive, they are trying to establish harmony in all aspects of their life (Ceple-Alkadi, 2010). In addition to nature tourism, the second interesting part of the rural market is wellbeing tourism. This is a new opportunity for rural enterprises. It is an increasing trend, especially among the modern humanists, who avoid materialism, especially women (Konu, 2015). Rural wellbeing, according to Hjalager (Hjalager et. a, 2015), includes holistic wellbeing, unselfishness and responsibility, integration with local nature and its' resources, balance between work and leisure time, rural tourism as a medicine for physical and mental health, versatile wellness, climate change, escape from digital life, simplicity, local products and by-products.

NECESSITY AND SCOPE FOR KNOWLEDGE AND SKILLS TRANSFER FOR ENHANCING SUSTAINABLE RURAL TOURISM

Toady meaningful and target oriented sustainable tourism training programmes are necessary both to educate and create awareness among stakeholders: rural entrepreneurs and their staff, local communities, local municipalities and policy makers on how to implement sustainable tourism strategies and the importance of such development. Thus, the authors of the paper want to emphasize that the main focus in the above mentioned professional knowledge and skills transfer should not be put solely and directly on those rural entrepreneurs who would further deal with Japanese tourists segment. It is important that up-to-date knowledge and skills transfer in the form of compact and target oriented training programmes should involve much wider public at all levels, especially during the initial period of intensive promotion of Latvian, Estonian and Finnish rural tourism products.

According to Vukovic, Subic and Cvijanovic training and education for rural tourism developers should be carried out at several levels.

1. *Training for trainers* – training is necessary for individuals involved in leadership positions at local level (i.e.

administration, product development, marketing). With the appropriate knowledge and skills, these individuals in turn are well positioned to train other individuals at an operational level. In order to ensure professional and high quality training, the appropriate methodology for rural tourism training material, including web-based materials, are highly important. Moreover, these materials should be professionally prepared (translated, illustrated) so that they could be easily used in all the three countries – Latvia, Estonia and Finland.

2. *Training for rural tourism providers* – rural tourism product providers, or operators, require training and education in a range of subjects:

- customer care;
- language skills;
- product standards;
- understanding of partners' needs;
- product knowledge;
- basic marketing;
- e-commerce and digital marketing.

Moreover, each of the three countries could have some differences, e.g. in digital marketing specifics, which should be taken into account.

3. *Training for officials* – many officials working at government or municipality level are unaware of the potential benefits of tourism. Training and educational programmes are also necessary for this target group. Hereby, the authors consider that in Latvia, the representatives of the Ministry of Economics, Ministry of Environmental Protection and Regional Development and Ministry of Agriculture should also be regularly informed and involved in project activities, e.g. invited to disseminate the information of project activities and participation in informative seminars.

Baum (1995) and Vukovic, Arsic, Cvijanovic (2010) in their research on the role of knowledge in tourism have emphasized the importance of the following competencies that in authors' opinion need to specially be addressed by the all level tourism managers in the Baltic Sea region countries to attract the new and promising Japanese tourists segment:

- to manage with a problems of guests (tourists), with care and sensitivity;
- to be able to communicate with them in written and oral form;
- to achieve a positive working atmosphere among the staff while accepting Japanese guests;
- to obtain professionalization in every aspect of Japanese tourist business;
- to achieve the positive attitude of Japanese consumers as well as positive relationships with them.

In scope of INTERREG Central Baltic project CAITO "Meta cluster for attracting Japanese tourism market" all these aspects need to be included in a special hand-book devoted to specifics of Japanese tourism market with recommendations for improvement of sustainable tourism products for the rural entrepreneurs in Latvia, Estonia and Finland.

CONCLUSIONS AND IMPLICATIONS FOR FURTHER ACTIVITIES

The preliminary research results give evidence that tourism enterprises that are targeting Japanese tourists in the Baltic Sea region have to revise their current marketing communication channels and using of same forms of communication as with other foreign tourists and relying on the experience of tourism agencies. Moreover, the quality, cleanness and availability of clearly understandable traffic signs and organization of public transport have to be revised as Japanese tourists might be discouraged due to language barriers.

The data obtained in Latvia, Estonia and Finland during the initial phase of the INTERREG Central Baltic project CAITO "Meta cluster for attracting Japanese tourism market" show that enhancing of cooperation among Finnish, Estonian and Latvian rural tourism agencies is of high importance in the interests of all the three Baltic Sea region countries both in terms of financial investments in rural tourism industry development and in information exchange. Currently, Finland and Estonia already have started a joint approach to promotion of their rural tourism services. Enhancing of cooperation with Latvian Country Association and network of rural enterprises could enable Japanese tourists to enjoy even safer, more meaningful and diverse travel experience in the Baltics.

The next objectives of the CAITO project should be focused on conducting specially tailored training courses for rural tourism companies to better meet the needs of Japanese tourists. For this reason, firstly, it is necessary to organize a special training for trainers, and, secondly, to elaborate a special hand-book devoted to specifics of Japanese tourism market and recommendations for improvement of sustainable tourism products should be elaborated for Latvian, Estonian and Finnish users: local development agencies and policy makers, tourism associations and service companies in rural areas; continuous training professionals (teachers and directives) and people in charge of development policies in local and regional tourism.

Moreover, it would be advisable that each rural tourism industry organization and each individual enterprise would popularize Latvia, Estonia and Finland as a joint destination, since the success of the relatively smaller and comparatively with other European regions less attractive Baltic Sea region lies in synergy of its countries' tourism potential and provides a sustainable win-win solution in the conditions of global tourism competition.

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Knowledge and specialism in curricula of professional and sectoral fields of practices in South Africa: a case of universities of technology

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Abstracts

Although knowledge differentiation, boundaries and specialism in curricula is a typical feature distinguishing educational institutions in terms of missions, purposes and specialism, the extent to which this feature shapes curriculum practice of professional and sectoral fields is generally underdeveloped. This article examines knowledge differentiation and specialisation in curricula of Engineering, Radiography, Biomedical Technology and Hospitality fields of practice of universities of technology (UoTs) in South Africa. It is argued that apprehensions about relevance and responsiveness of curricula of professional and sectoral to the emerging new markets and products could be attributed to undue polarisation of knowledge in curricula of different institutions on the one hand, and over-homogenisation of applied knowledge of professional and sectoral fields. Conversely, it is argued that curricula design practices of these fields are heterogeneous providing graduates with specialised distinct disciplinary knowledge of different professional and sectoral fields of practices, and exposing graduates to knowledge for specific occupations in collaboration with professional bodies.

Keywords: knowledge, differentiation; specialism; professional and sectoral; fields of practice

KNOWLEDGE MANAGEMENT MODEL TO DEVELOP CREATIVE THINKING FOR HIGHER EDUCATION WITH PROJECT BASED LEARNING

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ABSTRACT

Three purposes of this research are 1) to design and develop knowledge management model to develop creative thinking for higher education with project base learning 2) to compare creative thinking between students studying in the traditional way and students studying by using the model and 3) to study the correlation between compare learning achievement and creative thinking. The results are revealed as follows. Firstly, the model consists of 5 components that are Thinking Project, Resource, Seeking tools, Knowledge Sharing, and Knowledge Testing which are designed based on academic theories. Secondly, in the experiment at Nakhon Ratchasima Rajabhat University, the average scores of learning achievement and creative thinking derived from students studying by using the model are higher than the average scores derived from students studying in the conventional way and higher than 70% in a good level. Moreover, the result shows that there is a positive correlation between creative thinking and learning achievement. Thirdly, the results derived from the experiments at Wongchavartikul University and Nakhon Ratchasima Rajabhat University are correspondent. This confirms the integrity of the model.

Key words: Creative thinking, higher education, project based learning

INTRODUCTION

Educational institutions need a system of management by using Knowledge Management : KM as a tool to accomplish 4 sides that are 1) working, 2) learners developing, organization developing as organization of learning and 4) community groups. This system has 3 processes that are 1) Knowledge Acquisition, 2) Knowledge Sharing and 3) Knowledge Utilization (Butcher, G., Crispen, P., Espinal, D., & Griffin, C., 2001). Thus Knowledge management will be achieved effectively, it requires both people and technology (Orr, E. & M. dan Persson, 2003). To prepare people to step into the knowledge-based society, people must have creative thinking and thinking skills to apply knowledge to benefit. One theories that can develop these human features are KM and constructivism supporting the students in knowledge construction rather than the transmission of knowledge (Spiro, R., Feltovich, P., Jacobson, Michael J., & Coulson, Richard L., 1995) (Amornsinlaphachai, P., 2015) (Deejring, K., 2015). In addition, the design of learning to help foster creativity needs media attribution and media symbol system that assist learners to understand the conceptual model of knowledge domain. Universities in Thailand need to adapt in order to step into the knowledge-based society by building thinking skills and creativity to enable the students to have an approach to resolve the problems faced by many different situations. Learning that provides essential skills for living in society and concentrates on the learners, complies with project- based learning : PBL (John Larmer & John R. Mergendoller, 2010). The PBL is a learning activity that allows students to study and take action on their own according to their aptitude and interest by the scientific process or other processes that can be used to answer problems while teachers will provide suggestion closely. This learning process help students to build creative thinking.

As the reasons above, Researchers realized the importance and the need to design and develop a model of knowledge management to develop creative thinking for higher education with project base learning based on several educational theories such as constructivism (Vygotsky, L. S., 1962), knowledge management (Alavi, M., 1997), creative thinking (Guilford, J.P., 1950), project-based learning , CLE (Jonassen, D. H., 1999), Bloom taxonomy (Bloom, B. A., 1956), Mental model (Frederiksen, J., White, B., et al., 1999), Media Symbol System (Salomon, G., 1979) and other related researches which can be applied into practice in order to develop ways of learning.

THE PURPOSES OF RESEARCH

Three main purposes of this research are as follows.

1. To design and develop knowledge management model to develop creative thinking for higher education with project base learning
2. To compare creative thinking between students studying in the traditional way and students studying by using the model
3. To study the correlation between learning achievement and creative thinking.

METHODOLOGY

Target group

The target groups used in the research are as follows:

1. The first group of 30 second year students in computer education field at Nakhon Ratchasima Rajabhat University studying the knowledge management model.
2. The second group of 30 second year students in computer education field at Nakhon Ratchasima Rajabhat University studying in the typical way.
3. The 19 third year students studying in education technology and computer education field at Wongchavaritkul University used to insist the integrity of the model.

SCOPE of content

The content used in this research is a part of educational system analysis and design subject at Nakhonratchasima Rajabhat University, Thailand. The content of this subject corresponds to educational system analysis and design subject at Wongchavaritkul University, Thailand.

RESEARCH INSTRUMENTS

The instruments used in the study and data collection include the followings:

1. The Knowledge management model to develop creative thinking for higher education with project base learning.
2. The assessment forms to confirm quality and usability of the model.
3. The learning achievement tests for typical learning and learning with the model.
4. The creative thinking tests for typical learning and learning with the model.

Data collection and analysis

In the research, we develop the knowledge management model to develop creative thinking for higher education with project base learning is developed and then compare creative thinking between students studying in the traditional way and students studying by using the model and study the correlation between compare learning achievement and creative thinking. The data are collected and analyzed by the researcher as the following details.

1. The knowledge management model is evaluated by the experts. Three facets of assessment are (1) learning content, (2) design based on theories and principles and (3) media and technology. The result is analyzed by summarizing interpretation.
2. The learning achievement and creative thinking score are collected and analyzed by using mean (\bar{x}) and percentage (%).
3. The correlation between compare learning achievement and creative thinking is analyzed by using Correlation coefficient of Pearson.

RESULTS

The research results can be summarized as follows:

1. The results from developing the knowledge management model

The knowledge management model designed in this research consists of 5 components that are Thinking Project, Resource, Seeking tools, Knowledge Sharing, and Knowledge Testing as shown in the designing framework in Figure 1. An example of developing the model is shown in Figure 2.

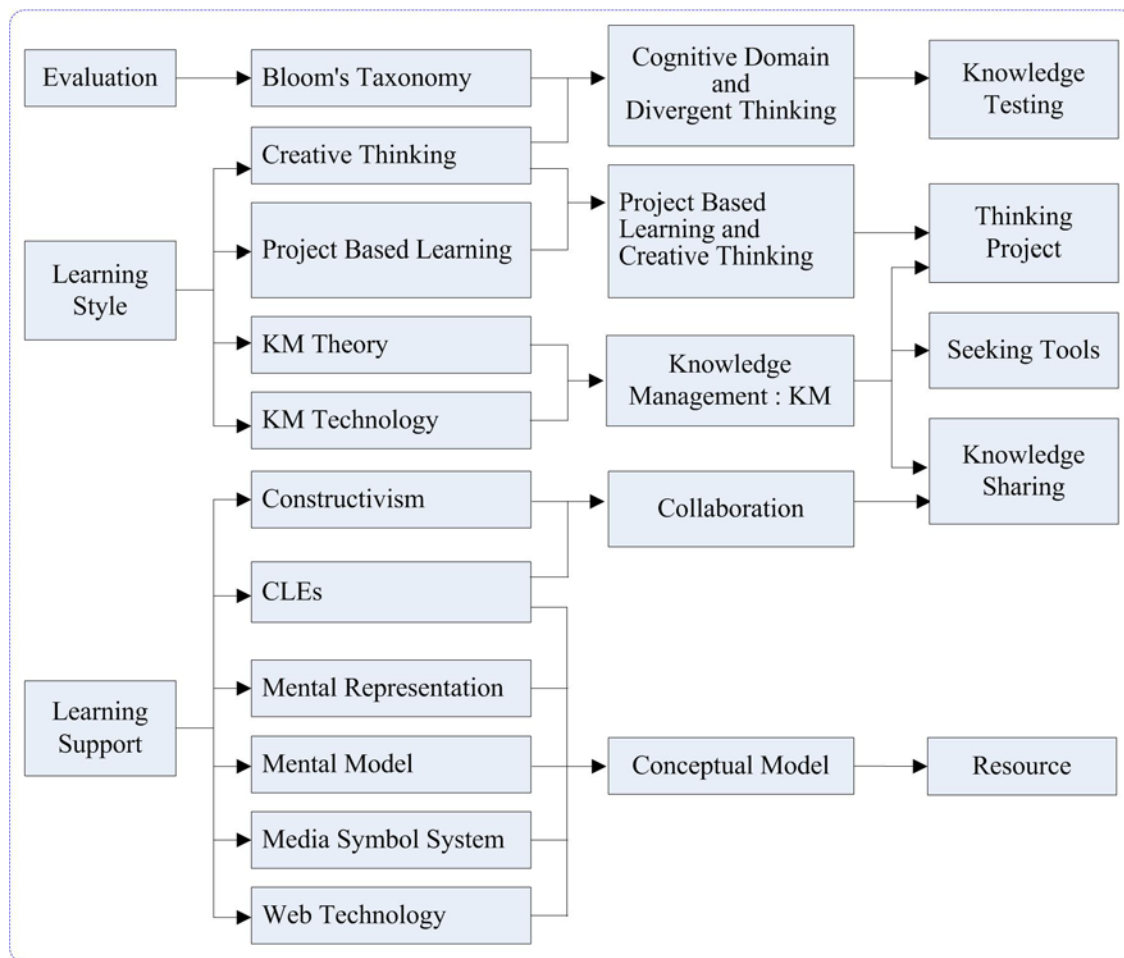


Figure 1. The framework of a design of the knowledge management model

The results derived from four experts to evaluate content, media and design are as follows.

The content of the model is accurate, right up to date timely. Design and media can encourage students to construct knowledge and enhance learners' creative thinking by using project base learning. This is because the model has been designed based on a theoretical basis. This theory leads to the practice.

2. The results from comparing creative thinking

The percentage of score for creative thinking derived from learning with the model is 71.13% while the percentage of score derived from traditional learning is 62.20%. Thus the average score of creative thinking derived from studying with the model is higher than the average score derived from typical studying. In addition, percentage of score for creative thinking derived from learning with the model is higher than 70% in a good level.

3. The results from studying correlation between achievement and creative thinking

The correlation between creative thinking and learning achievement is experimented at Nakhon Ratchasima University and Wongchavartikul University. The results derived from the experiments at both University show that there is a positive correlation between creative thinking and learning achievement. This insists the reliability of the model.



Figure 2. An example of developing the knowledge management model

CONCLUSIONS

In the research, the knowledge management model is design and developed. The framework design of the model comprises of 5 elements that are Thinking Project, Resource, Seeking tools, Knowledge Sharing, and Knowledge Testing. The experts reveal that the content of the model is accurate and modern; furthermore the design and media are designed based no educational theories that help students to enhance their creative thinking. The results from the experiments at Nakhon Ratchasiam Rajabhat University and Wongchavaritkul University are exposed as follows. The average scores of creative thinking derived from students studying with the model is higher than the average scores derived from students studying in the typical way. There is a positive correlation between creative thinking and learning achievement. This means the average scores of learning achievement derived from students studying with the model is higher than the average scores derived from students studying in the traditional way. The experimental results derived from Nakhon Ratchasiam Rajabhat University and Wongchavaritkul University are correspondent. Thus this can show the generalization of the model.

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KOREAN HIGH SCHOOL STUDENT'S PERCEPTION OF TRUST IN TEACHERS

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ABSTRACT

This paper is a report on clarify the grounds of trust in high school students and what factors influence them. To study these research questions, we interviewed 19 high school students. After gathering the interview data, this study attempted to adapt content analysis. As a result, three factors were categorized as 'student factor', 'teacher factor' and 'situation factor'. The characteristics of high school students' trust in their teachers revealed through research are as follows. First, when students(trustor) trust their teachers(trustee), it can be seen that a student's expectation on teacher role or advance information about their teacher influences rather than the teacher's behavior and attitude. Second, high school students refer to teachers' apparent behaviors and attitudes that are consistent with their expectations, but they also take teacher's effort behind the scene into account. Lastly, student' trust in teachers is influenced by the context and circumstance around them.

Keyword: trust, trust in school, student's trust in teacher, qualitative research, content analysis

INTRODUCTION

In a society where many people interact with each other, trust in others is compared to air. Like air, the very existence of trust in other people cannot be recognized until it is in deficiency(Baier, 1994). Without trust, people will consume considerable energy to protect themselves(Tschannen-Moran, 2014).

According to 2014 report on the time use survey, Korean high school students spend 8 hours and 21 minutes in learning at school. As students and teachers spend considerable amount of time together in school, trust between them would play a crucial role in building and maintaining healthy educational relationship. However, it cannot solely explain the meaning, cause and characteristics of trust between teachers and students, which thus leads to the necessity of examining the perception of students on their trust in teachers. The followings are prior studies focusing on student's trust and distrust in teachers: Lee, Sook-Jeong & Han, Jeong-Shin(2004) explained it as 'student's attitude to build and maintain an undoubtedly positive relationship with teachers based on teacher's cognitive, emotional and moral characteristics'. Furthermore, Ryu Yun-Seok(2016) described that 'members of a class community firmly trust teacher's intention, motivation and behaviors and rely on teachers'. The following are some factors that build students' trust in teachers. Lee(2006) found that the elements of trust were competence, openness, reliability, intimacy, caring and integrity. Another study by Lee, Hye-Sook(2010) analyzed constructs inducing trust factor and distrust factor in teacher from students. She drew trust factors: students were found to consider a sense of closeness, abilities, sincerity, consideration, consistency, a sense of community, belief, and openness as factors of trust in teachers. And students considered insufficient abilities, selfish and authoritarian behavior, lack of sincerity, inconsiderate behavior, lack of belief, ineffective communication, discrimination, and physical punishment as factors of distrust in teachers. Although precedent studies clarified various theoretical and empirical factors that build student's trust in teachers, they mainly focused on the attitude and behavioral characteristics of teachers who are the trustees.

On the other hand, the sociocultural environments in schools play as much important roles in promoting the trust relationships. Lee(2006b) analyzed that senior high students showed relatively higher level of trust in teachers than junior high and the bigger the size of a school or class was, the lower the level of trust became. And the level of trust was higher when they reached the end of the semester rather than the beginning of the school year(Adams&Christenson, 2000). In addition, tenth-graders showed a higher tendency of trusting teachers due to a sense of closeness and belief than eleventh-graders(Lee, Hye-Sook, 2010).

The trust carrying these characteristics has positive correlations with student's learning motivation and physical education attitudes(Furrer&Skinner, 2003). Also, Lee's study(2006b) suggested student's trust in teachers had effect on student's academic achievement through having influence on one's self-esteem, academic motivation, and class climate.

As these studies discuss the concept, cause and result of trust with no broad concurrence on what the trust between a student and a teacher refers to, the conceptual ambiguity increased, which faced criticism in that it seemed something in an ivory tower. (Jeong, Young-Su et al, 1998)

As such, to identify what the bases are that students use to build trust in teachers, the focus should move to students. Students experience constant environmental change in school. They interact with tens of teachers in each grade with changing classroom, peer group, physical environment and rules. Therefore, this study will clarify the grounds of trust in high school students and what factors influence them. Interview data with students will be analyzed to explore the meaning of trust in teachers that students think along with the characteristic of trust that can be found in teacher-student relationship. Based on this purpose, research questions were established as follows :

1. On what basis do high school students trust their teachers?
2. What are the influence factors of high school students' trust in teachers?

METHODOLOGY

To study these research questions, we interviewed 19 high school students. After gathering the interview data, this study attempted to adapt content analysis. Content analysis is a research technique for making replicable and valid inferences from texts (Krippendorf, 2004, p.18).

Participants

Participants were 19 students who attended B high school in Korea and agreed to provide the information in accordance with the purpose of the study. In selecting the participants, we tried to consider the intimacy with teachers and their grades. Through the snowball sampling method, we interviewed the other students who had similar characteristics through the first interview. The basic information of participants is summarized in <Table 1>

<Table 1> basic information of participants

Name	Sex	Grade	Name	Sex	Grade
S1	F	2	S10	F	3
S2	F	2	S11	F	2
S3	F	3	S12	F	2
S4	F	3	S13	M	1
S5	M	3	S14	M	1
S6	F	3	S15	M	1
S7	F	3	S16	M	2
S8	F	3	S17	M	2
S9	F	3	S18	F	2
			S19	F	3

Data collection process

Data was collected through individual interviews or interviews with 2 participants. After getting consent to participate in the study from all research participants, the research purpose and interview questions were presented to the participants in advance. Analysis of previous studies and interviews were conducted for 7 months from October 2016 to April 2017. The interviews were mainly conducted by the researchers at the home or near the school.

The researcher explained the purpose of the study and the anonymity of personal information when using data processing. The interviews encouraged the research participants to naturally speak their thoughts and experiences by applying semi - structured interview. During the interview, the researchers encouraged the participants to keep the topic of the interview. In some cases, the researcher questions were changed, excluded, or added by the researcher. At the end of the interview, we organized the overall contents of the students' trust experience and corrected the ambiguous expressions that were found during the interviews.

After completing the interview, we transcribed the interview within three days to prevent the loss of data. In addition to confirming the missing parts that were found during the transcription process, we checked the participant through phone or text message.

Prior to conducting interviews, the researchers made the interview questions based on their analysis of previous research related to school trust, student-teacher trust and trust effects. The content of the interview that has been revised is followed:

- Do you keep good relationship with your teachers?
- How many trusty teachers are there in your school?
- What is the major influencing factors in creating trust among teachers?
- How long does the trust typically last?
- What kind of changes happen after trust was created between teachers and student?
- Have you experienced the loss of trust in teachers?

Data analysis

The researchers conducted the content analysis process proposed by Krippendorff (2004). The first step is the 'deep understanding of the whole text'. In order to understand the text in depth, we read the whole data more than five times and carefully examined the students' experience. The next analysis procedure is 'finding meaningful statements'. The researchers organized the texts into appropriate units, selected meaningful statements related to the research questions and coded them. The third step is to collect similar or interrelated content to form a higher-level 'category'. the researchers categorized higher-level categories by grouping similar or interrelated contents. As a result, three factors were categorized as 'student factor', 'teacher factor' and 'situation factor'.

FINDINGS

1. Student Factor

-Students' different expectations on teacher role

Every student have different expectations about how teachers should be. As one teacher plays various roles such as a subject specialist, counselor, and classroom manager, there are various expectations from students on each role of the teacher. First of all, when a teacher is subject specialist, students want their teachers to engage all students in learning with responsibility(S5), to instruct knowledge beyond textbooks with professionalism(S11) and to answer student's questions in detail(S1, S8).

“Teacher is a teaching job. But some teachers don't have any responsibility or sincerity in teaching. A good teacher should take care of even the students left behind(S5)”

Students share their concerns and thoughts on going to college with teachers in and out of classroom as they spend considerable amount of time together. At this time, students want their teachers to listen to their story carefully, giving sincere advices (S2, S3, S7) and to pay attention to every student equally regardless of student's grades(S5). In addition, students don't want their teachers to tell inconsistent information about them to parents or other teachers while expecting their teachers to treat them respectfully(S2, S7).

On the other hand, they have different expectations on a teacher as a homeroom manager from those on subject specialist. As students spend a year together with their homeroom teacher, they want their teacher to pay attention to individual student(S9, S11, S12) and to understand each student's interest. Also, students expect teachers to create an atmosphere conducive to academic pursuit and give them every information that are helpful for preparing for college(S12).

“I think what teachers do first is to know their students. I mean for example, they should know how the atmosphere of the class the students are in...They should just see the students as they are with no bias based on their grades(S12)”

-Advance information about their teacher from their peers or seniors

Students tend to hear information about their teachers from their peers or seniors before the new school year begins. They are told stories about how well a teacher can teach, whether teachers treat students equally regardless of their grades, and whether teachers engage in counseling with affection. Interacting with their teachers for a year, some students actually get to build good relationships even with teachers whose reputation was bad and they face different attitudes and behaviors of teachers from those that they had expected.

“My homeroom teacher was notorious for his temper. Sometimes, he hit students. So, I was worried when he became my third grade teacher. However, he was not bad-tempered at all and took a good care of us(S3)”

2. Teacher factor

–Teacher behavior in accordance with student's expectation

High school students make a decision on whether to trust the teacher or not primarily based on their expectations toward teachers. When they think a teacher as a counselor, they seem to build trust in teachers when teachers are attentive in listening to students(S1, S2), understand each student's situation(S15) and try to give sincere advice(S4). Especially in counseling on their going to college or future career, students are likely to build trust on teachers seeing their teachers giving best advice and information considering the potential and the interest of each student with being free from bias formed based on each student's grades.

A homeroom teacher interacts more with students. As such, high school students want their teachers to create a good atmosphere for studying(S2) and give them positive energy to live through a hard school life(S5, S6, S7). In some cases, students trust their teachers when their teachers are fully aware of the information they need to deliver to students. In contrast, when teachers put their opinions and emotions first rather than student's and force them to follow to solve any problems they confronted, student's trust level in teachers declined(S18).

Also, students feel trustful of their teachers when they find that teachers are proud of their job, organize instructions flexibly depending on the interest or conditions of students(S1, S2, S3, S11, S12) and give kind and easy answers to understand to student's questions. However, when a class is taught depending on the mood of a teacher(S11, S12, S19), too teacher-centered(S3, S11) and the instruction does not go beyond textbooks, students don't appear to trust their teachers.

“When some teachers teach in class, it seems like we are not in the scene. There's only the teacher. It is not teaching students, but teaching themselves. They write on the board without checking whether we're with them. And when the students do not answer, they give us pressure for answers(S3).”

–Teacher's professionalism based on their efforts behind the scene

Students seem to strengthen their trust in teachers when they find out about their teachers' effort in preparing for classes with prior research and examples and reference materials. Students said they know whether teachers put a lot of effort and energy in preparing for classes or not (S5) because they check out teacher's 'writing on the board' or 'teacher's textbook'(S3, S4, S9, S10). Students not only build trust in their teachers but also get motivated seeing their teacher's constant effort.

“Sometimes I am curious about the teacher 's teaching materials when I sit in the front seat. I look at their books, some teachers books are completely black, well organized by highlighter. Then I promise myself I should be a hard-working student. Those teachers are great stimulation for me(S4).”

In addition, when students see their teachers try to memorize all the names of students they teach, they take it as a 'symbol of attention' and identify their teachers' affection toward them. Observing teachers remembering not only students' names but also their interest and concerns and give helpful advices, students feels the responsibility a teacher has in teaching students.

–Consistent behavior and attitude of teachers

It was found that teacher's consistent behavior and attitude contribute to student's trust building in teachers. Even if a teacher is met with student's expectations and equipped with a professionalism as a teacher, unless teacher's behavior and attitude are consistent, students find it hard to fortify their trust in their teachers. For example, if the atmosphere of a class varies depending on the mood of the teacher and when a student is given a report card that was written differently from what they had been informed, student's trust level in teachers declined(S18).

“When we talked with teachers in class, I felt much closer to teachers. But when I saw teachers are together talking with each other in school office, I felt like we were scored by them(S18).”

3. Situation factor

–Multiple situations in which students interact with teachers

Students' trust in teachers is different in each scene because of the variety of situations (instructor, classroom manager, guidance teacher) that students interact with teachers. For instance, even if a teacher gives clear and easy instruction, if he seems to have no affection and interest in his homeroom class, the trust level in that teacher is likely to vary in each scene. For this reason, rather than defining the concept of trust as a whole, students tend to have different trust levels even on the same teacher based on different reasons for each scene.

“My homeroom teacher taught English when I was freshman. He taught us well. But once he/she became my homeroom teacher, she didn’t take care much of homeroom teacher. Rather, she seemed more interested in other classes so I was disappointed(S1).”

In addition, individual student may experience that the level of trust changes between when they interact with teacher in groups and when they meet one-on-one with teacher. Even when students don’t have enough time to judge trust on teachers, they get to experience the unseen behaviors and attitudes of teachers through one-on-one interaction with teachers, which then influences student’s trust level.

-Teacher’s influence on student’s future plan for college

As planning for college is important in high school, it had both direct and indirect influences on student’s trust level in teachers. Especially as teacher’s influence is growing for teachers are the ones that fill in the personal schooling record of each student. Also, as in the case of ‘S19’ who hopes to major in music, relationship with a teacher from private academy has more influence on her than school teacher. Thus she have little opportunity or necessity to build trust in school teachers.

“They are adults. So it’s kind of uncomfortable. When I talk to my friends, I have a lot to talk about. But I do not know what to talk with teachers. It’s hard to feel close to them when they talk only about my grades. So I just want to maintain normal relationship with teachers as a student(S7).”

-Changing expectations on teachers by grade

Most students were found to have changing expectations on their homeroom teachers as they enter higher grade. A student may have different opinion on the same teacher when she met the teacher in 1st grade and later in 3rd grade. It shows that the expectation on the teacher is different depending on the situation the students are in.

“We have to get good grade until 2nd grade. And finding fun in school life is also important. So I think being close with teachers is helpful in getting good grades. But in senior year, we don’t interact with teachers as much as we used to because we spend more time watching online class. So I think teachers should understand that(S10).”

CONCLUSIONS

Trust in others is not naturally given. It is not externally given, nor is it a fixed concept. High school students’ trust in teachers will have similar characteristics as trust in other relationships.

Previous researches focused on the influence of student’s trust in teachers on the individual and school. However, a comprehensive study on how students build trust in their teachers and what factors influence the trust building process was not included. Therefore, this study is the result of analyzing their thoughts and experiences on trust in teachers obtained from interviews with 19 high school students in South Korea. The results of the interviews show that high school students’ trust in teachers is complicated by the behavior and characteristics of teachers, the characteristics of individual students, and various situations surrounding them. The characteristics of high school students’ trust in their teachers revealed through research are as follows.

First, when students(trustor) trust their teachers(trustee), it can be seen that a student’s expectation on teacher role or advance information about their teacher influences rather than the teacher’s behavior and attitude. This leads to a conclusion that the characteristic of individual student(trustor) plays a role in building and developing trust in teachers.

Second, high school students refer to teachers’ apparent behaviors and attitudes that are consistent with their expectations, but they also take teacher’s effort behind the scene into account. It can be seen that preparing the materials and illustrations for good instruction and showing the teachers time and energy for studying the instruction as an opportunity to deepen the trust in teachers.

Lastly, students’ trust in teachers is influenced by the context and circumstance around them. Even on the same teacher, there are differences in the grounds and meanings of students’ trust in them depending on the scenes they are facing such as instruction, classroom, and counseling. Also, students feel there are invisible wall between them and teachers as teachers have great influence on student’s future plan for college. Therefore, it can be seen that the students’ trust in friends, parents, etc. and the trust in teachers do not develop in the same way.

This study can complement the existing research in that it examines the grounds and related trust factors in teachers in terms of high school students. In the future, it will be necessary to explore on the basis of teacher trust formation and its meaning in the elementary and middle school scene.

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KÜLTÜREL TURİZMİN EKONOMİK, SOSYAL VE ÇEVRESEL ETKİLERİNE YÖNELİK BİR ARAŞTIRMA: SAFRANBOLU ÖRNEĞİ

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Bu çalışmanın amacı Safranbolu’da kültürel turizmin ekonomik, sosyal ve çevresel etkilerini öğrenci görüşleri doğrultusunda incelemektir. Çalışmada karma araştırma modeli kullanılmıştır. Araştırmaya Karabük Üniversitesi Edebiyat Fakültesinde öğrenim gören son sınıf öğrencilerinden 424 kişi katılmıştır. Veri toplama aracı olarak Değerliyurt ve ark. (2013) tarafından geliştirilen ölçek ve yarı yapılandırılmış görüşme formu uygulanmıştır. Araştırma sonucunda katılımcıların çoğunluğu kültürel turizmin Safranbolu’ya (yerel halka) ek gelir sağladığını, yeni iş alanları oluşturduğunu ve bunun hayat şartlarını iyileştirdiğini, kültürümüzü tanıtmak için iyi bir fırsat oluşturduğunu, tarihi yapıların ve yerel mimarinin korunmasını sağladığını ancak hayat pahalılığına neden olduğunu, kentte arsa ve ev fiyatlarının arttığını belirtmişlerdir. Katılımcılar tanıtımın yeterince yapılmamasını, alt yapı sorunlarını, ulaşım zorluğunu, turizm konusunda eğitim eksikliğini Safranbolu’da kültürel turizminin önündeki en önemli engeller olduğunu öne sürmüşlerdir. Katılımcılar Safranbolu’da kültür turizminin arzını artırılması için tanıtım faaliyetlerinin daha fazla ve farklı şekillerde yapılmasını, ulaşım ve konaklama şartlarını iyileştirmelerini, yerel halkın turizm faaliyetleri konusunda daha fazla bilinçlendirilmesi gerektiğini belirtmişlerdir.

toplumun maddi ve manevi kültürünü ayn, anda yans,t,rken evrensel bir ileti im arac, görevini de üstlenir. Bir toplumun kültürünü ve geli imini yans,tmak sanat,n önemli i levlerinden biridir.

Bir ülkenin kültürü sanat yap,tlar,nda somutla ,r, bu yakla ,mla sanat yap,tlar, uluslar,n var olma kan,tlar,d,r. Bu kan,tlar; uluslar,n dü ünçe hayat,n,n geriye b,rakt, , an,tlar gibi kabul edilmelidir. Bilgi aktar,m,na dayal, e itim sistemi toplumdaki de i im ve teknolojiadaki geli meye ba l, olarak yerini ö renciyi aktif yapan bir anlay, a b,rakm, t,r. Buna paralel olarak görsel sanatlar e itimi ise günlük ya ant,m,z,n her alan,nda kar ,m,za ç,kan ve bireyi etkileyen, bireye ekil veren vazgeçilmez bir alan olarak tüm e itim sistemi içinde özel bir yere sahiptir. Bu alan,n en önemli ara t,rma ve uygulama mekânlar, müzeler ve galerilerdir.

Müzeler; sanat, kültür, bilim ve teknikle ilgili yap,tlar,n ve do al nesnelerin yararlan,lmas, için korundu u ve sergilendi i mekânlar,d,r. öMüze; kültürel de er ta ,yan, bir bütünü farkl, biçimlerde korumak, incelemek, de erlendirmek, halk,n be enisini yükseltmek ve e itim için sergilemek amac,yla toplum yarar,na yönetilen kurumdur.ö

Müzeler dünyanın,n pek çok ülkesinde yayg,n e itim kurumlar, olarak, e itim amac,yla kullan,lmakta; hatta geli mi uluslar,n okullar,nda müze e itimi dersi verilmektedir. Ya am boyu e itim sürecinde çok yönlü ö renme ve ya am alanlar, olarak müzelerin; ya ant,lara dayal, etkin kullan,m,n, içeren tarihî ve kültürel zenginlikleriyle, Türkiye için yeni ve ihtiyaç duyulan kurumsal bir aland,r. Müze e itimi; amac, ve konular,, sergileri, objeleri, çevresel faktörleri ve ö renciyi merkeze alan disiplinler aras, yönleriyle müzenin temel e itim kuramlar, ve ilkeleri , , ,nda aktif bir ö renme ve geli me alan, olarak kullan,lmas,n, içerir.

Müze e itimi; bireysel, sosyal ve fiziksel boyutlar,n, objelerle, alg,lar ve ilgileri yoluyla etkile im, gözlem yapma, dü ünçe ve duygular, ifade etme, hayal gücünü kullanma, kendi ya am,na ba lama, bilgilenme, müzenin bak, aç,s,n, görme ve anlama, objeleri okuma, kültürel de erleri ve ya am, payla ma, gerçe i arama, uygulamalar yapma ve de erlendirme gibi konular, içerir.

Müze e itimi; özellikle zaman ve mekân içinde kendini ve insanlar, anlama, kültürel Miras, devam ettirme, geçmi i, bugünü ve gelece i anlaml, bir biçimde ili kilendirme, Kültürel varl,klar, eski eserleri anlama, koruma ve ya atma, kendi kültürünü ve farkl, kültürleri çok yönlü ve ho görülü bir yakla ,mla tan,ma ve anlama, müzeyi bir ya am biçimi hâline getirme ve müzeleri ya ayan kurum niteli ini kazand,rma, kültürler aras, anlay, ve duyguda l, , geli tirme gibi hedeflere hizmet etmektedir. Kültürel ve tarihî zenginlikleriyle tan,nan, medeniyet lerin be i i olarak bilinen ülkemizde güzel Sanatlar ve spor liselerinde ö renim gören ö renciler bu ders arac,l, , ile kültür ve sanata, sanat eserine, sanatç,ya, eski eserlere farkl, bak, aç,lar,n, geli tirerek, onlar, koruma bilinci, farkl, kültürleri ve eserleri tan,ma ve sayg, duyma, ara t,rma, uygulama yapma, de erlendirme gibi becerileri kazand,r,maktad,r.

Müze Türleri:

- Arkeoloji Müzeleri
- Etnografya Müzeleri
- Tarih Müzeleri,
- Güzel Sanatlar Müzeleri,
- Aç,k Hava Müzeleri
- Askerî Müzeler,
- Özel Müzeler
- Sanal müzeler

Müze E itiminin Amac, ve Temel Yakla ,mlar,:

Günümüz ö renci profili, bilimsel ve ak,l,c, dü ünme becerisine sahip, ara t,rmac, ve sorgulay,c,, bilgiyi ezber leyen de il bilgiye ula abilen, bu bilgiyi kullan,p payla abilen, ileti im kurma becerilerine sahip, teknolojiyi etkin bir ekilde kullanabilen, kendini gerçekle tirmi ve bunun yan, s,ra insanl, ,n ortak de erlerini sahiplen mi , yarat,c,, üretken, tak,m çal, mas,na yatk,n, ö renmeyi ö renmi ve ya am boyu ö renmeyi benimsemi bireyler olarak tan,mlanabilir. Ö renci profilindeki de i im e itim, ö retim sürecinde okula yeni anlamlar yüklemektedir. öö renci merkezli e itimö, öö renci merkezli okulö kavramlar, bu de i im ve geli imin bir sonucu olarak ortaya ç,km, t,r. Ö renci merkezli e itimin temel hedefi ö renciyi merkeze alarak kendisinin ve sistemin ihtiyaç duydu u de i im sürecini ba latmakt,r. Bu anlay, la geli tirilen müze e itimi dersinde ö renci merkezli e itimin ilkelerini a a ,daki ba l,klar alt,nda s,ralayabiliriz:

1.Müze e itimi dersi; genel e itimin bütünleyici ve birle tirici bir unsuru olmal,d,r.

Sanatta yarat,c,l,k temel ö edir. Yarat,c,l,k yaln,z zihinsel bir olgu de ildir. Bunun yan,nda duygular, duygular, imgeleme gücü, yetenekler ve tümünün birbiriyle bütünle mesi yarat,c,l,kta rol oynar. Sanat e itimi, ö renciyi böyle bir bütünlü e götürdü ü için ondaki yap,c, ve yarat,c, güçleri ortaya ç,kar,r.

2.Ö renmeyi ö renmek esast,r. Ö renme sürecinin do as, olarak ö renme, bireyin kendi alg,lar,, dü ünceleri ve duygular,ndan süzerek edindi i bilgi ve deneyimlerden anlam, ke fetmesi ve yap,land,rmas, sürecidir. Bu aç, dan ö rencilerin soru sormalar,na, kendilerinin neleri ve nas,l ö renceklerine karar vermelerine yard,mc, olun mal,d,r.

3.Her ö renci ö renebilir. Her ö renci, elde etti i verilerden bir anlam yaratmak, bunu gözden geçirmek ve di erleri için anla ,l,r hâle getirmek üzere çaba gösterir. Her ö rencinin ö rene bilece i ilkesinden hareketle yap,lmaz, gereken ey ö rencileri iyi tan,yarak onlar,n kuvvetli yönlerini ke federek ba ar,lar,n, art,r,malar,nda yol gösterici olunmal,d,r.

4.Her ö renci ö renirken eski ve yeni bilgiler aras,nda özgün ba lant,lar kurar. Bilginin yap,s, gere i her ö renci daha derin bir anlama etkinli ini yap,land,rmak için eski ve yeni bilgileri aras,nda özgün ba lant,lar kurar. Bu nedenle, her ö rencinin yeni bilgi ile eski bilgileri aras,nda ba lant,lar kurmas,na önem verilmelidir.

5.Bilim ve teknolojiyi içerecek biçimde insan,n her alanda yarat,c,, tasarlay,c,, dü ünce üreten yan,n, geli tiren bir e itim anlay, , olmal,d,r. Ya ayarak, ayn, zamanda yap,lm, olan,n üzerinde dü ünerek kendini gerçekle tir me çabas,nda, çevresiyle ili ki kuran, bu çevreyi düzenleyebilmek için neler gerekti ini hesaplayan, d, dünyadan kopmay,p tersine onunla ba da maya çal, an, dünya ile günün sanat biçimleriyle bar, ,k bireyler yeti tirmek amaçlanmal,d,r.

6. Dü ünmeyi ö renmek sorgulay,c, ve yarat,c, dü ünneyi geli tirir. Ö renci, nas,l dü ünce ini planlay,p, gözlemleyip, de erlendirerek, sorgulay,c, ve yarat,c, dü ünme becerilerini geli tirir. Bu nedenle, her ö rencinin dü ünmeyi ö renmesine öncülük edilmelidir.

7. Duyarlı, , güçlendirmek ve ön plana ç,karabilmek önemlidir. Güzel sanatlar ve spor liselerinin, e itim sürecinde ö rencilere kazand,r,lmaz, gereken en önemli de erlerden biride duyarlı,l,kt,r. Ö renci ilgisini d, dünyaya yönelterek, dünyadaki de i iklikler hakk,nda alg,lar,n, kuvvetlendirir. nsan gücüyle olu an dünya teknolojisiyle ba kurmay, ba ar,r. Duygular,n,, alg,lar,n,, deneyimlerini sanat etkinlikleri yoluyla, kulland, , gereçlerle ba kurmay, ö renir.

8. Ba arabilme duygusu içsel güdülenmeyi sa lar. Ö rencinin kontrol düzeyi, sorumluluk duygusu, hedefleri, ilgi alanlar,, yeterlikleri ve beklentileri ba arma güdüsünü besleyen etmenlerdir ve güdülenme ö renmeyi etkiler. Bu nedenle, her ö rencinin motivasyonuna önem verilerek ba arabilme duygusunu ya amalar,na uygun ortamlar haz,r,lanmal,d,r.

9. Ö renme olumsuz deneyimlerle engellendi inde zorla ,r. Her ö renci do al bir ö renme e ilimine sahiptir. Bu e ilim olumsuz deneyimlerle engellendi inde ö renme zorla maya ba lar. Bu nedenle, her ö rencinin ba ara bilme deneyimini ya amas, için onlar,n bireysel farklı,l,klar,n, dikkate alan f,rSATlar yarat,lmal,d,r.

10. Merak, yarat,c,l,k ve karma ,k dü ünmeyi harekete geçiren ödevler ö renciyi daha zorlar,n, ba arabilmeye güdüler. Merak, yarat,c,l,k ve kompleks dü ünmeyi harekete geçiren, güdü art,r,c, ö renme ve ö renmeye yönelik ödevler ö renciyi giderek zorla an ödevler yapmaya güdüler. Bu nedenle, ödevler her ö rencinin ba arabilme deneyimini ya amas, için yarat,lacak f,rSATlardan biri olarak görülmelidir.

11. Sanat e itimiyle ele tiri ve ele tiriye kabul edebilme yetene i geli ir. Ele tiri; var olan bir durumun, olgunun olumlu-olumsuz yönlerinin nesnel bir yakla ,mla irdelenerek de erlendirilmesi ve bunun yaz,yla yada sözle anlat,lmaz,d,r. Ele tiri; geli menin birinci ko uludur. Yanl, lar ele tirilerek do ruya ula ,l,r. Ele tirmek ve ele tiriye kabul etmek, uygar insan davran, ,d,r. Ancak, ele tirinin sayg,-görgü kurallar, çerçevesinde yap,lmaz,, ele tirinin de ho görüyle kar ,lanmas, gerekir. Bu kapsamda kendini ele tirmede oldukça önemlidir. Kendini geli tirme, kendini ele tirmeye olas,d,r. Yap,c, ele tirel tav,r ve davran, lar e itim yoluyla kazan,l,r ve geli tirilir. E itim sisteminin tüm ders ve etkinliklerinde yer almas, gereken ele tiri, müze e itimi dersinde etkili olarak kullan,lmal,d,r.

14. Ö renciler aras,ndaki olumlu ili kiler ö renmeyi art,r,r. Ö rencilerin birbirine destek olmas,, ilgi ve sayg, göstermesi gibi olumlu ili kiler ö renmeyi art,r,r. Müze e itiminde grup çal, malar, ve sosyal etkinlikler ö renciler aras,nda olumlu ili kilerin geli tirilebilmesi için yarat,lacak f,rSATlar olarak görülmelidir.

Müze E itimi ve Uygulama Dersinin E itim Ac,s,ndan Çocu a Sa lad, , Yararlar:

Pek çok geli mi ülkede müzelerden, etkin bir e itim ortam, olarak yararlan,lmaktad,r. E itimde aktif olma tecrübe sahibi olma çevre ve etkile im kavramlar,n,n ön plana ç,kmas,yla müzeler, çocuk e itiminde önem ta ,yan kurumlar haline gelmi tir. Çünkü müzeler:

- Çocuklar,n yaparak, ya ayarak, duysal, devinimsel, zihinsel, bili sel ve sosyal geli imine katk,da bulunabilecek uygun bir ortam sa lamaktad,r.
- Müzeler, çe itli kültür ve varl,klar,n, tan,tarak, çocuklara o toplumun bir bireyi olduklar,n, hissettirerek ki iliklerini ve öz güvenlerini geli tirmeye yard,mc, olur ve çocuklar,n sanatla ba kurmalar,na katk,da bulunur.
- Küçük ya lardan itibaren müzelerdeki eserlerle kar ,la an ve bunlarla ilgili etkinlikler yapan bir çocu un sanat anlay, , geli mekte ve bak, ac,s,n,n farklı,la mas,na sa lar
- Bu durumdan yola ç,karak öGörsel Sanatlarda Biçimlendirme ve öGörsel Sanat Kültürü ö retme alanlar,n yan, s,ra müze bilincini de geli tirerek çocukta fark,ndal,k yaratmay, sa lar.

- Müze bilinci ve e itimi çocu a görsel sanatlar,n birbirinden farklı dallar,nda verilmi olan, aynı zamanda birer kültür tarih miras, sayılan eserleri tanımlar,n, sağlar. Bu çerçevede öğrenciler, sadece yerel olan, değil aynı zamanda evrensel olan, da gözlemleyebilirler.
- Çok çeşitli ve zengin arkeolojik katmanlardan oluşan Türkiye cumhuriyeti toprakları,n, Anadolu medeniyetlerini tanımlar ve bu değerlere sahip çıkmaya bilinci edinirler.
- Müze e itimi ve uygulama dersi e itim yolu ile ki ilere sunacak, geniş imkânlar ve bakış açıları,n,nyan, sınırları, öğrencilerin yeni yatırımları ortaya çıkarması, ve içinde bulundukları toplumu, coğrafyayı, ve bunun sonucunda da farklı kültürleri kavraması, sağlar.

Aya Sofya'nın Tarihçesi:

İstanbul'da yapılmış, en büyük Bizans kilisesi olup, aynı yerde üç kez inşa edilmiştir. 1500 yıl öncesine dayanan ve birçok kez yapılmış, Bizans imparatorluğu zamanında yapılmış, tır. Birinci kilisenin Ayasofya'nın Roma imparatoru Büyük Konstantin (Bizans'ın ilk imparatoru I. Constantinus) tarafından yapılmış, ancak kesin olan, inşa 337 ile 361 yılları arasında tahtta olan oğlu II. Konstantin (Constantius) tarafından tamamlanmış ve 360 yılında ilk Ayasofya kilisesinin açılışıyla gerçekleşmiştir. Bugün dünyanın 8. harikası, sayılabilecek olan bu müze Ortodoks Hristiyanlar'ın kilise (bazilika) iken, 1453'te Fatih Sultan Mehmet tarafından 482 yıl camii olarak kullanılmış, 1935'te Ulu Önder Mustafa Kemal ATATÜRK tarafından müzeye dönüştürülmüştür.

Ayasofya'nın adı, ve inanç âlemindeki yeri:

Dünya sanat tarihinin en başta gelen yapıları, İstanbul'da görünümüne damgasını vuran bir eserdir (Görsel 1,2). İlk yapıldığında bu kilise, büyük kilise (Megale Ekklesia) olarak adlandırılmış, tır. Ancak V. Yüzyıldan itibaren sadece Sophia denilmeğe başlanmıştır. Kilise daha sonra (Theia Sophia- Hagia Sophia) yani Hristiyan üçlemesinin ikinci unsuru olan kutsal Hikmet (Hagia Sophia) adanmış, tır ve bu isimle anılmakta dır. V. yüzyıldan itibaren Hagia Sophia (kutsal hikmet veya kutsal bilgelik) olarak tanımlanmış, tır. Ayasofya'nın iç süslemesinin ihtişamı, ölçülerinin bir kilise için alışılmamış büyüklükte olması ve hepsinin üstünde, orta mekân, na hâkim olan kubbenin yüksekliği ve genişliği, her çağda insanlar, aşırtıcı ve hayranlık duyulması, yol açmış, tır. Hristiyan dünyası, bu cüretli kubbenin yapılmış, olağanüstü güçlere bağlı ve bu durum dini inanç ile birleştirilince, Ayasofya orta çağ mistizmi'nin en belirgin bir sembolü olmuştur. Ortodoks inançta semavi âlemi temsil eden kubbe, en yüce tirilmiş görünümüne kavuşmuş, bu kubbenin sanki boşlukta yüzdüğüne inanılmış, tır. Ayasofya Bizans'ın bütün tarihi boyunca olaylarda yer almış, imparatorlar burada taç giymiş, zaferler burada kutlanmış, suçlular kilisenin dokunulmazlığına sığınmış, tır. Bizans tarihinde önemli bir olay olan 726'dan 842'ye kadar süren İkonoklazma (ikonoklazma) döneminde ise Ayasofya'daki bütün dini resimlerin kaldırılmış, olduğu bilinir (Görsel 3,4).

Ayasofya Müzesinin Sanat E itimi Açısından Önemi:

Ayasofya müzesinin sanat e itimi açısından önemi de iki kültürleri ve sanat yapıtları, bir çatı altında sunmasıdır. Yeryüzünde ve dünya uygarlığı tarihi ve kültürü açısından sayılabilecek örneklerden biri olması. Bir mabet içinde üç devri, kültür ve inanç, bir arada tutan bir eser olması,ndan dolayı, dünyanın dört bir yanından gelen



Görsel 1. Ayasofya'dan gündüz görünümü



Görsel 2. Ayasofya'dan gece görünümü



Görsel 3: sultan Abdülhamid döneminde, hattat Mustafa İzzet Efendi tarafından cami içinde 7,50 metre yuvarlak 8. tane levha hazırlanmış, tır. Bu levhalarda Allah ve Muhammed isimlerinin yanı sıra dört büyük halifenin (Ebu Bekir, Ömer, Osman, Ali) ve peygamber efendimizin torunları, Hasan ve Hüseyin'in isimleri yer almaktadır.



Görsel 4: Ayasofya absid çeyrek kubbesindeki Meryem ve çocuk İsa mozaik (IX. Yüzyıl). Bu mozaik Ayasofya'da konaklama (Tasvir Kırk, c. 11. yüzyıl) döneminden sonra yapılmış, ilk figüratif tasvirli örneği temsil etmesi açısından önemlidir.

Hristiyanlara göre kilise, müslümanlara göre cami, yeni nesil ise Ayasofya müze olmak üzere merak ederek gelen bu insanlar gördükleri muhteşem yapı ve donanım karşısında hayret etmektedirler. Bizans ve Osmanlı kültür yapısını, her uygarlıktan alınan örneklerin bu kadar muazzam bir bütünlük içinde kaynağı olarak insanlara sunması, kültür ve sanat eğitim açısından önemi tartışılmaz.

Her yarıtan ve kültürden gelen insanda merak ve araştırmaya güdüsünü uyandırmaktadır. Örneğin bu yapı, geçmişten günümüze geçirdiği depremler ve yangınlara rağmen ayakta kalabilmiştir. Bu sütunlar bu kadar yükseklikte yapılmış, tır, burası, nasılsatılmış, tır. Mozaikleri, konaklar, Kapılar, Osmanlı dönemindeki yapılar, gibi. En küçük parçasını merak ederek, sorgulayarak, ziyaretçilerde öğrenme isteğini uyandırır (R.5-8). Bu araştırmayı yaparken Bizans kültürünü ve Osmanlı kültürünü bir arada öğrenme imkânı sağlar. Bu merak ve araştırma, ülkemizin kültürel ve coğrafi konumu hakkında insanların bilgi sahibi olmasını sağlar. Sadece bu yönüyle müzenin sanat açısından önemini kavramak kolay olacaktır.



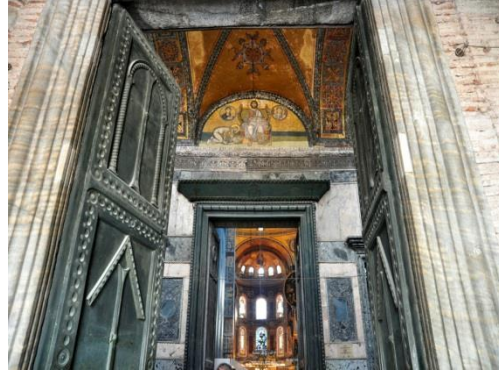
Görsel 5: Meryem ve Çocuk İsa (Vladimirs kaya) XVII yüzyıl Rus konas, tahta üzerine boyanmış resim, kısımların madeni kaplama, 30,5 x 27,5 cm.



Görsel 6: Ökutsal Mendil (Tahta üzerine boyanmış resim, 34x49 cm).



Görsel 7: İmparatorluk, Mermer Sütunlar



Görsel 8: İmparator Kapısı, 7. yüzyıl

(İmparator kapısı, 7. yüzyıl, ç Narteks bölümünden ana mekânâ geçi i sağlayan ve 6. yüzyıl, tarihlenen kapı, Ayasofya'nın en büyük kapısıdır. 7. yüzyıldaki İmparator kapısı, bronz çerçeveli olup, mermerden yapılmış, tır. Kanatlar, üstü tunç levhalarla kaplı olan kapı, yalnızca İmparator ve mahiyeti tarafından kullanılır. Doğru Roma kaynaklarında, kapı, Nuh'un Gemisi'nin tahtaları, yapılmış, olabileceğinin yanı sıra, Yahudilerin kutsal levhaları, saklandı, sandık, tahta, da olabileceğinin bilgisi geçmektedir).

Müze Etkinliği ve Uygulama dersinin Önemli Amaçları:

- Yeni nesillere tarihsel süreçlerini; sanat yolu ile kavratmak, çocuğun tarihine, Kültürüne ve sanatına yabancılaşmadan evrensel değerleri de yerli yerine oturtacak olgunlukla erişimlerini sağlamak,
- Yakın çevresindeki tarihi yer ve eserleri, sanat dünyasından ve kültürel, eserleri, inceleyerek güzeli görme ve estetik anlayış kazandırmak,
- Müze etkinliği ve Sanat yolu ile bireye toplumsal değerleri kazandırmak, kendi kültürü ile bütünleşmesini sağlamak,
- Sanat etkinliği çalılar, malar, ile öğrenciyi yaratıcı, bir birey olarak topluma kazandırmak, öğrencinin yaratıcı, duyguları, uyandırarak: gördüklerini, hissettiklerini, duygu ve düşüncelerini ilgili alanlarda ifade etmelerini sağlayacak zemin oluşturmak,
- Sanat çalılar, malar, araçları, ile öğrenciye yaptırım, disiplin zevk duyma alışkanlığı, ve beceri, işi bitirme sorumluluğu kazandırmak,
- Öğrencileri çeşitli materyal ve olanaklardan yararlanarak kendilerini rahat ve özgür biçimde ifade etmelerini sağlamak, Öğrenciyi yaratıcı, anlayışlı, yöneltmek,
- Çıkarıcı eğitim metodu, araştırarak inceleyecek, uygulayacak, gerekli tüm bilgiye ve donanımına ulaşma yollarını, öğrenciye sorgulayacak, yaratıcı, ve Aktif bir öğrenci tipi yetiştirmeyi hedeflemek sanat etkinliğinin önemli amaçları, arasında olmalıdır.

Müze Etkinliği ve Uygulama Konusuna İlişkin Temel Bilgiler: (14-Yaş)

Bu dönem, ergenlik başlangıcı olarak tanımlanır. Bu evre çocuğun çevresinden daha haberdar olduğu bir dönemdir. Gözlemlerini, soyut ve somut düşüncelerle birleştirerek yorumları, yansıtır. Kişisel ve toplumsal değerlere ilgisi artar. Bireysel duygusal yaklaşımlara yönelir. Kendine hedefler belirler. Bunlara yönelerek başarıya çalışır. Çocuk için önemli olan bireysel kimliğini bulma, bu durum resimlerine de yansır.

Bu dönem gençlik bunalımında göstergesidir. Hem fiziksel hem de ruhsal açıdan, önemli değişiklikler yaşamakta. Bu açıdan kritik bir dönemdir. Problemlerinin bazıları, çözebilme yeteneğini kazanmış, tır. Fakat çocukluk dönemi de sürmektedir. Çocukluk dönemi devam ettiği için hayal gücü ve yaratıcılık yeteneği kaybolmamış, tır. Resim yaparken karışık, sorunlar, öğrenerek çözümler. Çizim ve boyama konusunda dikkatli davranır. Kendi çabası, doğrultusunda çalışır. Çocuk insan giysilerini sadece cinsiyet farkını belirtmek için çizmez. Giysileri bir aksesuar olarak görür. Vücudun duruşuna göre kıyılar görür ve resimlerine ayrıntı olarak yansıtır. Renk konusunda en başarılı olduğu dönemdir. Çalılar, malar, gölge, renk perspektif gibi kavramlara önem verir.

Çocuktaki özgün olma duygusu kişiliklerini bulma hevesi yaratıcı, olumlu yönde etkiler ve gelişmesini sağlar. Resimde nesneleri ayrıntı, ekilde yansıtır. Bu dönemde çocuk kendi yaptığı, resimleri beğenmez. Fakat yapılan eleştirileri de kabul etmez. Resim çalılar, malar, kitap, çizgi film, Çizgi romanlardan yararlanır. Fakat bu yararlanma kısa süreli ve gördüklerini yorumlayabiliyorsa faydalı olur. Uzun süreli ise çocuğun yaratıcılığı, olumsuz yönde etkileyecektir. Bu dönemin diğer özellikleri şunlardır. Fiziksel gelişimi hızlanır, cinsel dürtüleri artar. Sanat ve spor faaliyetlerinde etkili olabilir. Dikkatini 30 dakikalık süreyle öyküye ya da müziğe yöneltir.

Ancak 15620 dakikalar aras,nda k,sa bir dikkat kesintisi olur.(ilgi duydu u takdirde, bu süre ya ilerlemesi ile orant,l, olarak artar). Gerekli e itimi ve ö retimi al,rsa, sanat eserlerinin kültür ortam,yla ili kisini kavrayabilir. Yetersiz kal,rsa kopya yapmaya yönelir. Kendini gerçekle tirme ve birey olarak de er kazanma aray, ,na girer. Sosyal ir. Kendine özgü anlay, tarzlar, vard,r. Alg,lar, geli ir bu durum resimlerine (renk, figür, vs.) yans,r.

Resimsel Geli im Evreleri:

1. **Karalama Dönemi (24 Ya)** : Çocuk karalamayla resme ilk ad,m,n, atar. Bu onun devinimsel gerek sinimlerinin bir sonucudur. İlk çizgiler geli i güzel yap,l,r ve anlams,zd,rlar. Fakat yaptı, , i ten haz duyar ve bu hareketini devam ettirir. Bu çizgilerle kendini geli tirerek anlaml, çizgilere do ru yol al,r.
2. **ema Öncesi Dönemi (467 Ya)** : Bu ya grubunda çocuk d, dünyanın fark,na var,r. D, dünya ile ba lar,n, kuvvetlendirmeye çal, ,r. Çocuk art,k tan,nabilen ekiller çizmektedir. Resimler de duygular ön pland,r.
3. **ematik Dönemi (769 Ya)** : Çocuk bu dönemde kendini çevrenin bir parças, olarak görür. Kafas,nda oturdu u insan, hayvan, ev semalar, vard,r. Önemli gördü ü parçalar, abart,r. Önemsizleri atar. Gördük lerini ak,l süzgecinden geçirerek yans,t,r.
4. **Gerçekçilik (Grupla ma)Dönemi (9- 12 Ya)** : Bu dönemde toplumun bir parças, oldu unun bilincinde olan, çocuk ayr,nt,ya daha çok önem verir. Ayr,nt, ve gerçekçilik onun için önemli olmu tur. Mekân ve perspektif devreye girer. Naif ve özgür havay, terk etmi toplumun be enisini göz önünde bulundurmaya ba lam, t,r.
5. **Görünürde Do alc,l,k (Mant,k) Dönemi (12614 Ya)** : Bu evre; çocu un çevresinde geli en olaylar,n fark,nda oldu u bir dönemdir. Sosyal ir. Gerekli e itim ve ö retimi al,rsa, sanat eserlerinin kültür ortam, ile ili kisini kavrar. Fiziksel geli imi h,zlan,r. Cinsel dürtüleri artar. Kendine özgü anlat, tarz, vard,r. Alg, lar, geli ir ve bu durum resimlerine (renk, figür, vs) yans,r. Bu dönemde resimlerde daha ayr,nt,l, çizimler ve gerçekçi bir yakla ,m görülür. Resim konular,nda k,zlar ve erkekler aras,nda farklı,l,klar gözlemlenir. K,z çocuklar, daha çok bebek resmi, portreler, elbiseler... Erkek çocuklar, ise araba, gemi, uçak çizerler. Resimleri be enmeme, a ,r, hassasiyet ve kendini ifade güçlü ü görülür.

Ergenlik Dönemi (14 Ya ve Sonras,)

S,k,nt,l, ve bunal,m,l, bir döneme ad,m at,ld, , kritik bir dönemdir. Yeni davran, lar,n olu mas,n, sa layan ifade uyum ki isel dü üncelerle ortaya ç,kar. Kendini gerçekle tirmek dürtüsü güçlenir. Sosyal me h,zlan,r. İgi alanlar,n, resmeder. Kültürel kaynaklardan yararlan,r. Sanat- uygarl,k ili kisini ve sanat,n karma ,k yap,s,n, anlamlandırabilir. Zihinsel geli im üst a amalara h,zla yükselir. Yarat,c,l, , geli ir. Gerekli e itimi-ö retimi al,p sanat alan,na yönelmi se sanatsal yarat,c,l, , giderek güçlenir ve ya la paralel olarak sanatsal olgunlu u artar.

Bir müze uygulama önerisi haz,rlayan e itimci u noktalara dikkat etmelidir.

1. Müze e itimi uygulama önerisinin hedef ve hedef davran, lar, belirlemelidir. Bireye kazand,r,lacak davran, ve özellikleri belirlemelidir. Geli im özelliklerine göre uygulama program, haz,rlanmal,d,r.
2. Uygulaman,ın yerini, mekân,n,, uygulama süresini bireyin ya düzeyine uygun olarak program haz,rlanmal,d,r.
3. Uygulaman,ın bireysel ve grupsal uygunlu u göz önünde bulundurulmal,d,r.
4. Uygulama do rultusunda gerekli izin ve yaz, malar, (müze gezisi) tamamlanmal,d,r. Ö retmen okul yönetimine program,n, bildirmeli ve izin almal,d,r. E er gezi ilçe d, ,na yap,l,yorsa okul yönetimi ilçe milli e itim müdürlü üne müzenin ad,n,, ziyaret gününü, saatini, ula ,m arac,n,, ö renci ve ö retmen say,s,n, (isim listesi ile),gezi plan,n, ve amac,n, bildiren bir yaz, göndererek gerekli iznin alınmas,n, sa lanmal,d,r.
5. Müzede uyulmas, gereken kurallar, belirlemeli bu kurallar, uygulama grubuna yal,n bir ekil de anlatma l,d,r.
6. Uygulama yap,lacak yer, mekân ve konusu hakk,nda bireyin ilgisini çekecek giri etkinli ine prog ramda yer verilmelidir.
7. Uygulama önerisi, yer ve mekân yönünden, çevresel ve fiziksel ko ullar,na uygun olmal,d,r.

Hedefler:

- Müze kavram,n, ve Müze e itimi ve toplum ili kisini kavraya bilme,
- Geçmi ten günümüze kadar gelen mimari geli meler hakk,nda bilgi sahibi olma, Ülkemizdeki müze, ö ren yeri tarihi eser, an,t vb. sahip oldu u de erleri kavrayabilme
- Ayasofya'n,ın bulundu u konum ve Bizans ve Osmanl, kültür sentezini kavrama,
- Tarihi eserleri koruman,ın önemini kavrayabilme, Ayasofya müzesinin ya ad, , dönemler hakk,nda bilgi sahibi olma,
- Ayasofya'n,ın bulundu u mekândaki çevre uygarl,klar,n, etkilerini kavrayabilme, Eserler arac,l, , ile kültürler aras,ndaki farklı,l,klar, ve ili kileri kavrayabilme

- Müze sanat e itiminin önemini ve i levini kavraya bilme,
- Müzedeki eserlerle, bu eserlerin ait olduklar, dönemlerdeki sanat anlay, , aras,nda ili ki kurabilme, Görsel alg,lama becerisi geli tirmeleri, Müzelerde yer alan sanat eserlerine de er verme, ilgi ve koruma becerisi geli tirebilme,
- Sanat eserlerini inceleyerek ve yaparak uygulamal, sanatsal deneyimler kazanabilme
- Di er toplumlara kar , sayg, duyma bilinci kazanabilme,
- Çoklu zekâ kuram,na (sözel-dilsel zekâ, görsel ömekânsal zekâ, müziksel örîtmik zekâ, bireysel ki isel zekâ, matematiksel zekâ, sosyal zekâ, bedensel- Kinestik zekâ, do a zekâs,) göre kendini ifade edebilme,
- Büyük küçük kaslar,n, kullanarak yarat,c,l,k becerilerini geli tirme (örne in bir heykeli görüp, onu yapmak için taklit yolu ile giri imde bulunma),
- Dü ünme, sorgulama yolu ile duygu ve dü üncelerini sanatsal olarak aktarabilme, Kendi co rafyas, ve kültür miras,n, sanat yolu ile inceleme merak etme, ke fetme lerini sa lama,
- Müze çal, malar,na dayal, projeler haz,rlama,
- Müze gezisinde uyulmas, gereken kurallar, ö renme,

Hedef Davran, lar:

- ✓ Ayasofya müzesinin tarihini anlatabilir. De i ik dinlerdeki mabetlere sayg, duyar,
- ✓ Müzedeki eserlerle, bu eserlerin ait olduklar, dönemlerdeki, sanat ve kültür anlay, , aras,ndaki ili ki kurarak aç,klayabilir
- ✓ Kendi öz kültürünün fark,ndal, ,n, aç,klayabilir, Eserler arac,l, ,yla Anadolu uygarl,klar,n, tan,yarak anlatabilir.
- ✓ Müzedeki eserlerden yola ç,karak çe itli görsel tasar,malar yapman,n kendi kültür birikimine katk,s,n, tart, abilir.
- ✓ Müzede bulunan baz, eserleri (ikona, mozaik) ara tırma iste i uyan,r,
- ✓ De i ik kültürlerle sayg, duyarak onlar, koruma iste i do ar,
- ✓ Müze çal, malar,na dayal, projeler haz,rlar, Sanat e itiminin yarar,n, kendisinde uyand,rd, , iste i ifade edebilir ve dü ünme, sorgulama yolu ile duygu ve dü üncelerini sanatsal olarak aktarabilir,
- ✓ Müze sanat galerisi, ören yeri, tarihi eser, an,t vb. ile ilgili edindikleri kartlar, posterler, gb, görsel belgelerle müze kö esi olu turabilir,
- ✓ Kendi koleksiyonunu olu turmak fikri do ar. Kendi öz benli inde ara tırma ve ke fetme duygusu uyan,r,
- ✓ Müze gezisi s,ras,nda uyulmas, gereken kurallar, ö renebilir, Grupta nas,l davran,laca ,n, kavrar, Çe itli etkinliklerde (drama, oyun, piyes gb.) rol alma iste i do ar. Sosyalle mesini sa lar.

Uygulama Projesinin Genel Çerçevesi: Ortaö retimde müze e itimi ve sanat kültür ili kisi

Uygulama Projesinin Genel Çerçeve Bilgileri:

Dengeli, sa l,kl, ve ileri dü ünen bir toplum için önemli unsurlardan biri sanat ve kültür miras,d,r. Sanat,n geli mi li i, bir toplumun geli mi li iyle paraleldir. Bu aç,dan bakt, ,m,zda geli meyi art,rmaq için sanat e itimine ihtiyaç vard,r. Sanat e itimi; e itim ve ö retimin vazgeçilmez bir parças, olmal,d,r. Müze e itimi ki inin duygu, dü ünce ve izlenimlerini anlatabilmek, yetenek ve yarat,c,l, ,n, estetik bir seviyeye ula tırmaq müze e itimi ve sanat e itimcisinin temel amac, olmal,d,r. Özellikle okul öncesi ba ta olmak üzere ilk ve orta ö retimde; müze e itimi di er derslerden ay,rt edilmeksizin e itimin ana derslerinden olmal,d,r. çinde bulundu umuz toplumun geli mesini istiyorsak hedefi ba tan belirlemeli, yarat,c, dü ünen, kendini ifade edebilen, anlayan, kavrayan, sorgulayan ve kendi öz kültürüne ve kültür miras,na sahip ç,kan, ba ka kültürlerle sayg, duyan bireyler yeti tirmeli, bunu yapmak içinde hangi derslerin ne kadar önem arz etti i bilinmelidir. Müze e itimi ve sanat e itimcisinin gereklili i her f,rsatta dile getirilmeli ve üzerinde durularak, önemi art,r,lmal,d,r. Bir yap,t,nda ngiliz air ve ele tirmen Herbert Read, sanat ve e itimin gereklili ini sanats,z toplumlar,n dengelerini kaybedece ini öne sürerek aç,klar. Ülkemizde sanat e itimi ve müze e itimi alan,nda ve genel e itim sistemi içinde ya anan sorunlar, ezberci e itim sistemi, çocu a zihinsel, bili sel ve duyu sal süreçlerini tam anlam,yla ya ay,p ve olgunla tırmas,na izin verilmedi i sürece çocuk d, a ba ,ml, kalmaktad,r. Müze e itiminde en önemli hedef, çocu un özgün dü ünce yaratmas,n, desteklemektir.

Müzede Uygulama Önerisi:

Tarih :/í .. /í í

S,n,f /Ya : 9/ F 14.Ya

Konu : Ayasofya Müzesi efsanelerinden öKutsal Mendilö drama yolu ile anlatma, gezi ve uygulama.

Süre : 5 Ders Saati

Projenin Plan, ve Organizasyonu:

Müze e itimi ve uygulama ders Plan,: proje konusu hakk,nda proje yöneticisine dan, arak, Proje konusu belirlendikten sonra kaynak ara t,r,lmas, yap,lm, t,r. Ara t,r,mada okulun Kütüphaneleri, internet ile bireysel kaynaklardan yararlan,lm, t,r. Ayr,ca kitapç,lardan Ayasofya müzesi konulu çe itli kitap taramalar, yap,lm, t,r. Ayasofya Müzesi konulu belgesel ler, ara t,r,larak kaynak elde edilmi tir.

Uygulaman,n Plan ve Amac,:

14 Ya grubunun müze ve e itim- ili kisine yönelik Ayasofya Müze'sinin (Dinler aras, Kültür bütünlü ü ve kültürel miraslar) Efsanelerinden yararlanarak kar, ,k teknik ile serbest uygulama çal, mas,

Uygulama Yönetimi:

Uygulama geni bir ekiple haz,rılanan bir çal, ma de ildir. Çevre okullardan, Nuri C,ng,ll,o lu lisesi 9/f s,n,f,ndan seçilen (14- ya) grubundan 5. çocu un katk,lar,yla, Ayasofya müzesi mekân,nda ve s,n,f ortam,nda yürütülmü tür. Proje grup ve bireysel olarak da uygulanabilir.

Drama (Kutsal Mendil) Uygulama Etkinli i için kullan,lan Materyaller:

Prens tac,, pelerin, melek kanatlar, ve halesi, kuma parças,, foto raf makinesi, Boya çe itleri, (sulu boya, parmak boya, pastel boya, kuru boya) çizim kalemleri, oyun kartlar,, renkli fotokopiler, 35x50 resim kâ ,d,, su kaplar,,

Draman,n Konusu Kutsal Mendil (Efsanesi): saın,n maruz kald, , eziyetler s,ras,nda hasta olan Urfa (edessa) prensi Abgaros, hastal, ,na bir ifa bulmas, üzerine, Hz. saıya bir elçi göndererek yan,na gelmesi hususunda ricada bulunur. Ananias adl, elçi resim yapmaktan anlad, ,ndan saın,n resmini yapmay, dü ünür. Abragosın elçisi beraberinde getirdi i mektubu saıya takdim ettikten sonra Hz. saın,n resmini yapmaya gayret eder. Fakat Hz. saın,n etraf,nda toplanan büyük kalabal,ktan dolay, ba ar,l, olmaz. Elçi uzakla arak ve yüksek bir yerden Hz. saın,n resmini çizmeye çal, ,r. Hz. sa bunu sezinler ve yüzünü y,kamak istedi ini dile getirir. Kendisine uzat,lan bir mendil ile yüzünü kurular ve elçi Ananiası verir. saın,n yüzünün kopyas, mendilin üzerine yans,m, t,r. Elçi Ananias Hz. saın,n yüzü görünen kutsal mendili alarak, Urfa prensi Abragosı takdim eder. Abragos kutsal mendili öAgion Mandilionö yüzüne sürerek sa l, ,na kavu ur. Hastal, ,na çare bulan Urfa prensi Abragos, bu mendili bir tahta üstüne gerdirerek, kentin giri kap,s,nda bir ni içine koydurmu tur. Kutsal mendilden sonra Hz. sa resimleri tasvir edilmeye ba lanm, t,r. H,ristiyan sanat,nda ve Bizans ó slam ili kilerinde önemli rol oynam, t,r..

Müze E itimi ve Uygulama Ders Plan,: proje konusu hakk,nda proje yöneticisine dan, arak, Proje konusu belirlendikten sonra kaynak ara t,r,lmas, yap,ld,ktan sonra, konuyla ilgili s,n,f içinde belgeseller izletilmi ve seçilen müze (Ayasofya müzesi) hakk,nda k,sa bilgiler aktar,lm, t,r. Efsanenin anlat,m,ndan sonra drama için rol alacak ö renciler seçilmi tir.

1. Çocuk sa
2. Çocuk Urfa (edessa) prensi Abgaros
3. Çocuk elçi
4. Çocuk Melek
5. Çocuk anlat,c,(Hikâyeci, sunucu)

Rol da ,l,m,ndan sonra çocuklar bu dramaı, nerede oynayal,m diyerek, çocuklar,n fikri sorulur. Bu drama n,n en iyi oynanacak yer Ayasofyaın,n bahçesidir. Hadi hep birlikte haftaya Ayasofya müzesini hem, ziyaret ederek gezelim, hem de efsanemizi drama yolu ile canland,ral,m. Daha sonrada kutsal mendili kar, ,k teknik ile uygulayal,m m,? Diye sorulmu çocuklarda merak uyand,r,lm, t,r. Müzeye giderken uyulmas, gereken kurallar aç,klan,r ve rol da ,l,m,na geçilir.

Müzedede Uyulmas, Gereken Kurallar:

- Eserlere zarar vermemek ve hiçbir ekilde dokunmamak,
- Yayd, , zararlı, ,nlarla tarihî eserlere zarar verebilece inden dolay,, foto raf çekerken flâ kullanma mak,
- Müze içerisinde ba kalar,n, rahats,z edecek ekilde yüksek sesle konu mamak,
- Müze bir grup halinde ziyaret ediliyorsa gruptan ayr,lmama,
- Sergi salonu içerisinde herhangi bir ey yiyip-içmemek,
- Gezi s,ras,nda hava ko ullar, göz önüne al,narak, buna haz,r,l,kl, olmalar,,
- Gezi s,ras,nda verilecek molalarda da ,lmamalar, gerekti ini aç,klamal,d,r.

Drama Rol Da ,l,m, ve Konu ma Metni:

1. Sunucu; efsanenin metnini okumaya ba lar. Bir zamanlar ülkenin birinde bir prens varm, . Bu prens ülkesi için o kadar çok çal, m, ki bedeni yorgun dü mü ve hastalanm, . Hastal, ,na kimse çare bulamam, . Prens hastal, ,na çare ararken bir gün kutsal topraklarda ya ayan herkese yard,m eden dertlerine çare bulan sa ad,nda birinin oldu unu duyar. Ve saıya bir mektup yazar.

2.Konu mac,: Urfa (edessa) **Abragos:** Hasta halde mektup yazarken görüntülenir(**R.9**). Elindeki mektupla elçisi Ananiası Seslenir. Ananias tez zamanda bu mektubu kutsal sa efendimize ula t,r. Ve ona hasta oldu umu, hastal, ,ma ifa bulmas, için yan,ma gelmesi, için ricam, ilet.

1.Sunucu: Elçi Ananias;



Resim 9: Urfa Prensi (Abragos) sağa Mektup Yazarken



Resim 10: Elçi Ananias Mektubu sağa Sunarken

3.Konu mac,: Elçi Ananias; Ba üstüne efendim.

1.Sunucu: der ve yola ç,kar. Resim çizmekten anlayan Elçi Ananias; Yolda giderken de bir yandan dü ünür. Bu kutsal görev bana verildi. Ben mutlaka kutsal efendimiz sañ,n resmini çizmeliyim bu benim için büyük bir mutluluk olur der. sañ,n yan,na var,r: önünde sayg, ile e ilerek; yüce sa size Urfa prensi (edessa) Abragos; sayg, ve sevgi ile size bu mektubu iletmemi emretti der, mektubu sağa takdim eder (**Görse10**).

1. Konu mac,: Elçi Ananias; Resim defterini ç,kar,r, sañ,n resmini yapmaya çal, ,r. Fakat ba ar,l, olamaz; çünkü sañ,n etraf,ndaki kalabal,k resmi çizmesi için engel olu turmaktad,r.

3. konu mac,: Elçi Ananias, Ben böyle çizim yapamam

1.Sunucu: Der kendi kendine,

3.Konu mac,: Elçi Ananias: En iyisi biraz uzakla ,p yüksek bir yere ç,kmal,y,m oradan daha rahat çizerim. r

1.Sunucu: diye dü ünür (**G.11**). Ama yine ba ar,l, olamaz. Hz. sa Her eyi sezinledi i gibi bunu da sezinler. saøetraf,ndakilere;



Görsel 11: Elçi Ananias sañ,n Resmini Çizmeye çal, ,rken



Görsel 12: sa mendille yüzünü kurularken

4. Konu mac,: (sa) Yüzümü y,kamak istiyorum.

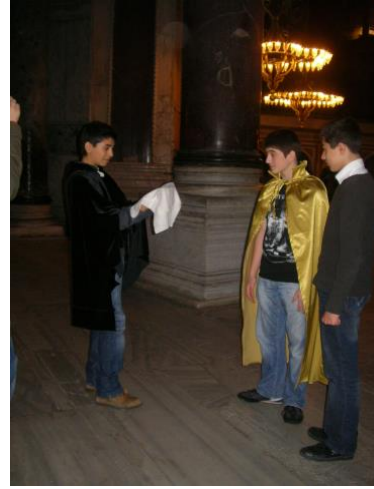
1.Sunucu: Der kendisine uzat,lan mendil ile yüzünü siler ve elçiye uzat,r (R.12). Elçiye mendili prensine götürmesinin söyler. Al bu mendili prensine götür. Hastal, ,na ifa olsun (R.13,14).

1.Sunucu: Elçi mendili al,r ve gördükleri kar ,s,nda a ,r. sañ,n yüz sureti mendile ç,km, t,r. Elçi Ananias mendili al,r Urfa (edessa) Prensı Abragos götürür. Prens mendili al,r. Yüzüne sürer. Hastal, ,na ifa bulur ve elçisine seslenerek.

2.Konu mac,: Urfa (edessa) Prensı Abragos; Bu mendili bir tahtaya gerin ve odan,n ni ine as,n diye emreder. Efsanede burada biter.

Ö retmen: Efsane hakk,nda aç,klama yaparak bu efsanenin H,ristiyan dininde H,ristiyanlar,n sa peygamberin mucize sahibi oldu u inanc, ile ilgili birçok efsane olu turduklar,n, aç,klar. Gerçekle bir ilgisinin olmad, ,n, sadece inançlar aras,ndaki farklı,l,klar, anlatt, , her inanç sisteminin kendine göre yorum ve efsaneler olu turabilece ini çocuklara aç,klar.

Efsane y,llarca gerçekten olmu gibi ku aktan ku a a aktar,lan öykülerdir. Efsanelerde anlat,lan olaylar bazen gerçeküstü olabilir; ama ço unlukla gerçek olaylara ve gerçekten ya am, ki ilere dayan,r. Bu öykülerin ço u kahramanca i ler yapm, ki ilerle ilgilidir.



Görsel 13,14: sa mendili elçiye verir ve Urfa prensine götürmesini söyler. Elçi gördü üne inanamaz

Müze ziyaret planı:

Bir hafta önce s,n,f ortam,nda yap,lan giri etkinli i (ön haz,rl,k) do rultusunda gezi için seçilen müze hakk,nda k,sa bilgi verildikten, Ayasofya müzesi ile ilgili haf,za oyun kartlar, da ,t,larak incelenmesi istenmi tir. Ertesi hafta tüm haz,rl,klar yap,lm, ekilde çocuklar müze ziyareti ve yap,lacak etkinlik için haz,rlan,rlar. Velilerinden izin alma, hava durumuna göre giyinme, yolda ne kadar zaman gezilece i, müzeye var, süresi, müzeyi hangi bölümlerin ne kadar sürede gezilece i, gezi sonunda oynanacak drama etkinli in süresi, arada verilecek ihtiyaç molas,) bilgilendirmeler yap,l,r. Çocuklara Müzenin tarihçesi, kurulu nedenleri dönemleri, dönemlere ait eserleri, sergiledi i kültürleri, hakk,nda genel bir bilgi verilir. Daha önce s,n,f içinde seyrettikleri Ayasofya ile ilgili izlenen belgesel ile gerçek mekân da bulunmalar, aras,ndaki hissettikleri sorulur.

- Belgeseldeki görüntüler mi sizi daha çok etkiledi yoksa burada görerek dokunarak bulunmak m,? En çok hangi eserleri sizi etkiledi?
- Kilise ile cami aras,nda ne gibi farklar gördünüz?
- Bu sütunlar sizce nas,l yap,lm, t,r? Bu kap,lar nas,l bu kadar sa lam kalabiliyor?
- Bizans kültürünü ve bizim kültürümüz kayna t,ran bu yap,ya sizce sahip ç,kabiliyor muyuz?
- Atalar,m,zdan kalan bu ah eserleri ve kültür miras,m,z, korumak ve sahip ç,kmak için bize dü en görevler nelerdir? Uygarl,k tarihimiz hakk,nda ne kadar bilgi sahibiyiz?
- çinizde tarihimize ait ba ka yerleri gören var m,? gören varsa aradaki fark, söyleyebilir mi?
- Günümüzde böyle yap,lar,n yap,lmama sebepleri sizce ne olabilir?
- Bu gezi süresi sizce yeterli mi? Bir daha gelmek ister misiniz? Gibi. Sorular sorulur.

Müzedede daha önce s,n,f içinde e le tirilen kartlardaki eserleri bulmak için küçük bir oyun oynan,r. En çabuk kartlardaki eseri bulan çocu a, müze ç,k, nda, müzeye ait küçük bir hediye al,n,r. Be dakikal,k bir mola verilir. Drama için müzenin bahçesinde uygun bir yer ayarlanarak drama gerçekleştirilir. Drama sonras, ökutsal mendiliö efsanesi serbest teknik ile çocuklardan yorumlamalar, istenir. Bahçe içindeki eserler içine girilmeden incelenir. Müze gezi sonlan,r. Gezi sonras, çocuklara gelecek hafta müze hakk,ndaki izlenimlerini anlatacak k,sa bir Kompozisyon yazmalar, istenir. Müze e itimi ve uygulama sonucunda konunun bütünlü ü içinde, Ayasofya müzesi ile ilgili serbest teknik ile çe itli sanat uygulamalar, yapt,r,l,r. steyen çocu a oyun hamurundan maket, heykel, alüminyum folyodan Ayasofya Kabartmalar,, mozaik çal, malar,, suluboya çal, malar,, ebru çal, malar,, yapboz oyun kartlar,, resimsel hikâye kitab,, iir, masal, kompozisyon gb. Çoklu zekâ kuram, do rultusunda birçok etkinlik yapt,r,labilir (**Görsel 15,19**).

ô **Görsel Zekâ:** Ayasofya müzesi içinde ve d, nda bulunan eserlerin ncelenmesi

ô **Matematiksel Zekâ:** Ayasofya müzesinin tarihini olu um süreci (dönemleri) içinde söylemesi,

ô **Sözel -Dilsel Zekâ:** Duygular,n, sözel olarak ifade etmesi arkada lar aras,nda, fikir al, -veri i yap,lmas,

ô **Bedensel- Kinestik Zekâ:** Drama yolu ile vücut ve beden dilini kullanmak, El kaslar,n, kullanarak çizim yapma

ô **Müziksel- Ritmik Zekâ:** Ayasofya belgeselindeki fon müzi inin dinletilmesi

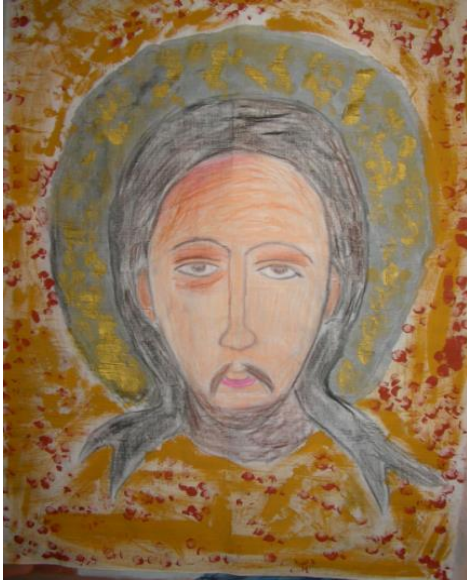
ô **Ki iler Aras, Sosyal Zekâ:** Bir Yeti kinle Proje Üzerinde Grupla Çal, mas,

ô **Ki isel çsel Zekâ:** Sanat eserlerini kendileri ile içselle tirerek resmetmeleri,

ô **Do a zekâs,:** Ülkemizdeki ören yerlerin ve kültür miras,m,z, do al çevresi içinde korunmas,n,n önemini ifade edebilir.



Görsel 15,16: Drama Etkinli inden Sonra Müze çinde Yap,lan ö Kutsal mendilö Çal, mas,ndan bir kare



Görsel 17: öKutsal Mendilö 50 x70 Cm Bez Üzerine Kar, k Teknik çsel Yorumlama



Görsel 18,19: S,n,f çi Ebru çal, mas, (Ayasofya mermerlerine ili kin do al yorumlama)

SONUÇ: Bu Projenin ba ar,l, olmas, mümkündür. Bu projede çocu un sanat eserlerini tarihle ili kilendirmi , tarih ve sanat ile yeni bir bak, ac,s, olu turdu u net bir ekilde görülmü tür. Çocu a kendi tarihimiz, kültürümüz ve sanat,m,z hakk,nda bilgi verilmi , milli birlik ve beraberlik duygusu içinde Atatürk 'ün kurdu u Cumhuriyetin bizim ve her Türk vatanda , için önemi kavrat,lm, t,r. Müze e itiminin tarihimiz için önemi kavrat,lm, t,r. Geçmi ten günümüze kültürel miras,m,z,n ya ad, , a amalar aktar,larak çocu un gelece e bak, , olumlu yönde uyar,lm, t,r.

Bir toplumun geli im seviyesi e itimli ve sa l,kl, öz benli i güçlü, kendi uygarl,k tarihine ve kültür miras,na sahip bireylere ba l,d,r. Uygar ya ama ko ullar,n, sa layabilecek, ara t,rma, inceleme yapabilecek bir e itim bütçesi olmayan bir ülkede, ö retmeni ve sanat e itimcilerini kimse ciddiye almaz. Kültür ve sanat politikalar, olu turulurken kendi siyasi görü leri do rultusunda de il ülkenin ve toplumun ihtiyaçlar, do rultusunda hareket edilmelidir. Sanat ve bilimden yoksun olan kendi kültür miras,na sahip ç,kmayan ülkeler hiçbir zaman medeniyetler seviyesine ula amazlar. Ulu önder Atatürk'ün; *öBir millet sanattan ve sanatkârdan mahrumsa,*

tam bir hayata sahip olamaz. Böyle bir millet bir aya , topal, bir kolu çolak, sakat ve alil bir kimse gibidir. Sanats,z kalan bir milletin hayat damarlar,ndan biri kopmu olur.ö Kültür ve kültür miras,m,za sanata ve sanat e itimcilerine, müzelerin kültür miras,m,z, gelece e aktarmadaki rollerine verdi i önemi bu sözlerle net bir ekilde anlatılmaktadır. Gelece i görebilmek için geçmi i bilmek, bir ba ka deyi le yar,nlar, sadece bugünün de il, geçmi in üzerine ça a uygun yeni fikirlerle in a etmek gerekir ki, bunu sa lamak ise tarihimizi ya atan ve unutturmayan müzelerle gerçekle ebilir.

Atatürk daha Cumhuriyet kurulmadan önce müzecili in önemine de inmi , her alanda oldu u gibi arkeoloji biliminde de dünyanın uygar ülkeleri düzeyinde olmay, hedef göstermi ve hangi dönemde yarat,lm, olursa olsun tüm kültür varl,klar,n,n birer tapu senedi gibi sahip ç,k,lmas,n,n gerekli oldu unu tarihe ve kültüre verdi i de erle her f,rsatta anlatm, t,r. Bu topraklar,n geçmi ine sahip ç,kman,n önemini Ulu Önder TBMM'nin aç,l, ,n,n hemen arkas,ndan **9 Mayıs 1920'de** göreve ba layan ilk hükümetin yapaca , i ler aras,nda eski eserlerin derlenmesi ve yeni müzeler kurulmas,n,n istemesinden anla ,lmaktadır.

- Her türlü tarihi vesika, malzeme ve abideleri bulmak, toplamak, muhafaza ve restore etmek.
- Memleket içinde ve da ,n,k bir halde aç,kta duran tarihi eserleri tahrip etmek, çalmak, satmak, zarara u ratmak ve zamanla kendi kendine harap olma tehlikesinden korumak için hükümetçe bütün tedbirleri almak, gerek içerde ve gerek d, ar,daki müzeler ve kütüphanelerde mevcut eski eserlerin ve tablolar,n kopyalar,ndan koleksiyonlar vücuda getirmek,
- Ankara, stanbul, Bursa, zmir, Edirne de muayyen devirlere ve kültürlere ait eserleri toplayarak bu ehirleri büyük üslupta birer eski eser ve abideler merkezi haline koymak,
- Ecnebi tarih ekspedisyenler,n,n büyük sermayelerle ba ard,klar, kaz,lar,, ileride mali kudretimizin vüs'at, zaman,nda yapmak üzere imdilik, küçük makyaslarda kaz,lar tertibi ile arkeolojik ve antropolojik ara t,r,malar ve ke ifler yapmak,
- Memleket içinde ve d, ,ndaki mühim kaz, ve ke if yerlerine seyahatler tertip ederek, bulunan tarihi eserler ve abideler üzerinde ilmi tetkikler yapmak,
- Hükümete dü en i leri, bu projeleri uygulamakla görevli komisyonlar,n Hükümet nezdinde takip etmeleri, Yabancı, bilim müesseseleriyle ve otoriteleriyle, mütehass,slarla i birli i kurmak, Kültür Bakanl, ,n,n verimli yard,m,, i birli ini sa lamak.

Osmanl,lar döneminde yap,lan kaz, çal, malar,nda yabancı, uzman arkeologlar yer alarak kültür miras,m,z,n ço u bu yolla yurt d, ,na ç,kar,lm, ve ülkemizin birçok de eri kaybolmu tur. Cumhuriyetin kurulu undan sonra Atatürk, müzecilik ara t,r,malar,n,n yan, s,ra arkeoloji kaz,lar,na önem vermi , bu do rultuda Türk arkeologlar, a ,rl,klar,n, duyurmaya ba lam, lard,r.

Müzecili imizin bugünkü durumuna gelince ana kaynak olarak, Atatürk ilkeleriyle s,k, s,k,ya ba lant,l,d,r. Atatürk; Osmanl, imparatorlu unun kültürel birikimini yans,t,rken, Türkiye Cumhuriyetinin yeni kültürel yap, s,yla desteklenmesinin zorunlu oldu unu çok iyi biliyordu. Kültürsüz bir milletin uygar olamayaca , ve uluslar,n kendilerini kültürleri ile kabul ettirdikleri bir gerçektir. Atatürk'ün **öTürkiye Cumhuriyeti ilelebet payidar kalacaktır,** sözleri milli kültürümüzün yüceli inin ifadesidir.

Türk Müzecili in Sorunlar, ve Çözüm Önerileri

Türkiye'deki sanat e itimi ve ö retimi veren e itim fakültelerinin güzel sanatlar e itimi bölümlerinde yer alan müze e itimi ve uygulamalar,ö derslerinin alan çal, malar,n,n gerçekle tirmesi zorunlulu u bulunmaktadır. Bu konunun, ça da müzecilik uygulamalar,n,n , , ,nda sa l,kl, bir ekilde yürütülmesi için siyasilere, üniversite lere ve ça da müzecilik uygulamalar,na yönelme karar, verecek müzelerimize önemli görevler dü mekte ve ilgili çal, malar yürütülerek, hedeflenen noktaya mutlaka ula mas, gerekmektedir.

- 1) Ça da müzecilik anlay, ,n,n temel hedeflerinden ve olmazsa olmaz, e itimidir.
- 2) Müzenin ana kayna , olarak bilgi kabul edilir. Bilginin de eri, anlam, ve yönetimi tart, ,lmal,d,r. Bilginin halka ula t,rma yöntem ve uygulamalar, günümüz ko ullar,na göre yeniden ele al,nmal,d,r.
- 3) Halkla ili kiler konusunda müzenin dar ve otoriter tavr, de i melidir. Halkla bütünle menin yeni ve ça da yollar denenmeli, (seminerler, belgeseller, ilgi çekici bro ürler, halka yönelik bilgilendirici konferanslar).TV. Ana haber sunumlar,nda müzeler ve kültürümüze ait arka fonlar kullan,labılır.
- 4) Müze eserlerini tan,t,lmas,nda devlet eli ile yenilikler yap,lmal,. Müze içinde bulunan bir eseri daha geni kapsaml, tan,t,labılır. Müzeye ait sanat atölyesinde hafta sonu etkinlikleri düzenlenerek; bu etkin likte bu sanat eserinin taklidi yapt,r,labılır. Yapt,r,lan bu etkinlikler müzede uygun bir kö ede sergile nebilir.
- 5) Müzelerde yeni yönetim yap,lanmas,na gidilmeli. Yeterli say,da eleman eksi i giderilmeli, gerekli eserler ve koleksiyonlar gruplanarak bu koleksiyonlar konusunda bilgi sahibi arkeologlara tan,t,m görevleri verilmeli. Bu uzmanlar örn. ta koleksiyonlar, hakk,nda ziyaretçiler için haz,rlanan ön haz,rl,k

- olarak video gösteriminden sonra, ziyaretçilere önderlik ederek eserlerin yeri gösterilerek incelenmesi sa lanabilir.
- 6) Devlet e itime ve müzelere yeterli bütçe ay,rma, sanat e itimi ve bilim adamlar,na yeterli olanaklar sa lanmal,, sanat e itimcilerinin ülke kalk,nmas,ndaki rolü aktifle tirilmelidir.
 - 7) Müzelerin tam olarak ekonomik ve politik e ilimleri saptanmal,d,r. Ziyaretçilerin ihtiyaçlar,n, saptamak için yeni yollar denenmeli, örne in. ehird, ,ndan grup olarak gelen ziyaretçilere bar,nma yeme içme konusunda kolayl,klar sa lanabilir.
 - 8) Müze e iticisinin sa l,kl, ko ullarda yeti mesine zemin haz,rlamak Milli E itim Bakanl, ,n,n en önemli görevi iken, kültürel miras,m,z, korumak ve gelecek nesillere aktarmakta rol alan müzeleri korumak, Kültür Bakanl, ,n,n en önemli görevi olmal,d,r. Çünkü sanatç, ve müze e itimcilerine haz,r lanacak olan bu zemin tüm di er alanlara yay,lacak ve yarat,c, bir nesil yeti tirilmesinde önemli bir rolle sahip olacakt,r.
 - 9) Sa l,kl,, öz güveni olan ça da bireyler yeti tirmek istiyorsak; sanat ve müze e itimi arkeoloji ve sanat,n her alan,nda dengeli politikalar geli tirilmeli ve desteklenmelidir.
 - 10) Her alanda e itim gören tüm ö rencilerin sanat ve müze e itimi ve ö retiminden pay alaca , bir sisteme geçilmesi kültür miras,n,n nesilden nesillere aktar,lmas,nda , ,k olacakt,r. Okullardaki fiziki ko ullar,n iyile tirilmesine yönelik devlet eliyle ciddi çal, malar yap,lmal,d,r. Sanat atölye, araç- gereç eksikli i h,zl, bir ekilde giderilmelidir.
 - 11) Kültür bakanl, , her okula uygun ko ullarda sanat atölyeleri aç,lmal, ve bu sanat atölyelerinde ailelere de sanat e itimi olanaklar, sa lanmal,d,r.
 - 12) Milli E itim Bakanl, ,n,n program,ndaki(görsel sanat dersleri)ve müze e itimi dersinin olmamas, ve sanat tarih derslerinin kald,r,lmas,, Ülke geli imini ileriye de il geriye götürmektedir.
 - 13) Kültür Bakanl, , ve Milli E itim Bakanl, , ortak bir proje olu turarak belli bir pilot bölge seçerek bu pilot bölgede yer alan okullardan dönü ümlü ö renci gruplar, ve ailelere her hangi maddi s,k,nt, verme den; ö renciler (gerekirse velilerde dâhil edilmeli) evlerinden alarak müzelerin do al ortam,nda sanat ve müze e itimi verilmelidir.
 - 14) Okulöncesi sanatsal faaliyetler bu noktada kritik bir hal kazanmaktad,r. Okul öncesi e itimden ba la yarak tüm e itim basamaklar,nda müze e itim dersi konmal,, müze kö eleri ve kollar, olu turulup kültürel miras,m,z, tan,tmal,y,z.
 - 15) Unutulmamal, ki kültür sanat, olmayan bir toplum yok olmaya mahkûmdur. Bu durumda okul öncesi e itimin dört ya æa indirgenmeli, çocu un sanatla tan, mas, sa lanmal,d,r. A aç ya ken e itilmeli sözü unutulmamal,d,r. Bu konuda aileler bilinçlendirilmeli bu Milli E itimi Bakanl, ,n,n görevi olmal,d,r.
 - 16) Ça ,m,zda sanat e itimcilerine, toplum bilimcilerine ve felsefecilere duyulan ihtiyaç, artacakt,r. Bilgi ça , toplumlar,n, sanat,n tüm alanlar,nda bilgi birikimini kendi estetik sürecine dâhil ederek, yarat,c, yorumlar,n, sürdürmesine olanak vermektedir.
 - 17) Sanat e itimi ile tarih, kültürel ve sanatsal miras, korumas,n, bilen kendi kimli inin bilincinde olan, uluslararası, piyasan,n rekabet ko ullar,na uyum sa layabilecek yeni nesiller yeti tirilmelidir.
 - 18) Bu dü ünceden hareketle, sanat ve kültür politikalar, olu turulurken Atatürk dönemi Türkiye'sinin kültür ve sanat politikas,n, kararl, bir tutumla ça ,n olanaklar,na uygun olarak sürdürmelidir.
 - 19) nsanlar,n dü ünceden yoksun, bilimden uzak ara t,rmayan, sorgulayamayan bireyler yerine, ülke geli imine katkı sa layan bireyler yeti tirilmelidir. Sanatsal yap,tlar, ve kültür miras,n,n halka tan,t,lmas,nda medyan,n önemi büyüktür. Sanatç,lar devlet eli ile desteklenerek toplumumuzun kültür de erlerine uygun yararlar, projeler üretilmelidir. Pembe diziler hiçbir ülkeyi kalk,nd,r, mam, t,r.
 - 20) **Müze- E itim ili kisi** göstermelik yürütölmektedir. Hem " Genel e itim" hem "Sanat e itimi " için müzeler mutlaka e itim sistemine dâhil edilmelidir. E itim Fakülteleri ile Müzeler aras,nda s,k, bir ili kinin ve i birli inin kurulmam, olmas, çok önemli bir eksiklikler.
 - 21) Gerçek anlamda sanatç, ve müze e itimcileri yeti tirmek isteniyorsa, e itim fakülteleri yeniden yap,lan d,r,lmal, ve geçmi e dönük yap,lan hatalar,n nedenleri sorgulanmal,, yanl, lar düzeltilmelidir. Bunun için ciddi siyasi dü ünceden ba ,ms,z toplumun tüm kesimine ve ülkenin yarar,na uygun güçlü bir devlet politikas, gereklidir.
 - 22) Üniversitelerdeki sanat tarihi ve arkeoloji bölümlerinin güçlendirilmesi, Buradan mezun olacak olanlara i imkânlar,n,n sa lanmal,d,r. Bu iki alan birle tirilmelidir.
 - 23) Sanat ve müze e itimi dar bir kal,pta de il, toplumun her kesimine ula t,r,lmal, bunun için Milli E itim Bakanl, ,n, ve Kültür Bakanl, ,n,n kendi politikas,nda 7 den 70 sanat e itimi ve müze e itimi bilincini olu turmal,d,r.
 - 24) Üniversiteler ve Kültür bakanl, , i birli i ile ya am boyu e itim kurslar, düzenlenerek sanat tarihi, uygarl,k, estetik ve müze e itimi dersleri verilmeli kat,l,mc,lardan bu alanlarda gönüllü gruplar, olu turulmal, ve bu yolla kültür miras,m,z, tan,tmaya katkı sa lanarak, Özellikle ailelerin ve toplumun sanat derslerine kars, bak, aç,lar, de i tirilmelidir.

- 25) Toplumda sanat e itiminin ve kültür ve sanat,n önemini kavrayan bir halk taban, yoksa tüm çabalar bo a gidecektir. Bu konuda devlet, yerel yönetimler ve gönüllü sivil toplum kurulu lar, ile i birli i yaparak, mahalleler baz,nda her ya a uygun sanat atölyeleri aç,lmal,d,r.
- 26) Müzeler özelle tirilerek ticari merkezler haline getirilmi , bu zihniyet ile kültürel varl, ,m,z yans,tan müzelerimizin do al dokusunu bozmaktad,r. Müzelerin do al dokusunu bozmadan ve her müzenin kendi ruhunu yans,tan sanatsal faaliyetlere yer verilmelidir.
- 27) Sanat zengin müze dü küni birkaç ayd,n,n tekelinde olmamal,d,r. Son dönemlerde sanat,n ticari amaçl, üretildi i görülmektedir. Birkaç marka isimle sanat geli imi ve kültürel miras,m,z geli emez. Tam tersi sanatsal e itime ve kültürel miras,m,za ket vurmaktad,r.
- 28) Sanat ve müze e itimi di er dallarla (disiplinlerle) bütünle tirmelidir.
- 29) Avrupa birli ine girme merak, olanlar,n, öncelikle kendi kültürünü benimsemi sahiplenmi olmalar, gereklidir. Bunun için her eyden önce bat,l,n,n kendi kültürünü nas,l sahiplendi ini ve sanat bilincinin nas,l geli ti ine dair ciddi bir e itim ald,klar, göz ard, edilmemelidir.
- 30) Müzeler aras, i birli i yap,larak, mekânlara uygun dönü ümlü sergiler aç,labilir
- 31) Müzelerimizde halen depolarda bekleyen ve sergilenemeyen (nedeni bilinmemekte) Eserlerin su yüze ç,kar,lmal,d,r. Özellikle Ayasofya müzesindeki Bizans dönemine ait ikonalar, kapal, olan kütüphane gb.

Son söz 21 yy. sanat e itimi; Ça da bireyler yeti tirmeyi amaçlamal,, ulusal kimli i ile ba lant,y, koparmadan uluslararası, arenada söz sahibi olacak bir sanat e itimi modelinden vazgeçmemelidir. Sanat dersleri Atatürk ve Cumhuriyetin temel ilkelerine ba l,: ça da geli meleri kavraya bilen, vatan,n,, milletin, seven y,lmadan çal, acak, onurlu, ahlakl,, kararl, ve özgüvenli ku aklar,n yeti tirilmesinde temel bir de ere sahip olacak ekilde programlanmal,d,r.

Müzelerde tarihin ayak izlerini görürüz. Bu kurumlar iyi alg,lan,r, ara t,r,l,r ve üzerinde yeterince çal, ,l,rsa yeniden yarat,lan ürünlere ve eserlere kendi kimli imizi verebilir ve böyle bir çabayla gelecekte toplum olarak evrensel boyutta kendimize ba ar,l, bir yer buluruz. Müzeler insanlara esin veren, yarat,c,l,klar,n, kamç,layan, zevkle gezilen ve ö renilen ve ö retilen mekânlar olmal,d,r.

Ne yaz,k ki ülkemiz kültür kurumlar,na özellikle, kültürel miras,m,z, gelece e aktaran müzelerimize heyecan ve ça da l,k getirecek, merak ve ara t,rma iste ini ço altacak, gelece e günümüzden bir eyler aktaracak, eskinin üzerine yeni bir ça da fikir in a edecek sürekli bir kültür politikam,z yoktur. Sadece göstermelik maskelerle gerçe i örten popülist politikalar uygulanmaktad,r. Yap,lan çarp,k kentle meler. Kentsel dönü üm maskeleri alt,nda getirim sa layan bu popülist politikac,lar,n kendi geleceklerinin d, nda hiçbir kayg,lar, bulunmamak tad,r. Bu topraklardaki kültürel miras onlar, ilgilendirmemektedir. Okul içi e itim ya ,n, geçmi ve toplumun büyük bir k,sm,n, olu turan insanlar,m,z, nas,l e itece iz. te burada Atatürk ilke ve ink,lâplar, do rultusun da en önemli görev ö retmen, sanatç, ve müze e itimcileri ba ta olmak üzere ça da e itim kurumlar,na dü mektedir. E er e itim yuvalar,n,n içi bo ise; ister e itim 8 y,ll,k, ister 12 y,ll,k, ister 4 +4+ 4 olsun de i en bir ey olmaz. E itimin içi ve yeti tirdi i e itimcinin ne kazanaca , beyinlerin nas,l ayd,nlanaca , ve gelece e katk,s,n,n ne olaca , tart, ,lmad,r.

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La Fete De La Francophonie and Intercultural Communication of French University Students in Indonesia

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ABSTRACT

The study portrays the development of students' intercultural competence through La Fete De La Francophonie activities. In developing the language skills, the French students need to explore the French culture as part of their learning process to develop the language and intercultural competences. La Fete De La Francophonie activities are designed to commemorate Francophonie Day which is held on every March 20. The activities give a broad opportunity to students and lecturers to interact with the French people and Francophone for approximately a week. The qualitative research approach is employed as a research methodology which involved 20 participants. The study result shows that the intercultural competence of participant developed because of this activity. The activity also involved participants from other countries such as Switzerland, Canada, Belgium, Morocco, Algeria, Laos and Vietnam.

Keywords : *La Fete De La Francophonie, intercultural competence, France as foreign.language, university student*

Introduction.

La journée de la francophonie is a worldwide celebration of international organization of La francophonie which takes place on March 20th of each year.

This event is created in 1988 as the way for 220 million francophones on 5 continents celebrate their shared language and the diversity of La francophonie, through many competitions as word competition, films festivals, songs festivals, literally meeting, gastronomic meeting and artistic meeting.

The event was in colaboration with FIPF (Federation International des Professeurs de Français), RFI (Radio France International), AUF (Agence Universitaire Français), TV5 monde. In Indonesia, francophonie is held through various activities which is initiated by France Embassy cooperate with Swiss, Canada, Belgia, Algeria, Maroco, Vietnam & Laos Embassy. Francophonie celebration is held regularly. At the beginning the event was held in big hotels that affiliated with Accor Group, but in 2000 the event moved to campus. Embassy

of francophone countries and France Embassy in Jakarta cooperate with French study program in UNJ (State University of Jakarta) and UI (University of Indonesia) to started the event in the campus.

Approximately in 2010, UIN (State Islamic University) open French course and colaborate with IFI (Institut Français d'Indonésie), and then francophonie event held in those three campus. Francophonie event started with opening ceremony and then various activity such as singing, speech contest, debate contest, drawing contest, photography, writing contest, francophonie movie screening and ended with closing that usually consist of announcement of each contests' winner. The closing ceremony usually held in France Ambassador's residence in Jakarta. But, last year the closing was held in University of Indonesia.

French study program of UNJ, one of participants in francophonie event, always participate every year. In 2011 French study program UNJ hosted this big event. The opening ceremony of francophonie event was held in Teacher Certification Building UNJ, that was attended by Catherine, France Ambassador of Indonesia, Canada Ambassador, Swiss Ambassador, representative from Maroco, Algeria and Laos. The event also attended by FBS Dean, UNJ Rectorate, Representative from UI, UIN, IFI and student from French study program of UNJ, UI and student representative from UIN.

Francophonie event in March 2017 was held also in French study program UNJ. The opening was held in University of Indonesia that was attended by France, Swiss, Canada, Maroco and Algeria Ambassador. The debate contest took place in University of Indonesia was held in French which is involved by 40 students from UI and UNJ. It is also involved by the native speakers Immene and Amel.

French Study program UNJ celebrate francophonie by making singing and speech contest in French. Singing and speech contest who was followed by High School student from Jakarta. The jury were Josef, native speaker from Canada Embassy and Amel from France Embassy. All activity in celebrating francophonie that was followed by student always involved native speaker from France or francophonie country. So, during francophonie event for seven days, a cultural communication was certainly happen among the participants.

Non direct cultural communication also happen during france movie screening and francophonie that was held for four days. The movies was screened and discussed in class and used France language.

Based on activity above it is concluded that there are intense intercultural communication when francophonie held. This writing will discuss on how intercultural communication happen, whether this activity gives positive impact on student intercultural ability and other things that related to this activity. Chornet and Par in Journal of Intercultural Communication, March 2017 staated that acorollary of understanding speech codes through six steps iterctive training cycle is the development of emic intercultural communication competence and sensitivity (journal of intercultural communication , ISSN 1404-1034, march 2017). Thus intercultural communication competence enhancement can be achieved in many ways.

To know whether intercultural communication ability increase, questionnaire is used as data collection tool and comes with a portfolio that tells experiences, comments, suggestions and critics after they follow the activities of la semaine de la francophonie.

To discuss the matter above, the definition of intercultural ability according to experts will be presented. Intercultural communication simply define as communication done by minimum of two people with different cultural background. The culture differential can cause missunderstanding and fatal missunderstanding. The missunderstanding can cause lack of communication. The obstacles in intercultural communication usually caused by the different of language that used by two persons that communicate, different of culture and different of value. According to Ting-Toomey in Cinfo, intercultural communication definition build on these elements:

- deux personnes (ou deux groups), de cultures différentes, en interaction, négociant un signifié commun. (Véronique Schoeffel et Phyllis Thompson, 4 :2007).

Those definition explain that intercultural communication happen if there are two persons or two groups with different culture interacting and negotiating with same language. The word *negotiation* in those definition is very important because in intercultural communication, a communication is not the only important thing, but moreover to understand between communication participants.

It is the same with Gudykunst & Kim notion in Fathur Rokhman (2013: 100) stated that intercultural communication understood as oral transaction process, symbolic process that involved attribution of meaning between individuals from different culture. Therefore to have good intercultural ability someone should understand and receive other culture, because if it is not, then shock culture happens. Transactional process what is meant above related to negotiation of meaning. In negotiation of meaning, individuals that communicating should *experience either light obstacle or correct obstacle*.

According to Lewis and Slade in Fathur Rokhman, at least there are three sectors that become a problem in intercultural change, there are language constraints, different of value and different of pattern of cultural behaviour (Rokhman, 2013 : 100).

Language constraints become the main problem, because in verbal and non verbal communication a difficulty will occur if someone using different language. For example, Indonesian that communicate with French. If both of them don't understand both languages, misunderstanding will happen. Sometimes although Indonesian can speak France and communicate with French, some constraints still happen.

Every country must have their own values so if two persons with different language and culture communicate, constraints still happen. While pattern of cultural behaviour is the reflection of a country, so each country have a different pattern of cultural behaviour, therefore it is also become the problem. From the three constraints, language constraint is more easy to handle. Because language can be learn by themselves or participate in a private course or in an institution.

To have intercultural ability, a student must have three characteristics above plus things like stereotype and prejudice. Stereotype is people view of others or other group based on limited knowledge of others or group.

Intercultural ability can be developed if each side that interact can eliminate or minimize cultural misunderstanding such as prejudice and stereotype. And if each side can arrange or manage worry or uncertainty that exists.

In globalization era like today, the meeting between two cultures or more cannot be avoided. Therefore intercultural ability is indispensable by everyone, moreover student that learn French language. In the la fete de la francophonie event organized by the French study program, French and the people of francophone country was involved, so there is a meeting

of two or more culture, and it gives the students and lecturers opportunity to be able to increase the intercultural communication competence.

Metodology

This research followed by 20 respondents that was active in La fête de la Francophonie event. They are debate participants at University of Indonesia and also active as committee in Francophonie event in UNJ. Therefore, they also hang out and interact with French and Francophone at the event.

To know their intercultural ability, measurement instrument is used. The instrument was in the form of writing that tell about message, comment and everything connected with La fête de la Francophonie event. From their writing, (portofolio) it is found that their intercultural ability has developed.

Findings

After data were analyzed, these are the results:

1. Understanding French people in this case native

For example statement M.N:

- Grace à ce concours-là, j'ai obtenu plus d'information sur les caractéristiques de chaque pays francophone.
(Thanks to this competition, I obtained more information on the characteristics of each francophone country)

Statement HK :

- Je suis arrivée à l'heure mais le natifs ne sont pas arrivées quand j'ai été là. Mais enfin je comprends que pour le rendez-vous avec des français, 15 minutes de retard, c'était normal.
(I arrived on time but the natives haven't arrived when I was there. But finally I understand that for the appointment with French, 15 minutes late, it was normal)

Statement F.

- Je peux collaborer avec des autres étudiants et des natifs.
(I can collaborate with other students and natives)

Statement N.K :

- Nous nous sommes entraînés par les natifs : Madame Amel Bouchekouk et Madame Immène Maa donc j'ai compris comment le natifs nous entraînent et c'est dur.

(We trained by the natives: Mrs. Amel Bouchekouk and Mrs. Immène Maa so I understood how the natives train us and it's hard)

2. Understanding vestimentaire style.

Statement I.N.

- Je comprends qu'aujourd'hui, la jeunesse a son propre style vestimentaire et je peux le respecter.

(I understand that today, the youth has its own style of dress and I can respect it)

3. Understanding culture of francophone's country.

Statement N.W.

- Je suis dans le groupe de Maroc, et Je comprends petit à petit le Maroc, les gens de Maroc, les vêtements et la culture.

(I am in the group of Morocco, and I understand little by little Morocco, the people of Morocco, the clothes and the culture)

Statement N.K:

- Le nom de notre group était Canada, alors dans ce débat le nom de chaque groupe a utilisé le nom de pays francophones. Et moi je dois savoir ce pays.

(The name of our group was Canada, so in this debate the name of each group used the name of francophone countries. And me, I must know this country)

4. Could cooperate with French people or francophone.

Statement M.N.

- Le plus important de tout cela, la relation entre des étudiants et des natifs est bien construite.

(Most important of all, the relationship between students and natives is well built)

Statement HK:

- Je peux collaborer avec des autres étudiants et des natifs.

(I can collaborate with other students and natives)

Statement TL:

- Avant j'ai peur de participer à cette activité mais enfin j'ai réussi de le faire.

(Before I was afraid to participate in this activity but I managed to do it)

Statement Ina:

- D'abord je ne suis pas sûre que je peux y passer enfin j'ai pu y participer.
(At first I'm not sure that I can pass it, finally I could participate it)

Statement NK:

- J'étais choquée quand notre professeur m'a informé pour participer à ce concours, enfin j'ai réussi de résoudre ce problème et j'ai été contente.
(I was shocked when our teacher informed me to participate in this contest, finally I was able to solve this problem and I was happy)

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LANDSCAPE CHARACTERIZATION OF E-LEARNING RESEARCH IN THAI EDUCATION

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The changing technological, economic, and demographic environments are challenging higher education institutions across the world. They are driving the creation of new types of learning platforms, which are in turn driving changes in instructional design, curriculum design, pedagogy, assessment and evaluation, as well as educational policy. Most of these changes have been designed to serve diverse learners and, above all, to improve learning and teaching effectiveness. This study aims to characterize the landscape of e-learning research, particularly in Thai higher education across a 10-year period. Relevant articles and documents have been identified, collated, and processed to develop a longitudinal data set for the purpose of content analysis and text mining. The results from exploring the patterns and trends and the association between topics will be of great use to educators and researchers, helping them to map out research trends, and ultimately comprehend and characterize significant phenomena of what constitutes e-learning research across the last decade. This study will make a significant contribution to both practice and research by giving a better grounding of what is happening in the field and what is missing.

Close

LEADING SOFTWARE DEVELOPMENT METHODOLOGIES IN CENTRAL EUROPE

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ABSTRACT

This paper describes results of research undertaken to obtain information about used methodologies and their combination by SW companies in central Europe. Research was processed as an anonymous online questionnaire. It was addressed a wide range of software development companies. It was the company developing in a commercial, personal, governmental and non-profit sector. These companies engaged in mobile, desktop or web development. These companies are focused on mobile, desktop, or web development. This research followed previous research of software development in Czech Republic. Combination of these two researches could determine the most used methods of software development in across the central Europe. Results of this research could be used in the teaching of software engineering (Veselá, Krbeček, 2016).

INTRODUCTION

Large number of new software is developing every day. Software development could be done in several ways based on standardized methodologies. Selection of the right methodology is a key part which could affect time and quality of development. This paper describes results of research undertaken to obtain information about used methodologies and their combination by software development companies in central Europe. Research was processed as an anonymous questionnaire. It was filled by the leading members of the development team or person responsible for the choosing of process for software development. It was divided into three main parts. First part was about main information of software companies (size, type, software platform, ...), second part was focused on used methodologies and third part was focused on custom software development process (Veselá, Krbeček, 2016).

THE STUDY

There are several methodologies to develop software. These methodologies can be divided into two main groups: "Traditional" and "Agile". Traditional development approaches have been around for a very long time. Traditional methodologies may be characterized by a sequential series of steps like requirement definition, planning, building, testing and deployment. These methodologies must follow the exact development process (Awad, 2005), (Xie, Shen, Rong, & Shao, 2012).

Everything changed in 2001. Seventeen process methodologists held a meeting to discuss future trends in software development. There was created Agile 'Software Development' Manifesto. Representatives from Extreme Programming, SCRUM, DSDM, Adaptive Software Development, Crystal, Feature-Driven Development, Pragmatic Programming, and others ("Manifesto for Agile Software Development", 2001). This manifesto brings new possibility in software development. The Agile methods place more emphasis on people, interaction, working software, customer collaboration, and change, rather than on processes, tools, contracts and plans. Agile developers are more flexible through their iterative style of work than Traditional developers. The main advantage of Agile methodologies is that the Agile methodologies allow clients to make changes throughout the development process. (Awad, 2005), (Al-Zewairi, Biltawi, Etaiwi, & Shaout, 2017).

FINDINGS

Questionnaire was sent to SW companies across central Europe. It was divided into three main parts and consists of 30 questions. It was filled by the leading members of the development team or person responsible for the choosing of process for software development. First part was about main information of SW companies (size, type, software platform, ...), second part was focused on used methodologies, and third part was focused on custom software development process. The survey was undertaken during the period from January to June 2017 (Veselá, Krbeček, 2016).

Responses were used to answer these questions like:

- What types of methodologies are used (Traditional/Agile)?
- What principles are used in development process most?
- Are there newly created methodologies or the commonly known are used?

From the first part of the questionnaire, we found that all of the companies work for a commercial sector. The size of companies was represented by numbers of employs. Main part of respondents (45%) has 16-30 employees. Next main group of respondents (28%) can be considered as small companies since they have 1 to 5 employees. Next aspect of company identification was number of new project per year quarter. Main part of respondent (54%) has 1 to 5 new projects. Second group (32%) has 6 to 10 new projects.

A. What types of methodologies are used (Traditional/Agile)?

Data shows that the trend of using Agile methodologies is more popular than Traditional methodologies. In previous research in Czech Republic the trend was quite balanced between Traditional and Agile methodologies (Veselá, Krbeček, 2016), see Figure 1 and 2.

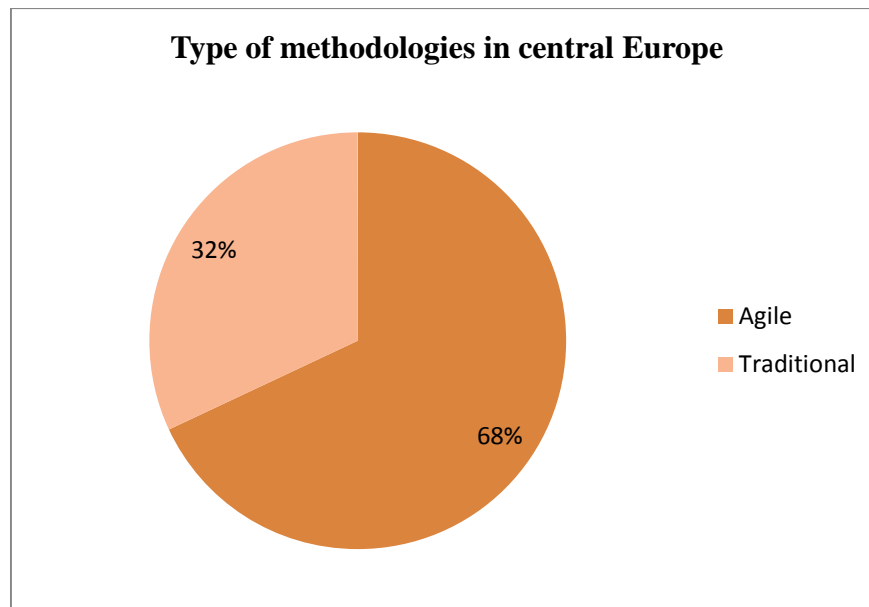


Figure 1: Type of methodologies in central Europe

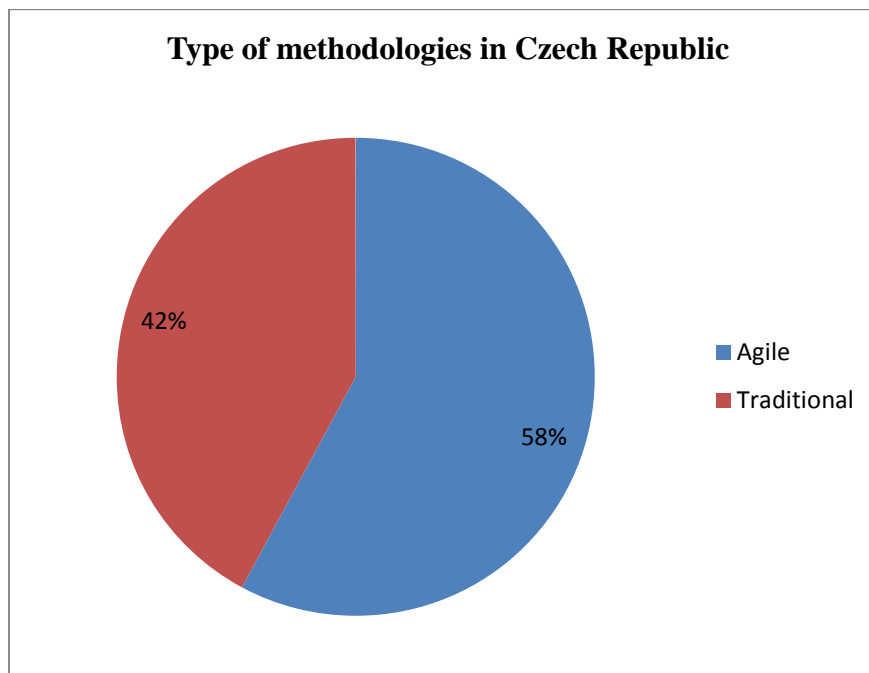


Figure 2: Type of methodologies in Czech Republic

Almost 70% of the respondents claim to have knowledge of both types of methodologies very height. It shows that people working in area of development software have good knowledge about possibilities and ways of development. They can choose from several ways of development.

B. What principles are used in development process most?

The most used principle is "Regular meetings of the development team". This principle is based on Scrum methodology, which is mentioned bellow (Table 3 and 4) as the most known methodology. It is followed by principles "Development is customized for each project", "The rapid development, prototyping and client involvement" and "A quick start of development". Least used principle is "Development process repeatedly follows several parts in spiral". Full data can be seen in Table I. below.

Regular meetings of the development team	35
Development is customized for each project	29
The rapid development, prototyping and client involvement	21
A quick start of development	16
Actions follow consecutively	14
A predetermined rules	10
First are test scenarios and then code	9
Learning from mistakes	8
Ordinary activities are tightened to extremes	5
Development is carried in small sections so called features	4
Development process repeatedly follows several parts in spiral	3

Table 1: Basic principles of development in central Europe

In previous research in Czech Republic was the most used principle "Regular meetings of the development team". "A predetermined rules" and "Development is customized for each project". Full data can be seen in Table II. below. (Veselá, Krbeček, 2016).

Regular meetings of the development team	20
A predetermined rules	19
Development is customized for each project	18
Ordinary activities are tightened to extremes	16
Actions follow consecutively	12
Development process repeatedly follows several parts in spiral	11
First are test scenarios and then code	11
The rapid development, prototyping and client involvement	8
Learning from mistakes	8
A quick start of development	5
Development is carried in small sections so called features	4

Table 2: Basic principles of development in Czech Republic

There are some comments filled in by respondents:

- A quick start
- Low ongoing costs
- The core team of experts is on permanent stand-by with the flexibility to engage coders and other staff on part-time basis.

- Flexibility of operations because clients may be change by them requirements specification at any time
- Clients have the right to control the work of the team.
- At all parts of the project development the client has access to the team and can see the progress.

C. Are there newly created methodologies or the commonly known are used?

In this part was intended to answer this question. None of obtained custom development process descriptions contain any new principle or part. All process was composed from principles contained in standard methodologies.

In the small companies is used a more liberal approach. The methodologies can be modified by other practice from other methodologies. In the large companies are used more Traditional methodologies because they can plan the added complexity of running and a sequential series of steps like requirement definition, planning, building, testing and deployment (STOICA, MIRCEA, & GHILIC-MICU, 2013).

Scrum	41
Waterfall development	39
Extreme Programming	25
Dynamic software development	19
Test driven development	16
Rational Unified Process	15
Rapid application development	13
Crystal	12
Adaptive software development	8
Unified Process	6
Lean development	4
Feature driven development	3
Spiral development	2

Table 3: The most used methodologies in central Europe

Scrum	34
Waterfall development	23
Test driven development	23
Rapid application development	20
Extreme Programming	20
Rational Unified Process	19
Lean development	13
Spiral development	12
Feature driven development	11
Unified Process	9
Adaptive software development	0
Dynamic software development	0
Crystal	0

Table 4: The most used methodologies in Czech Republic

CONCLUSIONS

Field of software development is a very important part of information communication technologies. It could be done in several ways based on standardized methodologies. Research shows that the most known and used methodology is SCRUM. This Agile methodology has gained wide acceptance in the world. It is especially effective for developing custom web and mobile applications.

Agile methodologies can be described by following claims (Awad, 2005), (Al-Zewairi, Biltawi, Etaiwi, & Shaout, 2017):

- People and interactions are more important than processes and tools;

- Working code is more important than perfect documentation;
- Cooperation with customer is more important than contractual commitments;
- Response to changes is more important than sticking to a plan.
- Agile development methodology is especially effective for projects with limited timeframe. It requires minimal documentation at all stages of project development.
- Close interaction of clients with the development team provides quick response to client's requests.

This research followed previous research of software development in Czech Republic. Combination of these two researches could determine the most used methods of software development and will lead to design of a new hybrid methodology for software development.

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LEARNING ABOUT SAFETY, PREVENTION AND QUALITY OF LIFE THROUGH PBL: IMPLICATIONS FOR TEACHER EDUCATION

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ABSTRACT

In Problem-Based Learning (PBL) students learn 'new' knowledge by solving problems. Studies focusing on the efficacy of PBL for the learning science content knowledge are rare and their results are not fully consistent. This study aims at: comparing the effectiveness of a transdisciplinary PBL and traditional teaching with regard to students' learning of science knowledge within the scope of the theme Safety, Prevention and Quality of Life; finding out students' opinions on transdisciplinary PBL approach. The sample is made of two 9th grade classes of a school located in the north of Portugal. The experimental class (24 students) approached the theme through PBL in an integrated way that is, Natural Sciences and Physical Sciences teachers pooled together the concepts that they were supposed to teach and organized PBL oriented teaching as if those concepts belonged to a single school subject. The control class (25 students) studied the same theme through traditional teaching, with the concepts of each school subject addressed separately by each one of the teachers. Data relative to content learning were collected by means of a pre- and a post-test and data relative to PBL students' opinions on the new teaching approach were collected through an opinion questionnaire. Results indicate that transdisciplinary PBL led to a bit better results than traditional teaching and that students valued PBL.

CONTEXT OF THE RESEARCH

Problem-Based Learning (PBL) is a student-centred teaching approach that is consistent with the key principles of active learning as it is defined by Savery (2006) and Tan (2004). In a PBL learning environment, students are at the centre of the teaching and learning process (Barrows 1986; Barrows, 1996; Boud & Feletti, 1997; Lambros 2002; Hmelo-Silver, 2004) and they play an active role in it as they have to take the appropriate actions to learn (deeply) knowledge (that is new to them) by solving problems (Dahlgren, Castensson & Dahlgren, 1998).

In a PBL approach, problems are the starting point for learning (Barrows, 1986; Barrows, 1996; Dahlgren, Castensson & Dahlgren, 1998; Lambros, 2002; Hmelo-Silver, 2004). They determine what students learn, as this depends on the problem-solving process demands concerning knowledge and skills. Problems are qualitative or quantitative statements that offer an obstacle to problem-solvers who have to find strategies to overcome the obstacle and to reach a solution (Pozo, Postigo & Gómez-Crespo, 1995; Neto, 1998; Jonassen, 2004). To succeed in doing so, students need to use conceptual and procedural knowledge within the scope of the field(s) of the problem, as well as appropriate problem-solving strategies (Hmelo-Silver, 2004). Usually, problem-solvers do not possess all the necessary knowledge and skills and therefore they need to develop them (through study, inquiry, etc.) before being able to reach a good solution (if there is one for the problem that is at stake) or concluding that the problem has no solution.

In a PBL learning environment, teachers do not teach in the usual sense (Dahlgren, Castensson & Dahlgren, 1998; Chin & Chia, 2004). They are not there to *tell science* or to even to explain science concepts to students (Leite & Esteves, 2012). Thus, there is a risk that they feel that they are not playing their role as teachers (Li & Du, 2015). If it is the case, it may interfere negatively with the learning environment, as they may reduce students' learning freedom and responsibility. This is why teachers may need support (Goodnough & Nolan, 2008; Pepper, 2009; Morgado, 2016) before they are used to and become comfortable with PBL.

However, as it was discussed in another paper (Leite & Esteves, 2012), in a PBL context, teachers have a variety of important roles to play and many key things to organize and monitor. Above all, teachers *are there* to stimulate students' curiosity through scenarios or problems that interest to students and that make them feel willing to engage into a problem-solving process (Lambros, 2002). In doing so, teachers provide students with learning opportunities that these may feel as being relevant for school as well as for daily life purposes. Nevertheless, within school systems that acknowledge curricula which are not problem-based (as defined by Boud and Felletti, 1997) students' learning possibilities are often conditioned by the problems that are selected by the teacher. As a matter of fact, when making this selection, the teacher bears in mind a mandatory curriculum that requires certain concepts, laws and theories to be taught and learned at a given school level.

Besides, teachers have other key roles to play, namely to guide students' work towards learning goals achievement and to ascertain that learning takes place (Dahlgren, Castensson & Dahlgren, 1998; Hmelo-Silver, 2004). In the

former case, teachers need to prevent the possibility of having students stuck before some difficulty, as this would cause demotivation and even frustration along with waste of time. The idea is not that the teacher gives direct answers to students' questions but rather that he/she 'answers them' by asking other questions (Hmelo-Silver, 2004) that make students think about relevant issues or rethink some procedures, or redistribute the group roles, etc. In the latter case, teacher needs to ascertain that learning takes place. To do so, he/she needs to use appropriate tools both during the problem-solving process (e.g., questioning the problem-solving teams about their achievements and the foundations of their actions) and afterwards. In fact, by the end of the process, teacher should promote a new knowledge synthesis (Hmelo-Silver, 2004) or revision (if necessary) and a retrospective analysis of the problem-solving process. On one hand, asking students to make the synthesis themselves can make evident the need for knowledge revision through appropriate remediation strategies, which should be student-centred, consistently with the PBL underlying philosophy. On the other hand, the retrospective analysis can help students to develop an awareness of the problem-solving strategies that showed to be more or less useful, as well as the team members' actions and behaviours that were more or less productive and consistent with the group's mission. Arguments for teaching science through a PBL approach (see, for example, Hmelo-Silver, 2004; Lambros, 2004; Azer 2008) assume that PBL may enable students to:

- learn science content knowledge, as problems focus on some science issue that is new or partly new for the students and that needs to be mastered before the problem solution is reached;
- learn procedural knowledge, including problem-solving skills and science process skill, as students need to find the most appropriate strategies to solving the problem. Reaching this goal may require the use of several process skills, some of which may be new to the students;
- develop interpersonal skills, as PBL is usually done in small groups or teams whose members need to cooperate so that they can reach their common goal that is to find one or more solutions for the problem, if it has a solution;
- develop communication competences, as they need to read, write, prepare materials, do presentations and discuss, at least, with colleagues and teacher.

These arguments are consistent with, for instance: Dewey's ideas of learning as a social process; Piaget's idea that learning depends on the learner's logic-mathematic reasoning abilities (Piaget, 1979); Vygotsky's idea that learning takes place in social contexts in which the teacher should scaffold the students (Palincsar, 1998; Tan, 2007); Bruner's idea that students learn better by doing (Palincsar, 1998); and Ausubel's idea that the type of learning that matters is meaningful learning which requires knowledge to be integrated into the cognitive structure of the learner (Ausubel, Novak & Hanesian, 1980).

Despite the convincing arguments for PBL, reviews of research focusing on the effects of PBL on science learning (e.g., Albanese, & Mitchell, 1993; Demirel & Dağyar, 2016; Dochy et al, 2003; Leite, Dourado & Morgado, 2016) do not provide unequivocal support for PBL as a teaching approach. In fact, PBL students' conceptual learning results are often similar to the ones attained through conventional methodologies and seldom overcome them. However, there are two aspects in favour of PBL that deserve being stressed: no PBL-based published research was found leading to lower results than the traditional approaches; PBL fosters the development of relevant learning components other than the conceptual one. However, it should be noted that some research studies have methodological limitations (Albanese & Mitchell, 1993; Hung, Jonassen & Liu, 2008; Leite, Dourado & Morgado, 2016) that reduce the credibility of the results attained.

Research on teachers' reactions towards PBL suggests that they fear (Goodnough, 2008; Leite et al, 2013; Morgado, 2016) but (after getting used) enjoy (Vernon, 1995; Dahlgren, Castesson & Dahlgren, 1998; Pepper, 2008; Ribeiro, 2010; Leite et al, 2013; Morgado, 2016) the challenge of trying a very different methodology but they feel unsecure about students' learning (Li & Du, 2015) in a PBL environment. They themselves ask for support from people experienced on PBL in order to get advice on how to deal with the challenge of putting PBL into practice in real classrooms. Besides, research indicates that according to teachers, students' reactions towards science teaching through PBL depend on students' academic level, with the low achievers (according to teachers' criteria) showing better attitudes than top students (Leite et al, 2013; Morgado, 2016).

As it is well known, PBL started in medical schools (Barrows, 1996; Camp, 1996; Boud & Feletti, 1997; Barret & Moore, 2011; Hmelo-Silver, 2004; Savery, 2006) but it quickly spread to other areas and reached science education, namely in Portugal where the first known paper was written in 2001 (Leite & Afonso, 2001) and the first research was completed in 2001 by Gandra. At the time the research reported in this paper took place, the National Curriculum (DEB, 2001a) as well as the Physical and Natural Science Curriculum Guidelines (DEB, 2001b) did not explicitly mention the use of problems for science curriculum development but they suggested the use of problem-solving in the science classroom (Morgado & Leite, 2011). Nevertheless, they did not make any explicit reference to PBL. However, it seems possible to integrate PBL into science classes without contradicting the spirit of the national curriculum guidelines. This may happen because the guidelines argue for the use of student-centred teaching approaches that give students an active role and that acknowledge their previous knowledge as a starting point for the development of a diversity of competences, ranging from conceptual, to procedural, attitudinal and metacognitive.

Most science teaching in Portuguese schools is still teacher-centred and subject-based. There are a few experiments with PBL focusing on different science topics and school grade levels, organized on a school subject basis (e.g., Gandra, 2001; Carvalho, 2009; Torres, Preto & Vasconcelos, 2013). Despite the reduced sample size, they suggested that students might have benefited from PBL because they achieved better learning results or because they developed competences that their counterparts did not. In addition, a research study carried out by Morgado et al (2016) suggested that PBL organized into a transdisciplinary basis led to better results than the traditional approach when high demanding cognitive questions were at stake but not necessarily in the case of low demanding questions. If this can be confirmed, it would be a strong argument in favour of PBL.

In summary, even though PBL seems to be a powerful approach, research results are not clear enough with regard to PBL effect on science learning, partly due to some research design weaknesses. Besides, some studies did not take into account the multidisciplinary nature of real problems, which requires PBL to be transdisciplinary rather than school subject-centred.

RESEARCH QUESTION

Bearing in mind the disciplinary teacher-centred characteristics of most Portuguese science teaching and the multidisciplinary nature of real life problems, this study aims at comparing a transdisciplinary PBL approach with traditional teaching of the theme 'Safety, Prevention and Quality of Life', with regard to students' learning of science content knowledge; finding out students' opinions on the transdisciplinary PBL approach. According to the official curriculum, this 9th grade theme is supposed to be approached within both Natural Sciences and Physical Sciences school subjects and therefore the two of them were involved in this study.

RESEARCH METHODOLOGY

In Portugal, science education for all children goes up to 9th grade that is to 14/15 years old. Afterwards, students must continue at school but they can choose to study science or not. Thus, this research is centred on the last school grade in which science is taught to all children, which is a relevant stage from a citizen's education point of view. It took place in a secondary school that volunteered to participate in a research project which encompassed the research reported in this paper.

As mentioned above, the science theme chosen for the purpose of this research was 'Safety, Prevention and Quality of Life', which belongs to the syllabuses of two school subjects: Physical Sciences (includes Physics and Chemistry) and Natural Sciences (includes Biology and Geology). Physical Sciences are supposed to cover topics like Basic motion concepts, Collisions, Airbags, Helmets and seat belts, Traffic accidents prevention. Natural sciences are supposed to address issues like Traffic accidents, Effects of alcohol and drugs on the driver's abilities, Driver's food behaviour and psychological characteristics.

A quasi-experimental, pre-/post-test design with control group (see McMillan & Schumacher, 2010) was adopted. Two 9th grade classes and their four teachers were involved in the study even though with different degrees of engagement. Thus, from the experimental group (EG) side, a Physical and a Natural Sciences teacher were involved together with their 24 students. From the control group (CG) side, a Physical and a Natural Sciences teacher were also involved together with their 25 students.

The EG followed an active student-centred transdisciplinary PBL approach. Teachers were invited to work together to approach the topics referred to above, with no differentiation between what used to be the class time periods of each one of the two school subjects. Teaching materials were prepared or selected by the EG teachers and the researchers. To start the PBL sequence, a scenario like a press news focusing on 'Reducing traffic accidents: a matter of safety, prevention and quality of life', was adapted by the two schoolteachers and the researchers. It worked as a context for students to raise problems that would require concepts within the scope of the whole theme if they were to be solved by the students. Both teachers monitored the students, which were asked to work in small groups, each at a time or together, according to their availability and the anticipated students' needs of guidance. One of the researchers observed all the EG classes to give support to teachers. However, at the end, both teachers assisted to students' presentations and conducted the solution analysis and the process evaluation. Figure 1 gives a synopsis of the process followed in the EG.

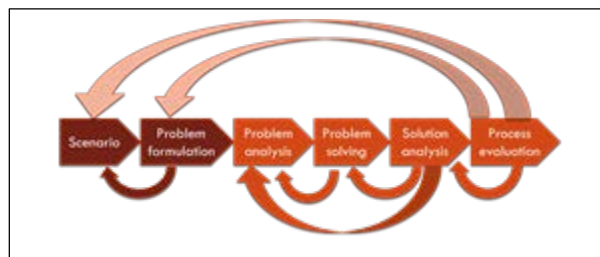


Fig. 1: Synopsis of the PBL approach followed in the EG

The CG followed a disciplinary teacher-centred approach with teachers working separately and with a well-marked differentiation of the two subjects. They followed the assigned textbooks approach, namely with regard to the sequence of the topics and the activities performed in each subject.

Both interventions lasted for about a month. However, in the CG part of the time was devoted to solving exercises after addressing the content.

Inquiry through questionnaire was the data collection technique adopted. Then, to avoid contamination, the researchers alone designed a paper and pencil test to be used as pre- and post-test in the two research groups. The test covers the contents addressed and includes open-ended questions so that students could explain their ideas without being influenced by a given set of predetermined possible answers.

Students answered the test individually, two days before initiating the theme (pre-test) and eight days after concluding it (post-test). Both groups have done it in a Physical Sciences class time, supervised by their own Physical Sciences teacher.

Data analysis included content analysis based on a set of predetermined categories, as follows:

- *Correct answer*: scientifically accepted and complete answer, according to what is expected for this grade level, based on what is prescribed in the syllabus;
- *Incomplete answer*: answer that misses one or more elements required to be considered complete but does not include any incorrect idea;
- *Answer including alternative conceptions*: answer that includes ideas which are not consistent with the scientifically accepted ones;
- *Don't answer*: comprises no answer, incomprehensible answers and answers that simply repeat the question.

Pre-/post-test gains were also computed. They have to do with the difference between the post-test and the pre-test percentages obtained for each category of answer. They indicate a variation that can be either positive or negative and that is good or bad depending on the category that is at stake. A positive gain is desirable for the correct answer category and a negative gain is desirable for the Don't answer category. For the other categories, the interpretation of the gain in a category depends on the gains in the other categories. Finally, to attain the objective of the study, control group *versus* experimental group comparisons were made.

Afterwards, a more detailed analysis was performed in order to get more information on the incomplete answers and the ideas that were more and less hard for students to acquire.

In a physical sciences class after the post-test, the EG students were asked to answer to an opinion questionnaire on the PBL approach. The questionnaire, composed of 15 directional Likert type items, had been developed previously by Leite, Dourado & Esteves (2011). The scale used was a five degrees scale ranging from *Nothing* to *A lot*. Frequencies per item and scale grade were computed in order to get information on issues that deserved more and less positive reactions from the EG students.

RESEARCH RESULTS

Students' learning

Table 1 shows the results relative to students' science content knowledge learning which were collected through a test used as pre- and post-test in both research groups (EG and EC). In the pre-test, no research group reached a correct answer in any question. In the post-test, correct answers were obtained in one question (question 3) only.

Table 1: Control/experimental gains comparison for questions asking for an explanation (%)
(N=49)

Question	Group	Correct		Incomplete		Including AC		Don't answer	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post
1 - Driving under alcohol	CG	0,0	0,0	96,0	92,0	4,0	4,0	0,0	4,0
	EG	0,0	0,0	75,0	91,6	25,0	8,3	0,0	0,0
2 - Driving under drugs	CG	0,0	0,0	84,0	96,0	16,0	0,0	0,0	4,0
	EG	0,0	0,0	83,3	87,5	12,5	0,0	4,2	12,5
3 - Slow down motion	CG	0,0	4,0	24,0	44,0	4,0	20,0	72,0	24,0
	EG	0,0	29,2	20,8	16,7	12,5	20,8	66,7	33,3
4 - Speed and velocity	CG	0,0	0,0	0,0	4,0	36,0	44,0	64,0	52,0
	EG	0,0	0,0	0,0	70,8	33,3	4,2	66,7	25,0
5 - Asleep driver after lunch	CG	0,0	0,0	28,0	44,0	72,0	44,0	0,0	12,0
	EG	0,0	0,0	45,8	62,5	50,0	37,5	4,2	0,0
6 - Instantaneous velocity <i>versus</i> mean speed	CG	0,0	0,0	12,0	24,0	8,0	0,0	20,0	60,0
	EG	0,0	0,0	20,8	58,3	8,3	0,0	70,8	41,7
7 - Collisions on a road	CG	0,0	0,0	28,0	40,0	8,0	8,0	64,0	52,0
	EG	0,0	0,0	42,2	54,2	4,2	0,0	53,6	45,8

Note: n_{EG} = 25; n_{CG} = 24

Table 2 shows the gains (positive, null or negative) for the seven questions used to assess students' learning in this research study. An analysis of the gains obtained for the correct answers shows that non-null gains were obtained for question 3, the only got correct answers. Those gains are positive for the two research groups. However, the gains obtained for the EG (29,2%) are much larger than those obtained for the CG (4,0%) which is a result in favour of the EG.

Table 2: Control/experimental gains comparison for questions asking for an explanation (%) (N=49)

Question	Correct		Incomplete		Including AC		Don't answer	
	CG	EG	CG	EG	CG	EG	CG	EG
1 - Driving under alcohol	0,0	0,0	-4,0	16,6	0,0	-16,7	4,0	0,0
2 - Driving under drugs	0,0	0,0	12,0	4,2	-16,0	-12,5	4,0	8,3
3 - Slow down motion	4,0	29,2	20,0	-4,1	16,0	8,3	-40,0	-33,4
4 - Speed and velocity	0,0	0,0	4,0	70,8	8,0	-29,1	-12,0	-41,7
5 - Asleep driver after lunch	0,0	0,0	16,0	16,7	-28,0	-12,5	12,0	-4,2
6 - Instantaneous velocity <i>versus</i> mean speed	0,0	0,0	12,0	37,5	-8,0	-8,3	-4,0	-29,1
7 - Collisions on a road	0,0	0,0	12,0	12,5	0,0	-4,2	-12,0	-7,8

Note: $n_{EG} = 25$; $n_{CG} = 24$

Then, an analysis of the gains for the incorrect answers shows that: no null gains were obtained; larger positive gains were obtained for the experimental group in three questions (question 1, 4 and 6); similar positive gains were obtained for questions 5 and 7; lower gains were obtained for the EG in question 2 and 3. However, if in the case of question 3 we sum up the gains obtained for the correct and incomplete answers, for each group, 24,0% and 25,1% will be obtained for the CG and the EG, respectively. Even though these two percentages are similar, the 25,1% of the EG are better because they come mainly from complete answers while the 24% of the CG come mainly from incomplete answers. Data given in table 2 also show that positive gains in the complete and incomplete answers are associated with negative gains in the Don't answer and/or Including Alternative Conceptions (AC) answer. Thus, it can be stated that the EG achieved better results than their counterparts in the CG.

As far as the incomplete answers are concerned, table 3 shows that in question 1 the CG incomplete answers were more incomplete than those of the EG as the percentage of incomplete answers mentioning 2 or 3 effects that alcohol can have on a driver's organism is much larger in the EG (40,9%) than it is in the CG (26,1%). Being the numbers of students similar in both groups (22 and 23, respectively), this result is also in favour of the EG.

Table 3: Driving under the effect of alcohol - # of effects in Incomplete Answers (%)

# effects mentioned	Pre-test		Post-test		Gains	
	CG (n=24)	EG (N=18)	CG (n=23)	EG (n=22)	CG	EG
1	87,5	83,3	73,9	59,1	-13,6	-24,2
2 or 3	12,5	16,7	26,1	40,9	13,6	24,2
4 or 5	0,0	0,0	0,0	0,0	0,0	0,0

Table 4 shows that the two research groups mentioned the same effects of the alcohol, in the pre- and the post-test, the only exception being the EG that did not mention sleepiness, in the pre-test. 'Difficulty of risk assessment' was the effect mentioned by larger percentages in the pre-test probably because it has to do with every day (including mass media) arguments against drink ingestion before driving.

Table 4: Driving under the effect of alcohol - Effects mentioned in Incomplete answers (%)

Effects	Pre-test		Post-test	
	CG (n=24)	EG (n=18)	CG (n=23)	EG (n=22)
Reduction on the reaction capacity	25,0	27,8	65,2	63,6
Difficulty of risk assessment	50,0	61,1	34,8	54,5
Sleepiness	20,8	0,0	8,7	9,1
Vision limitations	20,8	27,8	17,4	22,7
Motor coordination limitations	0,0	0,0	4,3	9,1

Percentages relative to 'Reduction on the reaction capacity' and to 'Motor coordination limitations', increased from the pre- to the post-test, being a bit favourable to the CG in the former case and to the EG in the latter case.

These effects have to do with human physiology (Ogden & Moskowitz, 2004; Carson-DeWitt, 2003) and the increase in the percentages from pre- to post-test may mean that learning took place in both groups.

Table 5 shows that in question 2 the CG incomplete answers were quite as incomplete as those of the EG, as the percentage of incomplete answers mentioning 2 or 3 effects of drugs on a driver's organism is quite as large in the EG (28,6%) as it is in the CG (29,2%). It should be emphasised the CG students that had mentioned 4 or 5 effects in the pre-test did not mention the same number of effects in the post-test. Therefore, these results are not clearly in favour on any of the groups.

Table 5: Driving under the effect of drugs - # of effects in Incomplete Answers (%)

# effects mentioned	Pre-test		Post-test	
	CG (n=21)	EG (n=20)	CG (n=24)	EG (n=21)
1	85,7	95,0	70,8	71,4
2 or 3	9,5	5,0	29,2	28,6
4 or 5	4,8	0,0	0,0	0,0

Data given in table 6 show that the most mentioned effects in Incomplete answers relative to the effects of drugs on the driver compare to those most mentioned for the alcohol question (see table 4). However, the control group added a new effect in the pre-test that is hallucinations, which is also mentioned by authors like Ogden and Moskowitz (2004) and Carson-DeWitt (2003). In the EG, from pre- to post-test, percentages increased for all effects except for 'Difficulty of risk assessment'. In the control group, the percentages obtained for several effects decreased a little bit. The 'Reduction on the reaction capacity' was again the effect whose percentages suffered a larger increase as it happened in the case of alcohol (see table 3). This increase was larger for the EG.

Table 6: Driving under the effect of drugs - Effects mentioned in Incomplete answers (%)

Effects	Pre-test		Post-test	
	CG (n=21)	EG (n=20)	CG (n=24)	EG (n=21)
Reduction on the reaction capacity	28,6	10,0	50,0	61,9
Difficulty of risk assessment	47,6	85,0	41,7	57,1
Sleepiness	9,5	0,0	4,2	4,8
Vision limitations	14,3	5,0	8,3	14,3
Motor coordination limitations	0,0	5,0	0,0	9,5
Hallucinations	28,6	0,0	25,0	4,8

Question 3 asked students to explain why a child (Rui) traveling without the car seat belt fasten was project forwards and hit the head when his father slowed the car down due to meeting a red traffic light, in a raining day. Table 7 shows that each incomplete answer for this question includes one of two explanations. The first explanation is a synthetic statement that does not provide fully evidence that their holders really understand what they are saying. This interpretation is supported by answers like the following one: "His seat belt was not fasten and a body that is moving tends to keep on motion" (post-test, CG11). The first part of this answer is a repetition from the question (the seat belt was not fasten) which is not explicitly related to the second part of the answer, which is a general statement (on the inertia law), not explained.

Table 7: Motion when slowing down - Explanations in Incomplete answers (%)

Explanation	Pre-test		Post-test	
	CG (n=6)	EG (n=5)	CG (n=11)	EG (n=4)
Rui's body tends to continue in motion	0,0	20,0	63,6	0,0
As Rui's seat belt was not fasten, there was nothing to prevent him from keeping moving with the car speed at the slow down instant	100,0	80,0	36,4	100,0

The second one is much more explicit in terms of why Rui was projected. In fact, it implicitly mentions the role of the seat belt (it would prevent Rui from keeping moving with the car speed), as shown by the following answer: "As a force was exerted on the car, it stopped; as no force was exerted on Rui, he kept on moving" (post-test, EG18). In the post-test, all the incomplete EG answers fell into this category, while the same happened with only about one third of the CG incomplete answers.

Question 4 focused on Rui's conversation with his father; Rui was talking about the car speed and his father talking about the car velocity. Table 8 shows that incomplete answers relative to a possible difference between the meanings of the two words were registered in the post-test only and that they fell into three categories.

While the CG incomplete answer fell into the most incomplete group of answers, the EG incomplete answers are distributed by the three categories, being some of them (11,8%) quite complete, which is an indicator of deeper learning. An example of this is the following answer, which combines type of magnitude and trajectory: "Velocity is the distance (straight line) between points A and B (displacement) over a certain time; speed is the path travelled between points A and B over a certain time." (post-test, EG18). Bearing in mind table 1, the incomplete answers are a result of a reduction in Including Alternative Conceptions and/or Don't know answers. Therefore, data in table 8 reinforce the idea of a better performance of the EG.

Table 8: Speed and velocity - Explanations in Incomplete answers (%)

Explanations	Pre-test		Post-test	
	CG (n=0)	EG (n=0)	CG (n=1)	EG (n=17)
Velocity is a vector magnitude and speed is a scalar magnitude	0,0	0,0	100,0	52,9
Velocity is a ratio between the displacement and the time spent to make it; speed is a ratio between the path covered and the time used to cover it.	0,0	0,0	0,0	35,3
Velocity is a ratio between the displacement and the time spent to make it; speed is a ratio between the path covered and the time used to cover it. Then, opposite to speed, velocity does not depend on the trajectory.	0,0	0,0	0,0	11,8

When explaining why a truck driver fell asleep after lunch, having slept well the night before (question 5), students mentioned only one of the two issues that would be demanded to them according to the syllabus. Thus, they based their explanation either on 'Digestion energy requirements' or on 'Blood concentration on stomach and intestine' (table 9), which are effects that are mentioned in the literature (Barr & Wright, 2010; Eldelstone & Holzman, 1981). The former was the most popular in both research groups, in the pre- as well as in the post-test. Surprisingly, a few students of the EG abandoned the explanations based on the idea of 'Blood concentration on stomach and intestine'. In the whole, these results are consistent with those given in table 1, as they are not in favour of none of the research groups.

Table 9: Driving when feeling asleep after lunch - Explanations in Incomplete answers (%)

Explanation	Pre-test		Post-test	
	CG (n=7)	EG (n=11)	CG (n=11)	EG (n=15)
Digestion energy requirements – needs energy and originates a deficit in the rest of the body	85,7	45,5	100,0	86,7
Blood concentration on stomach and intestine – brain has not enough blood to react	14,3	54,5	0,0	13,3

Question 6 focuses on who was right: a driver, arguing that he made calculations (with time and km) and was moving at 100km/h, and a police officer, accusing the driver of having exceeded the maximum velocity (or instantaneous speed, that is equal to instantaneous velocity magnitude) limit of 120km/h. Table 10 shows that three types of incomplete explanations were obtained, being the first one a statement that does not make explicit the difference between the two concepts that are at stake: instantaneous velocity and mean speed.

Table 10: Instantaneous velocity vs mean speed - Explanations in Incomplete answers (%)

Explanation	Pre-test		Post-test	
	CG (n=3)	EG (n=5)	CG (n=6)	EG (n=14)
Mean speed is different from instantaneous velocity	0,0	0,0	16,7	0
The value shown by the policy radar has to do with instantaneous velocity	33,3	0,0	16,7	0
The driver's argumentation is wrong because it is based on the computation of the speed and this is not what the radar shows.	66,7	100,0	66,6	100,0

Even though many incomplete answers were got in the post-test for the EG, they not only resulted from a decrease in the Alternative conceptions and Don't know answers but also fell into the most complete group of incomplete explanations. This group shows disagreement with the driver's reasoning, uses the concept of mean speed and implicitly or explicitly suggests that the radar does not show that magnitude. This can be illustrated by the following answer: "The car driver calculated the mean speed [100km/h] but he may have exceeded the velocity limit [120km/h] even though the mean was that one." (post-test, CG25).

Table 11 shows that the number of Incomplete answers increased in both research groups from pre- to post-test, for question 7. This question focuses on the effects of two cars colliding with the road protection rails. In one of the collisions, the rails were damaged but not broken; in the other collision, the rails were broken. The two explanations obtained for incomplete answers suggest that students seem to focus on the observable effects rather than on the interaction between the cars and the protection rails. Nevertheless, it seems that the second explanation given in table 11, shown by less students in both groups, is a bit more complete than the first one. In fact, the second explanation relates force, speed and collision effects, as illustrated by the following answer: "To break the protecting rails a large force is needed; this means that it was travelling with a larger speed." (Post-test, EG15). These results suggest that the numbers of students showing the most complete answer did not change from pre- and to post-test.

Table 11: Collision on a road - Explanations in Incomplete answers (%)

Explanation	Pre-test		Post-test	
	CG (n=7)	EG (n=10)	CG (n=10)	EG (n=13)
The larger the magnitude of the impact force, the more violent is the collision	85,7	80,0	80,0	92,3
The larger the speed, the larger the magnitude of the impact force and the strongest is the effects of the collision	14,3	20,0	20,0	7,3

EG students' opinions on PBL

The EG students' opinions on PBL were collected through an opinion questionnaire, after the post-test. Table 12 shows the questionnaire 15 items, clustered according to the skills that underlie them, and the frequencies obtained for each grade of the scale.

Table 12: EG students' opinions on the PBL approach (f)

(N=24)

Skills	Items	Nothing	A little bit	Moderately	Quite a lot	A lot
Learning	13. Deepen knowledge/ideas	0	0	7	9	8
	14. Understand content	0	5	4	10	5
	12. Learn about issues that interest to me	0	3	7	8	6
Problem-solving	10. Learn how to solve problems	0	1	4	15	4
	8. Learn how to plan tasks	0	2	4	14	4
Thinking	11. Learn how to synthesize	0	2	5	13	4
	7. Learn to think	0	2	2	12	8
	5. Learn how to interpret information	0	0	9	11	4
Communication	3. Learn how to communicate ideas	0	3	3	14	4
	4. Learn how to present own ideas	0	2	6	14	2
	1. Learn how to argue and counter-argue	0	2	9	11	2
Social interaction	6. Learn how to share tasks	0	1	7	15	1
	2. Learn how to cooperate with colleagues	0	0	4	14	6
	9. Learn how to respect the others' opinions	0	0	7	12	5
Welfare	15. Feel comfortable	2	5	8	4	5

An analysis of the frequencies given in this table shows that at least two thirds (that is 16) of the 24 students choose the Quite a lot or A lot degrees for 10 (out of 15) items. Item 15 was the only item that got non-null frequencies for the Nothing degree and about one-third only for Quite a lot plus A lot, meaning that some students did not feel comfortable with PBL classes. This sensation may be due to students' initial lack of experience with not only PBL but also with teamwork and with enquiry like tasks, as well as with their high level of anxiety regarding the non-distinction between the two disciplines and the nonexistence of exercises to be solved by (and after) the end of the

classes. Thus, it seems that the novelties introduced may have really caused initial discomfort to students. Nevertheless, for what researchers and teachers could observe, most of them overcame those difficulties and anxiety quite fast. An additional evidence of this is that the discomfort felt did not impair them from recognising the positive things they got from the PBL approach. Excluding item 15, items 1 and 12 are the ones that got less Quite a lot and A lot. In the former case, on one hand, it should be noted that argumentation is not an easy competence to develop (Belland, Glazewski & Richardson, 2008) and, in the other hand, it may happen that students were not familiar with the words, especially with counter-argumentation. It may be that argumentation and counter-argumentation competences development may need more assistance from the teacher than the PBL context provided. In the latter case (item 12), it should be emphasized that what students learned was limited by the problems that emerged from the scenario. During the classes, teacher(s) were used to monitor the small groups' activities in order to check whether they were on the task or whether they were doing other things. It was necessary to settle strict rules for internet access in order to prevent waste of time with issues that were not relevant for the task students had at hands. In fact, undue internet use was an expected issue (see Dogruer, Eyyam & Menevis, 2011) as it was students' unhappiness with limitations on this. On the other hand, as argued above, the fact that the Portuguese curriculum is not a problem-based one, obliged teachers and researchers to find problems to be solved that were consistent with the curriculum demands, as the use of a new methodology and the undertaking of a research experience could not prevent the compulsory curriculum to be followed.

CONCLUSIONS AND IMPLICATIONS

The global results together with the incomplete answer analysis suggest that students in the EG performed better than their CG counterparts, which is a result consistent with studies that compared PBL with traditional teaching (ex. Gandra, 2001, Carvalho, 2009; Khoshnevisasl et al, 2014; Zahid et al, 2016; Strobel & van Barneveld, 2009; Morgado et al, 2016). However, both groups rarely reached complete answers, which may be partly due to strict correction criteria adopted in this research and partly due to language issues. The latter may be especially true for physics questions that deal with the speed and velocity concepts, as the words that give names to these two physics concepts are usually used undistinguishably in Portuguese everyday language. Besides, even though the EG students may have felt an initial discomfort (as it happened in other studies – see, for example, Gandra, 2001; Selçuk, 2010; Alessio, 2004; Larin, Buccieri & Wessel, 2010), they seem to have valued PBL as they recognized that they have developed several types of competences.

Thus, the use of a transdisciplinary approach neither impaired students from learning nor made them feel confused and unhappy. However, the fact that some students (not only but also in the EG) used a sort of slogan-like explanations when trying to explain their reasoning on issues related to daily life situations should deserve attention. On one hand, pedagogic attention is needed in order to find better ways of promoting deep learning. Hence, results obtained through the present study should be combined with those obtained by Morgado et al (2016) in order to find ways of making PBL more useful for the learning of students' complex and familiar issues. On the other hand, research attention is needed in order to find out whether slogan-like answers just happened or whether this is a result consistent with what Silva, Leite and Pereira (2013) found with seven graders, which were asked to solve familiar problems.

This concern raises a few questions that are worth considering. Were students happy with their previous common sense knowledge about the effect of drugs and alcohol on the organism so that they did not feel the need to learn more about it? Should the teaching context have been able to deal with such knowledge to show that it is not enough to fully explain the situation? Was inertia law too much emphasized so that students memorized it and, maybe, based on previous experiences, felt that it would be enough to restate the law without explicitly relating it to the problem-situation that was at stake? Of course it may also have happened that the information sources used by the students were reinforcing the slogan-like answers or that they were unable to propel students to go deeper into the issue. Answering to these questions would be useful for organizing learning situations more able to foster students' deep learning through PBL.

Finally, bearing in mind that EG students managed well with transdisciplinary PBL, it should be investigated how disciplinary and transdisciplinary PBL convey students the ability to deal with real problems which are transdisciplinary in nature. Transdisciplinary PBL is more demanding for teachers and school organization. From the authors' experience, teachers need to get not only training but also support from researchers or colleagues used to PBL as well as from the school director. PBL requires flexible classroom organization and school resources use which need to be acknowledged by the whole school. Effort to get such support may be worthwhile as PBL seems to be one of the best teaching approaches for XXIst century students, which need to be prepared for solving real problems. As it was argued elsewhere (Leite et al, 2017; p.159.), PBL can “show students that science [...] is all around them and that the knowledge it encompasses may help them not only to better understand, fully appreciate and respect more the natural world but also to take more advantage from what the natural world can offer without putting it at risk.”.

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LEARNING ADEQUACY OF NIGERIAN TERTIARY EDUCATIONAL SYSTEM FOR SUSTAINABLE BUILT ENVIRONMENTAL COURSE

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ABSTRACT

Learning is highly pivotal in every areas of life, it could be formal, informal or non-formal. Irrespective of the form of learning, it has turned out to be a veritable medium in human training. This study will concentrate on the adequacy of learning in a formal environment. The study examined some indicators that can limit learning of building course in some selected tertiary institutions which include the lecturer capacity, lecturing method and learning facilities indicators. The study adopt survey method with the aid of structured questionnaire to elicit information from the respondents on the adequacy of learning in their institutions. Findings revealed some gaps across the selected institutions learning adequacy and to address the gap, it is recommended that there should be collaboration among the institutions as to strengthen each other weakness and to encourage industries role in education funding.

Keyword: learning, education, higher-institution, building program.

1.0 INTRODUCTION

The concept of learning has attracted high attention from different stakeholders in the past and on till the present day. Learning as gather such momentum due to its numerous impact that is evidenced in the present world. Learning has proved to be a veritable tool that have advanced and sustained our world. Learning is not limited by human class, gender or race, it is an insatiable well from which all human drinks. Either formal, informal or non-formal learning, man has benefited immensely from learning potential. Learning has immensely contribute to advancing frontiers of knowledge. Learning effect on human mind are vivid in our world as great discoveries emerged from the learned mind. Egmond, Kuhnen and Li (2013) opines that learning is indispensable to man as it is part of life. Man's sustainability lies in his ability to learn. The concept of learning has been an issue of discourse among researchers as they tend to discover effective learning medium. In line with their findings, Nganga (2011) asserted that learning concept cannot be generalized due to its multidimensional views. Laal (2011) further affirmed that concept of learning cannot be generally defined due to differing perceptions of various cultural groups across the globe on this subject matter. Egmond, Kuhnen and Li (2013) however reveal the parallel view of learning across two different cultural background. To the western world learning is viewed as a mind-oriented tool while the East-Asia viewed it as a virtue-oriented. Mind oriented learning primarily focus on the cognitive center which as to do with mental development and alertness through knowledge acquisition. Virtue oriented learning however leap beyond the scope of the mind learning as it encompass the mental development to developing the wholeness of a man. It is evidenced from the forgoing that learning defines the uniqueness of different culture. Irrespective of the cultural view of learning, the form of learning is universal. Tissot (2004) further buttresses on the three forms of learning which include formal, informal and non-formal learning. Formal learning is viewed as a form of learning which are obtainable within a structured and organized environment. Informal learning are form of learning which are synonymous with the acquisition of vocational skills while the non-formal learning is form of learning which evolve through daily life activities. This paper will strictly be limited to formal form of learning. In a formal environment, it is pertinent to address dependent indicators on which sound learning can be attained and they includes lecturer, learning facilities among others. The concept of learning cannot be certified without addressing the dependent variables. The various benefits of learning cannot be achieved without addressing the factors that can enhance learning effectiveness. The state of learning in our higher institution has been an issue of concern due to the gap in the expected to the observed performance in a learned individual. Such observation as generated questions as to the

competency of our instructor, the state of our learning facilities and other key factors of concern. To this end, this study will carry out an enquiry as to ascertain the state of learning in our higher institutions. It will look at the various indicators that can limit learning of building course in our institutions which include the lecturer attitude, lecturing method and lecturing facilities.

2.0 LEARNING CONCEPT

The sustainability of any education system across the globe is dependent on teaching and learning effectiveness. Teaching and learning are two inseparable twin which must flow together. Learning is what makes teaching interesting. The premium placed on learning is evidenced from researcher's efforts to making learning appealing to all. The concept of learning has evolved in different dimension from traditional learning to electronic learning (e-learning) to mobile learning (m-learning) and presently to blended learning. Nordin and Alias (2013) identify blended learning as a type which allow for integration of traditional learning (face to face learning) with online learning. Both m-learning and e-learning are both online learning mode. The changing phase of learning is aimed at arriving at the optimum learning mode to solving existing challenges in learning. However, effort towards making learning more effective cannot be ascertained without involving the learners. The best route toward solving the issues with learning in higher institutions can only be ascertained from the student's perceptions. Centra and Gaubatz (2005) opines that beyond the student's grade for the evaluation of learning in a course which is mostly limited to the course learning outcome, there are need to be holistic in the students learning indicators to be able to capture the realistic perception. Koon and Murray (1995) further reveal the general indicators that can best measure the student's perception of learning and they include; students' affinity in the subject, students reasoning ability, student's self-understanding and cooperative abilities. Measuring students learning perception by assessing their affinity for the subject matter is without doubt one of the veritable medium of measuring learning. The interest in a subject is not just a sudden occurrence as there must have been some level of interaction which are only obtainable under a friendly learning environment. Also, student's critical thinking skills are product of effective learning which has expand student's capacity to reason. Corporative abilities and understanding capacity are two values that are evidenced in a learned individual. Teaching effectiveness was also found to be a realistic indicator to measure student's perception of learning (Ryan and Harrinson, 1995; Cashin and Downey 1999). Without doubt teaching effectiveness is one of the key medium that ascertained learning capacity. Poor teaching skill can demoralize student's zeal to wanting to learn a subject of interest while a good or effective teaching can boost the morale of the individual and such a person will be highly informed. Aside the teaching effectiveness, teaching facilities and environment are also relevant factors that should be given high consideration in measuring students learning capacity. Considering a building technology course which entails a lot of practical training, student imaginative ability can be better appreciated when the necessary facilities are in place to assist in students learning. Arfwork and Asfaw (2014) affirmed that critical thinking learners will no doubt require learning facilities to aids their thinking capacity. Learning in higher field of learning is no more purely traditional as there are need to adopt modern technology as to aid students learning capacity. In the same vein learning environment also contribute to student's capacity to learn effectively as it defines the wellbeing of the mind which is the core center of learning.

2.1 HIGHER INSTITUTION OF LEARNING IN NIGERIA

Like other country around the globe, Nigeria is abound with several higher institutions and they are tasked with human training, learning and all-round development. These institutions are widely spread across the geographical zones of the country. The ownership of these various institution are categorized under three ownership structure which are State, Federal and Private. Both the federal and state are under the auspices of the government while the private ownership is controlled by an individual or group. This study will capture institutions across the identified group of institution. The three institutions that will be focused on for this study are Covenant University, Moshood Abiola Polytechnic and Federal Polytechnic Ilaro. Covenant University is a private own university and it is located in Ogun state which is south-western region of the country. Also, Moshood Abiola Polytechnic and Federal Polytechnic Ilaro which are state and federal owned institutions respectively are both located in Ogun state south-western region of Nigeria as well. The three institution are offering technical and engineering related courses which include building program. This paper will be assessing the adequacy of building program in the identified three institution of learning in Nigeria.

3.0 RESEARCH METHODOLOGY

The study is aimed at assessing anti-sustainable indicator to the learning of building program in our higher institutions. The aim is achieved by considering the objectives which are to ascertain the adequacy of the building program from the human and facilities resources consideration and as well to compare the adequacy of the building program among selected institutions. Both primary and secondary data are sourced for to achieve the stated objectives. Primary data were collected with the aid of structured questionnaires administered to the students in the selected institutions which are Covenant University, Moshood Abiola Polytechnic and Federal Polytechnic Ilaro. Purpose sampling technique was used in selecting the sample in other to control the response. Higher institutions students were the targeted respondents due to their learning status in the various institutions. A total of 70 questionnaires were administered to the students studying building program in the three selected institutions and each two of the institutions received twenty five questionnaires each while the last received twenty questionnaires.

The questionnaire was divided into two sections, section one examined the characteristics of the respondents, the second section assessed the anti-sustainable indicators of building program and the assessment are placed on the likert scale of 1-5 to be scored accordingly. Respondents were to score in accordance to level of agreement where; 1 = do not agree, 2 = slightly agree, 3 = neutral, 4 = agree, 5 = strongly agree. The third section addresses the strategy to developing technical education and respondents are to attest to the agreement of the factors in the following order on the likert scale; 1 = do not agree, 2 = slightly agree, 3 = neutral, 4 = agree, 5 = strongly agree.

4.0 ANALYSIS AND RESULT

4.1 Characteristics of the Respondents

In this section, the personal information of the respondents used for the study was analyzed using percentage. The result obtained are presented in table 1

Table 1 shows the summary of the demographic characteristics of the respondents. The male gender represents 47.1% while female gender represents 52.9%. It is evidenced from the result that there is adequate representation of both genders in the study. The age bracket, 15-20 years represents 52.9% of the total respondents which is second-to-none in the age bracket group. 30% of the respondents fall within the age bracket 21-25 years of age while the age bracket with the least respondent was 25 years and above with respondents percentage rate of 8.6%. The result shows that the respondents are well represented age wise. The respondents rate of the selected there institutions which are Covenant University, Moshood Abiola Polytechnic and Federal Polytechnic Ilaro are 35.7%, 35.7% and 28.6% respectively.

Table 1: Characteristics of Respondents

Characteristics	Frequency	Percentage
Gender		
Male	33	47.1
Female	37	52.9
Total	70	100
Ages		
15-20 years	37	52.9
21-25 years	27	38.6
>25 years	6	8.6
Total	70	100
Institution		
Moshood Abiola Poly	25	28.6
Covenant University	25	35.7
Ilaro Polytechnic	20	35.7
Total	70	100

4.2 Assessment of tertiary institutions learning adequacy

Table 2: Assessment of higher institutions learning adequacy

Lecturer Indicators	CU		MA POLY		Iloro Poly		Overall
	Mean	Rank	Mean	Rank	Mean	Rank	Mean
The lecturers in my department teaching course attitude is very outstanding.	4.72	1 st	4.24	2 nd	4.65	2 nd	4.35
The lecturers in my department are academically and professionally qualified.	4.64	2 nd	4.48	1 st	4.60	3 rd	4.57
The lecturer in my department have a good understanding of the course they teach.	4.56	3 rd	4.16	3 rd	4.50	4 th	4.40
The lecturer in my department believes in our learning capacity.	4.12	4 th	3.96	4 th	4.70	1 st	4.23
Method of Lecturing							
The lecturer in my department are detailed in teaching.	4.60	1 st	4.12	1 st	4.50	1 st	4.40
The lecturers in my department use multimedia for teaching	4.56	2 nd	3.04	3 rd	1.75	4 th	3.21
The lecturer in my department engage us in adequate practical session.	4.56	2 nd	3.12	2 nd	4.40	3 rd	4.00
The lecturer in my department adopt problem base learning in teaching.	4.28	4 th	2.04	3 rd	4.45	2 nd	3.89
Learning Facilities							
There is fully equipped library in my institution.	4.76	1 st	2.40	1 st	4.45	1 st	3.83
My department has a fully equipped laboratory.	4.72	2 nd	1.72	5 th	4.35	2 nd	3.54
There is internet facilities in my institution.	4.72	2 nd	1.84	4 th	4.45	1 st	3.61
The reading tables and chairs in my class are adequate.	4.72	2 nd	1.96	3 rd	4.45	1 st	3.66
My class room is equipped with good reading tables and chairs.	4.68	3 rd	2.20	2 nd	4.30	3 rd	3.69
My classroom is equipped with multimedia facilities.	4.40	4 th	1.40	6 th	4.20	4 th	3.64

CU: Covenant University. MA: Moshood Abiola Polytechnic.

Table 2 shows the various learning parameters which can be used to measure adequacy of learning under three headings which are 'lecturer indicator, learning methods and learning facilities'. The various parameters are categorized under the three headings which are used to measure and compare the learning adequacy of the three selected institutions. The result in table 2 shows that Covenant University was mean values was higher compare to other institutions for the parameters under learning indicator. However, the ranking of the various parameters differs for different institutions. Covenant University respondents ranked the parameter 'the lecturers in my department teaching course attitude is very outstanding' highest with a mean score of 4.72 while the same was ranked second on the ranking scale of both Moshood Abiola Polytechnic and Federal Polytechnic Ilaro with a mean score of 4.24 and 4.65 respectively. However, it is evidenced from the result presented under the lecturer indicator for the three institutions are very outstanding as all the mean values of all the parameters used in the assessment is above 4.0. The overall mean also collaborate the former statement.

In the same vein, the parameters under learning method indicator are all outstanding for Covenant University as all the parameters mean value is above 4.0. However, in Moshood Abiola Polytechnic, aside the parameter 'lecturer are detailed in teaching' with a mean score of 4.12, all other equally relevant parameters are on mean score of 3.0 which signifies neutral on the likert scale. Such mean score can be linked to the uncertainty of the respondents of the assessed parameters in the institution. Federal polytechnic Ilaro performed well in most of the parameters under learning method as the mean score is above 4.0 except in the use of multimedia in teaching which it ranked lowest with a mean score of 1.75 which signifies 'do not agree' on the likert scale.

Under learning facilities assessment, Covenant University ranked very high in all the parameters considered with a mean score of 4.0 and above which signifies excellent performance by the institution. However in Moshood Abiola Polytechnic the reverse is the case as the mean score in all the parameters considered are between 1.0 and 2.0. Such response shows that her learning facility assessment is very porous and that can affect the student learning. Federal polytechnic Ilaro performance is excellent in all the learning facilities assessment except in multimedia facility assessment which it ranked 2.0 on the mean score which tends towards disagreement on the likert scales.

4.3 Research Hypothesis

The research hypothesis for the study is that there is no significant difference among the institutions on the assessed learning adequacy. The results is presented in Table 4.0.

Table 4: ANOVA results for significant difference among higher institutions on learning adequacy assessed

		Sum of Squares	Df	Mean Square	F	Sig.
The lecturers in my department have a good understanding of the course they teach.	Between Groups	2.280	2	1.140	2.091	.131
	Within Groups	36.520	67	.545		
	Total	38.800	69			
The lecturers in my department are academically and professionally qualified.	Between Groups	.343	2	.171	.373	.690
	Within Groups	30.800	67	.460		
	Total	31.143	69			
The lecturers in my department teaching course attitude is very outstanding.	Between Groups	3.293	2	1.646	4.980	.010
	Within Groups	22.150	67	.331		
	Total	25.443	69			
The lecturer in my department believes in our learning capacity.	Between Groups	6.543	2	3.271	5.507	.006
	Within Groups	39.800	67	.594		
	Total	46.343	69			
The lecturer in my department are detailed in teaching.	Between Groups	3.160	2	1.580	4.892	.010
	Within Groups	21.640	67	.323		
	Total	24.800	69			
The lecturers in my department use multimedia for teaching.	Between Groups	88.916	2	44.458	45.918	.000
	Within Groups	64.870	67	.968		
	Total	153.786	69			
The lecturer in my department adopt problem base learning in teaching.	Between Groups	28.136	2	14.068	24.199	.000
	Within Groups	38.950	67	.581		
	Total	67.086	69			
The lecturer in my department engage us in adequate practical session.	Between Groups	30.400	2	15.200	32.228	.000
	Within Groups	31.600	67	.472		
	Total	62.000	69			
My class room is equipped with good reading tables and chairs.	Between Groups	87.446	2	43.723	52.650	.000
	Within Groups	55.640	67	.830		
	Total	143.086	69			
The reading tables and chairs in my class are adequate.	Between Groups	112.821	2	56.411	102.287	.000
	Within Groups	36.950	67	.551		
	Total	149.771	69			
My classroom is equipped with multimedia facilities	Between Groups	124.071	2	62.036	129.887	.000
	Within Groups	32.000	67	.478		
	Total	156.071	69			

My department has a fully equipped laboratory	Between Groups	130.741	2	65.371	152.981	.000
	Within Groups	28.630	67	.427		
	Total	159.371	69			
There is fully equipped library in my institution	Between Groups	80.433	2	40.216	71.834	.000
	Within Groups	37.510	67	.560		
	Total	117.943	69			
There is internet facilities in my institution.	Between Groups	123.236	2	61.618	87.189	.000
	Within Groups	47.350	67	.707		
	Total	170.586	69			

Significant Level: 0.05

The significant difference in the three institutions was tested by setting the level significant at statistical value of 5%. The results in Table 5 shows that the significant level of all the parameters under lecturer assessment was above 0.05 which signifies that there is difference among the institutions on lecturers assessment on learning adequacy. As such the alternative hypothesis is rejected and the null hypothesis which says there is significance difference among the three institutions response on the assessment of lecturer indicator on the adequacy of learning in tertiary institutions. Under lecturing method, the only parameters above 0.05 was 'the lecturer in my department are detailed in teaching' while all other parameters are below 0.05. It can be concluded from the result also that null hypothesis which state that there is no significant difference among the three institutions on all the parameters on learning method is accepted except the parameter 'the lecturer in my department are detailed in teaching' in which the alternative hypothesis is accepted. Under learning facilities assessment, result shows that all the parameters are below 0.05 and that signifies that alternative hypothesis is rejected while the null hypothesis which says there is no significance difference among the institutions on learning facilities on the adequacy of learning in tertiary institutions is accepted.

5.0 DISCUSSION OF FINDINGS

The study conducted shows the state of learning adequacy under the three indicators which are 'lecturer assessment, lecturing method assessment and learning facilities assessment in three tertiary institutions. The results shows that learning adequacy under the three indicators in Covenant University are very outstanding. The outstanding capacity of Covenant University in learning can be attributed to its ownership structure as their drive is second to none.

Learning indicator assessment is excellent in Ilaro Polytechnic and also method of lecturing assessment except in the use of multimedia facilities in teaching. Such inadequacy can be attributed to institution less priority to information technology (IT) in learning. The institution also performed excellently in learning facilities assessment except in multimedia facilities availability which is earlier observed.

Moshood Abiola Polytechnic lecturer indicator assessment is excellent why method of lecturing and learning facilities are porous. The porosity in method of lecturing assessment and learning facilities assessment can be affiliated to lack of training of lecturer and poor funding of the institution. The study also revealed that there is no significant difference among the selected tertiary institutions on lecturer indicator assessment. The study further revealed from the tested hypotheses that there is significant difference among the tertiary institutions on lecturing method and learning facilities.

6.0 CONCLUSION AND RECOMMENDATION

It is evidenced from the study conducted that there are differences among the tertiary institutions on the assessment of learning adequacy. Covenant University learning adequacy assessment under lecturer learning indicator, method of lecturing and learning facilities report are excellent compare to the other two tertiary institutions which are Moshood Abiola Polytechnic and Federal Polytechnic Ilaro. Among the two institutions Moshood Abiola Polytechnic is highly porous in method of lecturing and learning facilities measurement and performed better in lecturer indicator assessment. Federal polytechnic Ilaro is highly adequate in lecturer indicator assessment while it shows some measure of inadequacy under method of lecturing and learning facilities. The inadequacy observed in Ilaro Polytechnic is attributed to lack of multimedia facilities as revealed from the study.

In concise, the study shows some gaps in some of the selected institutions on learning adequacy assessment. The following recommendations are hereby made to address the observed gaps from the study;

- I. Government should give education priority in her budget allocation as lack of funding has contributed to institution inability to procure facilities that can aid students learning ability.
- II. There should be collaboration among the institutions as to strengthen each other weakness.

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LEARNING DIFFICULTIES IN THE STUDY OF STRUCTURAL ANALYSIS IN TERTIARY INSTITUTIONS

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In Education lies the bedrock of the future. Sustainability in education can be achieved through the transfer of knowledge and technology to the next generation and one of the vital ways of achieving this is through teaching in the classroom. Without proper dissemination of these knowledge and skills, there is a disconnection and the students are left without the proper foundation they should have in the first place. Several studies have shown that student experience difficulties in mathematical based courses. This study sought to identify the challenges students of structural analysis face and the factors responsible for these challenges. A survey of three institutions was carried out and data was obtained through the distribution of well-structured questionnaires to students that offered structural analysis from University of Lagos, Covenant University and Yaba College of Technology. Data obtained from this survey were analyzed using Statistical Package for the Social sciences. The results were presented in form of frequency tables using relative index importance index to get a clearer view of the most significant factors. Results from the factors affecting students learning difficulty of the course showed that, poor background (in physics & mathematics) from secondary school made the course difficult for them, their lecturers mode of delivery made the course uninteresting, and also the class sizes were also a problem. To curb this situation, it was recommended among other things, that lecturers should try as much as possible to deliver the course in creative ways that would entice the interest of the students. Secondary and primary school education should be improved, by investing in continuous workshops, seminars and training of teachers to improve their productivity, and lastly, public universities should admit the number of students they have enough resources to cater for, so as to reduce the class sizes.

Keywords: Education, mathematical based, learning difficulties.

INTRODUCTION

There are several factors that have been identified as contributors to students learning difficulties in which includes, peer pressure, parental and home background, teacher's attributes, school environment and socio-economic status of the student (Riliwani, 2014).

However, it attention has been paid to the attributes of teachers as a critical factor influencing the academic performance of students. It is believed that the students success is hinged on the effectiveness and efficiency of the teachers (Sabitu and Nuradeen, 2010). Therefore, how knowlegable a teacher is and how well the teacher is able to adopt the apt strategies will play a significant role in the teaching process (Zarei and Sharifabad, 2012).

Parental and home background is another significant factor, because according to a saying charity begins at home, so no matter how effective or ineffective a teacher might be, the background given to a child (student) would always serve as a pulling or pushing factor.

Furthermore, the school environment is also another critical factor affecting learning especially in the developing nations of the world, due to poor facilities and lack of appropriate teaching aids. for examples, there are some public schools in Nigeria that cannot afford enough chairs for their students, hence some of them have to stand for hours stretch receiving lectures, some institutions do not even have the right textbooks and resources to stimulate the interest of the student, also other environmental factors like improper ventilation, inadequate lightning and a host of them contributes to the difficulty in learning. This singular factor is what distinguishes the performance of students in Africa to other developed nations of the world (Riliwani, 2014)..

Research problem

Structural analysis being a combination of two core science subjects which are mathematics and physics have imposed a lot of difficulties on student (Johnson and May 2008), this proposition has been backed up by several researches like the engineering council of British (2000), which explains that Academics may encounter challenges of a weak foundation they may have had in mathematics and physics prior to their admission into a university. Johnson and May (2008) further expressed that one of the challenges encountered is the fact that an increasing number of students join a discipline without having an appropriate understanding of mathematics.

It has also been observed that architectural students have the highest number of failure in structural analysis. According to Herr (2013) the main challenge of structural education in architecture are the students trying to incorporate structural design into their applied design skills. This research sets out to empirically answer the bogging question of how students really respond to structural analysis and the difficulties encountered.

Significance of this Study

Every sector in the world is experiencing tremendous changes, including the construction industry. Nowadays constructions which were previously deemed impossible are being made possible due to a better understanding of structural analysis and design. Since a good understanding of structural analysis is one of the brains, behind the great innovation in the construction industry, then it is important that students have a good knowledge of the course, so that they can become relevant in the construction industry, hereby having a successful career. This study would trigger this, by helping the student to identify what they feel about the course, the challenges encountered, and then appropriated solutions will be provided.

Furthermore, this study is of inestimable value to the respective institutions, as it will help them identify what student think about the course, the challenges the students are encountering, hereby creating a platform for them to know how to increase productivity hence improve the performances of the students at the same time.

Lastly, this research work will help the construction industry and society at large to boast of well-rounded graduates, who can withstand the ever-increasing changes taking place in the construction industry, through the adequate knowledge and application of structural analysis

Research Questions

1. What are the factors responsible for difficulties student face in learning structures and determine the severity ranking?
2. What are the agreement ranking of students' responses and factors?

Research Objectives

1. To identify the factors responsible for difficulties students, face in learning structures and determine the severity ranking.
2. To determine the agreement ranking of the learning difficulties students come across in the study of structural analysis, among Architecture, building, civil and quantity surveying programs.

LITERATURE REVIEW

Structural analysis is an ancient craft and has been known to humankind since the onset of civilization. The earliest structures have included the pyramids built by Egyptians around 2000 B.C, Parthenon at Athens (2500 years old), these structures have gradually progressed to the Taj Mahal (350 years old), and Eiffel tower (120 years old) thereby testifying to the skill and the advancement human achievement. That these monuments are still standing speak to the great accomplishment of the craftsmen in the construction of large structures which invariably involve analysis and design.

Amazingly, these monuments were constructed not only without any computation but also without any theoretical concepts as we know it today (Pedron, 2006), but these masters used the knowledge of rules of proportion developed through experience and practical training. These rules of proportion were what developed over the years

to form the fundamentals of mathematics and physics, so to say that these great feats achieved by these outstanding craftsmen were a proper understanding of mathematics and physics would not be an understatement. Having identified evidences from researchers that a faulty foundation in mathematics and physics, amongst others are the problems facing students' structural analysis skill, then it is best to deduce the causative factors.

Learning is difficult to define and there is scarcely one universally acceptable definition that has been acknowledged by researchers, theorists and practitioners (Shuell, 1986). In the same manner, students also vary, and hence there are differences in the difficulties encountered by them. In a research conducted by Felder and Brent, (2005) they noted that different students can be motivated by different things and each student possesses a unique attitude towards learning. They further observed that no two students are exactly the same as they have different backgrounds and upbringing and characteristics that make their individual approaches to studying unique. The diversities of students' approach to learning and orientation to studying were examined by (Irfan and Shabana, 2012) they identified three approaches to learning, the surface approach, the deep approach and the strategic approach. Students who adopt a surface approach to learning usually dwell on facts but do not delve deep to understand reasons behind the facts such as origins and limitations. They are motivated to study solely to avoid failure thereby making their motivation extrinsic. The students who adopt a deep approach to learning go beyond memorizing the facts but rather dwell on understanding the intricacies of the material they are studying. Their desire to learn more is sparked by intellectual curiosity. This motivation is indeed intrinsic. The third group which consists of students that adopt the strategic approach to learning are a category that are efficient and well organized in their efforts, they know where they are in their studying and know the effort they need to put in to achieve the success they desire and attain their ambition.

Very obvious that if the difficulties encountered by students have different diversities, also parameters in judging the students' performances should also vary, the analyses of the students' performance would then help to get to the root of the difficulties student encountered.

Hansen, (2000) outlined two factors that affect students' academic performance. They are the internal factors which include class size, learning facilities, environment of the class, innate ability of the student, motivation, complexity of the course material, teachers' role in the classroom, technology used in the class and the exam system; and external factors, which constitute social economic factors, extracurricular activities, family problems. Further research conducted by Bangbade, (2004) shows that students performance may also depend on other factors such as gender and age differences.

School environment when analysed has a great role to play in difficulties students' encounter, the more conducive the environment, the lesser the difficulties students' encounter. Social environment could mean a conducive learning environment, availability of good teaching aids (computers, teachers, laboratories, libraries etc.) For example, temperatures above 80 degrees tend to produce harmful physiological effects that decrease work efficiency and output.

It was noted further, that poor ventilation interferes with students' ability to understand. Also decaying environmental conditions such as poor lighting, inadequate ventilation, inoperative heating and cooling systems etc. can affect the learning of students i.e. in any learning environment, comfort is vital to improving student's assimilation rates. Overcrowded institutions are a serious problem in many school systems. Crowded classroom conditions not only make it difficult for students to concentrate on their lessons, but inevitably limit the amount of time teachers can spend on innovative teaching methods.

In a study on class size, (Ronald et al, 2001) observed that changing how students learn can be achieved by simply changing class size because it is believed that class size is pivotal to achieving a good learning experience. While the class size is important, there are other factors on which learning is dependent. These factors include the background of the student and the influence of the broader community.

Interest in the job fuels passion for the job and a lack of interest in a job will lead to the inability to be good at it. There is a relationship that exist between a teacher's interest in the job, knowledge of the the subject, ability to communicate effectively and the overall academic performance of the student (Riliwani, 2014). A research by (Wenglinsky, 2000) on how a teacher's experience affects a student's ability to learn showed that a positive relationship exists between the teacher's years of experience and effectiveness. This implies that an inexperienced teacher is less effective in passing knowledge across to students. Other researchers (Starr, 2002), (Schacter and Thum, 2004), Rivkin, Hanushek, and Kain. 2000). Also studied the relationship between students' academic

performance and the teachers' skills and attribute and it was discovered that there exist a strong relationship between the three variables.

According to a research by Umar *et al.*, (2010), it was explained that cults, which are associations with organized structures have a way of looking out for the interest of their members can influence and impact positively or negatively the performance of a student who is its member. These cults entice prospective members with the perceived benefits they offer such as protection, popularity and even sometimes assistance in school fees payment. The problem usually arises when the student member does not strike a balance between the demands of his studies and the demands of the cult association because most times the promised benefit never get to the student members.

It was argued that students make educational decisions by calculating their costs, anticipated benefits, probability of success, and the attractiveness of alternative options (Breen and Goldthorpe, 1997). Because these aspects vary among socio economic status (SES) groups, the degree to which students of different socio-economic backgrounds view schooling as desirable varies as well, it was also maintained that student begin to understand at an early age about how the society is structured. They begin to become to be aware that the society rewards people or individuals of different SES differently, therefore these students of low SES families realize that they are likely to be exempted or excluded from desirable job and hence, they go through a process of disillusionment. As a result, these students expect a wide gap with age due to students' being less motivated and placing efforts into their academic activities.

METHODOLOGY

Area of study

The study was conducted in Covenant University, Ota and two Lagos universities, the first one which is University of Lagos, Akoka and Yaba School of technology. The reason for choosing these other two institutions in Lagos state universities was because one represented a federal government institution while the other represented a state institution.

Population of study

The targeted population for this study were students in 100-500 level studying any construction related courses basically architecture, building technology, Civil Engineering and Quantity surveying in covenant university, university of Lagos, and Yaba College of technology.

Data collection instrument

Data used for this research were obtained from using multiple choice structure questionnaires to answer the question of student's response to calculation based courses. The questionnaire was adopted from a rigorous review of the literatures used. The questions were in a 5-point Likert format ranging from (SD= strongly Disagree, D=Disagree, U= Unsure, A=Agree, SA=Strongly Agree) which were used to measure the respondent response and factors affecting the learning of structural analysis as a case study. the questionnaire consists of two sections.

Sample size and administration of the research instrument

A sample consists of selected elements, subjects or observations from a given population. It is a finite part of statistical population of which properties are studied to gain information about the whole population. For the purpose of this research work, a survey was conducted and it was realized that all together in the three institutions there were more than a thousand students in the courses. Therefore, for this research work 195 questionnaires were distributed and 164 were retrieved which is 84.10%.

Research instrument for data analysis using Statistical package for social sciences (SPSS)

Statistical package for social science (SPSS) was used to process and analyse the information obtained from the questionnaire survey. Mean and agreement ranking were used to achieve objectives 2 and 3 as stated in chapter one by the use of SPSS. The result gotten would be made in a pictorial form for example pie chart and also frequency table for clarity of the analysis of the obtained data.

Descriptive tools

These are the tools used for describing the entire population or samples. This helps to show the relationships among the variables and other significant features. These tools are very useful in conveying quick impression of any clustering variations and possible trends in the value of variation. An example of such tools collected in the analysis of this data includes charts, frequency, percentages and measure of central tendency.

ANALYSIS AND DISCUSSION OF RESULT

Demographic distribution of respondents

In the first section, the personal data of structural analysis students were acquired through the self-administered questionnaires. Information such as gender, institution, levels and departments were analysed. The following were discovered

Covenant University had 77 respondents; university of Lagos (UNILAG) had 47 respondents while Yaba School of technology had 40 respondents. The following data shows that Covenant University had the highest respondent for the study, owing to the fact that it was the researcher's institution.

In order to get accurate information, and views from different sides, the entire department offering structural analysis were included in the research work. From the figure above building technology had 36.27% of the respondents, followed by civil engineering with 33.33%, also Architecture had 25.49% and lastly quantity surveying with 4.90% of the total respondent. The department of building technology has the highest number of respondents for this research work.

It was also observed that 100 level respondents had the lowest percentage at 4.90%, followed by 200 level respondents with 7.84%, 300 level respondents with 17.65%, 400 level respondents at 24.51%, then 500 level respondents which carries the largest percentage at 45.10%.

The reason 500 level respondents had the largest percentage was because the researcher assumed that, the respondents had spent quite a considerable time doing structural analysis, therefore with their experience they could provide accurate information.

The gender distribution of the respondents was as follows; it indicated that the male gender has 65.69% while the females have 34.31%. From this distribution, the male gender had a greater population than the females, the reason for this is not far-fetched as the construction industry is male dominated.

Factors responsible for learning difficulties amongst covenant university respondents, University of Lagos and Yaba College of Technology.

The factors were divided into positive and negative factors with the positive affecting their success and understanding of the course, structural analysis. The negative factors on the other hand related directly to the reasons for the difficulties experienced in the study of the course. The factors were ranked according to the responses obtained from each university. And the results are displayed in tables 1 and 2 below.

Table 1 Negative factors causing learning difficulties amongst covenant university, University of Lagos and Yaba College of Technology respondents.

FACTORS	Covenant university	Rank	UNIVERSITY OF LAGOS	Rank	YABA COLLEGE OF TECHNOLOGY	Rank	Remark
The prior background I had makes it difficult for me to understand structural analysis	3.77	1 st	3.59	2 nd	2.33	7 th	Negative factor
The Lecturers' mode of delivery makes the course uninteresting	3.56	2 nd	3.38	3 rd	2.5	5 th	Negative factor
The class is too large and I am unable to follow	1.85	7 th	3.62	1 st	4.04	1 st	Negative factor
I have a solid mathematical background but struggle with the basics of structural analysis	3.4	4 th	3.28	4 th	3.58	3 rd	Negative factor
I have a poor mathematical background and it makes it difficult for me to understand the subject	3.25	6 th	2.97	7 th	3.63	2 nd	Negative factor
My physics background from my secondary school education is poor and therefore an obstacle to understanding structural analysis	3.27	5 th	3.28	4 th	3.28	4 th	Negative factor
The lecturer is not able to communicate the subject area clearly and I find it difficult to keep up	3.5	3 rd	3.28	4 th	2.38	6 th	Negative factor

From the table 1, it can be observed that the major problem encountered by the public institution is the class size while for Covenant university that represents a private institution, the major problem is the prior background of the student as the class sizes are regulated. Closely related in agreement is the ability of the student to relate structural analysis with his/her basic knowledge of mathematics and physic. Despite the solid mathematical background, they still struggle with understanding basic structural analysis. This problem of not being able to understand the course could be closely tied to the mode of delivery by the lecturers and the inability of the lecturers to communicate the subject area. Poor mode of delivery will fail to spark interest of students and that will translate to their poor performance in the course.

Table 2 Positive factors causing learning difficulties amongst covenant university, University of Lagos and Yaba College of Technology respondents.

FACTORS	Covenant university	Rank	UNIVERSITY OF LAGOS	Rank	YABA COLLEGE OF TECHNOLOGY	Rank	Remark
I have no problem understanding the basic structural concepts	2	6 th	3.38	1 st	3.5	2 nd	Positive factor
The Lecturer has no problem communicating and expressing himself/herself	3.27	3 rd	3	2 nd	3.54	1 st	Positive factor
There are practical examples provided in class that makes it easy to understand the concepts and principles of structural analysis	3.29	2 nd	2.79	5 th	2.79	6 th	Positive factors
The lecturer takes time to solve examples in class to give us a better understanding of the subject area	3.6	1 st	3	2 nd	3	5 th	Positive factor
The tools for teaching structural analysis are available and we are exposed to them	3.19	4 th	2.69	6 th	3.08	4 th	Positive factor
We are exposed to the use of computer softwares to aid in structural analysis	2.24	5 th	3	2 nd	3.33	3 rd	Positive factor

The table 2 shows a summary of positive factors ranked amongst Covenant University, university of Lagos and Yaba School of technology. From the above table, it can be observed that the ability of the lecturer to communicate the subject area and expose the students to examples ranked highest among Covenant University responses. This will help with the students' performance in the course. In the public schools, their main concern is understanding the basics of the course but in the private school, their understanding was hinged on the lecturers taking time to explain and work some example in order to help with their comprehension.

CONCLUSIONS

1. The major problem most students are facing was as a result of faulty background, especially in the core science subjects (physics, mathematics, chemistry) which is a stumbling block to them understanding the course
2. Class sizes is a problem, especially to the public universities as most of them inferred that they are unable to follow up and concentrate when lectures are going on, due to the large crowd. This is in agreement with (Ronald et al, 2001; Westerlund, 2008; Bedard & Kuhn, 2008)

3. A teacher's ability to communicate the subject area and engage the class will help with the students understanding the course and performing well in the course. This is in agreement with (Bangbade, 2004; Starr, 2002; Schacter and Thum, 2004; Rivkin, Hanushek, and Kain. 2000).
4. Exposure of students to computer aided software, that would help their understanding and appreciation of the course.

RECOMMENDATIONS

the following are recommended to minimize learning difficulties students encounter in construction measurement.

1. Secondary and primary school educations should be improved, by investing in continuous workshops, seminars and training of teachers to improve their productivity. Also there should be continuous monitoring and evaluations of teachers' performance, in order to ensure that students are well informed.
2. Public universities and higher institutions should restrict their admissions to the number of students they have enough resources to cater for, so as to reduce the class sizes. Should in case they want to admit quite a number of students they should ensure that they are divided into groups and given different lecture times.
3. Lecturers should try as much as possible to deliver the course in creative ways that would entice the interest of the students. This entails a balance between theory and practical, in which could be achieved by showing students life model of how some structural concept works. Also the classes should be interactive so as to reduce anxiety and fear.
4. Also, there should be provision for computer aided software, examples of which are. These computer soft wares simplify the work of the lecturer and hastens the understanding of the students, as it translates the whole structural concept from abstract to reality, boosts the creativity of the student, and lastly helps students to solve real life problems.

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LEARNING FOR PLACEMENT. FOSTERING INNOVATION IN THE CONSTRUCTION SECTOR THROUGH PUBLIC-PRIVATE PARTNERSHIP IN THE EMILIA-ROMAGNA REGION

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ABSTRACT

The Fourth Industrial Revolution increasingly deals with the application of new abilities, skills and workforce strategy as well as the introduction of new integrated technologies to support both productivity and innovation. The current research project carried out in collaboration between TekneHub, a research laboratory of the Emilia-Romagna High Technology Network, the Department of Architecture (DA) of the University of Ferrara and national and international public and private parties has focused on knowledge updating in the construction sector. The study was based on the application of both collaborative *Integrated Project Delivery Methods* (IPD) and *Value-Chain Analysis* (VCA), which allow the most effective learning strategies to be identified in relation to industry needs, academia capability and placement requirements. Managerial knowledge and data based decision-making are certainly emerging as key findings in order to drive the Framework of Qualifications for higher education towards more contemporary and effective results.

Keywords: Construction management / Innovation management / Integrated Project Delivery Method (IPD) / Skills for Innovation in Higher Education.

INTRODUCTION

To ensure that new opportunities for increasing the productivity and the competitiveness of the construction sector determine a Fourth Industrial Revolution, it is not enough to introduce new technologies, such as automation in production processes and Internet of Things (IoT), or Advanced Materials.

At both national and European level, the construction industry has to deal with the inadequacy of job organization and skills in key areas, such as managerial knowledge, basic financial knowledge (ERA SGHRM, 2011) and data based decision-making, that are becoming even more crucial to make a new level of productivity effective. The upgrading of skills would allow the industry to “significantly contribute to job creation, by increasing its activity in some very promising areas such as the renovation of buildings” (EC, 2012, p.2).

Due to its slow innovation adoption, at both technological and organizational level, and the lack of collaborative work, associated with a variety of site-based project sizes, the construction sector has always been characterized by insufficient sharing of best practices among all the players and stakeholders involved, as often experienced in the Italian setting. Consequently, huge waste is still observed along the construction value chain.

“One reason for the industry’s poor productivity record is that it still relies mainly on paper” (McKinsey, 2016, p.7). Moreover, the fact that the construction industry invests less than 1% of net sales in R&D (EC, 2016) must be taken into account in order to understand the lack of innovation and technological progress.

For this reason, thanks to the reforms of the UK Government, the European States have recently undertaken actions to enable the development of a digital and automated production environment. In fact, since 2014 several codes and standards have become law and are being implemented. These include the sets of rules which refer to the adoption of Building Information Modeling tools; a set of ICT integrated tools for collaborative design and management.

The first results of an ongoing research project can be found below, which aims both to measure the impact of digitization and automation in the construction sector and the reflections (effects) on the higher education system in the Emilia-Romagna Region, which is part of a national industrial cluster, strictly linked with the European market.

Considering the complexity of the players involved throughout the industry, the research project was based on the application of both collaborative *Integrated Project Delivery Methods* (IPD) and *Value-Chain Analysis* (VCA) to access, through quantitative and qualitative analysis, the correspondence between industry needs and public sector capability offering adequate higher education solutions to address placement opportunities.

The first results of the research project show that an integrated and collaborative approach to the upgrading of higher education solutions, helps to identify more effective strategies, in order to support the introduction of new skills and technologies in the construction sector.

THE STUDY: SKILLS FOR CONSTRUCTION INDUSTRY DIGITIZATION

Despite the increasing demand of digitized processes in the construction industry, “the sector is among the least digitized” (McKinsey, 2016, p.2). While the construction process is becoming more complex due to the amount of specialized knowledge that is necessary to effectively put a project in place, cost and schedule overruns are the norm.

This research study considers knowledge and Information Management (IM) as assets which are fundamental for the efficient and effective delivery of a project and which lead, if well managed, to better outcomes, including:

1. Increasing collaboration;
2. Improving the quality of data-decision making;
3. Enhancing the speed of decision-making;
4. Reducing duplication of effort;
5. Increasing business resilience.

The aim of the project is to investigate the quality of the regional higher education offer in order to verify the presence of knowledge areas such as the capacity to manage big data, creative thinking, complex problem solving and the risk management approach which have been identified as drivers for making the new industrial revolution effective.

In fact, according to *The Future of Job Report* “in many industries and countries, the most in-demand occupations or specialties did not exist 10 or even five years ago” (WEF, 2016, p.1) and one job type is mentioned, among others, across all industries and geographies: data analysts. In this new scenario, the skills set is expected to change rapidly according to industry needs so the “exposure to industry and other relevant employment sectors” (PIDT, 2011) becomes crucial right from the early stages of education, with particular reference to levels five to eight of the European Qualification Framework. It should be stressed that “the term industry is used in the widest sense, including all fields of future workplaces and public engagement, from industry to business, government, NGOs, charities and cultural institutions (e.g. musea)” (ERA SGHRM, 2011).

The finding of the study sample was based, first, on the definition of the target involved. In this study, higher education courses such as bachelor higher national diploma, bachelor, master and doctorate courses for architects and engineers were considered as main areas of the research. (Figure 1)

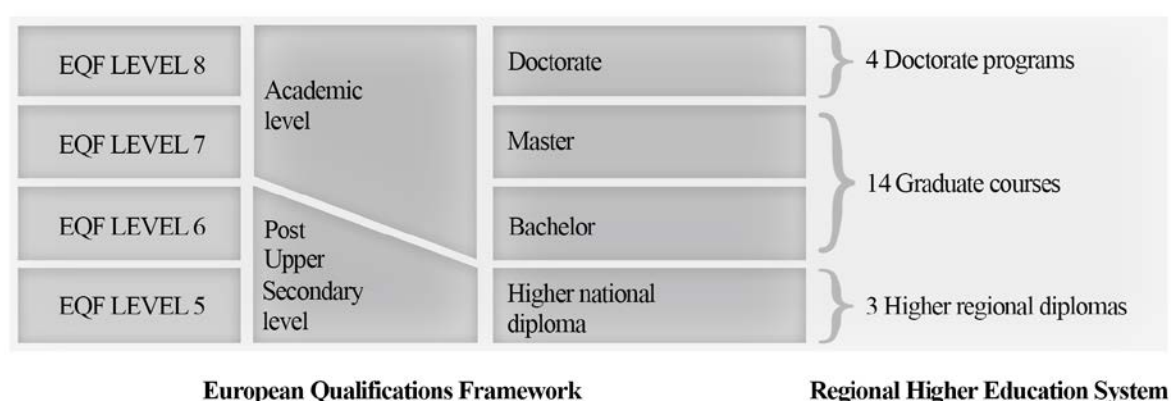


Figure 1: European Qualifications Framework and regional higher education system. Research domain.

Secondly, criteria such as the representativeness from the territorial point of view were considered. In fact, higher education courses for the construction sector as well as continuing education and on the job training activities are an integral part of the regional education system.

However, despite this scenario there is currently no common data set of information, either at regional or national level, which could allow the most effective strategies to be identified in order to meet the new placement opportunities. A long-term fallout of the study is certainly providing the regional sector with a comprehensive database of information regarding the quality of supply and demand of professionals in the construction sector.

This purpose can only be pursued thanks to strong cooperation between the public and private players involved.

In fact, the research project is carried out in collaboration between the regional “Association Construction Clust-ER”, which is regional a public-private initiative, the TekneHub centre, a research laboratory of the Emilia-Romagna High Technology Network, the Department of Architecture (DA) of the University of Ferrara and other regional, national and international public and private parties. (Figure 2)

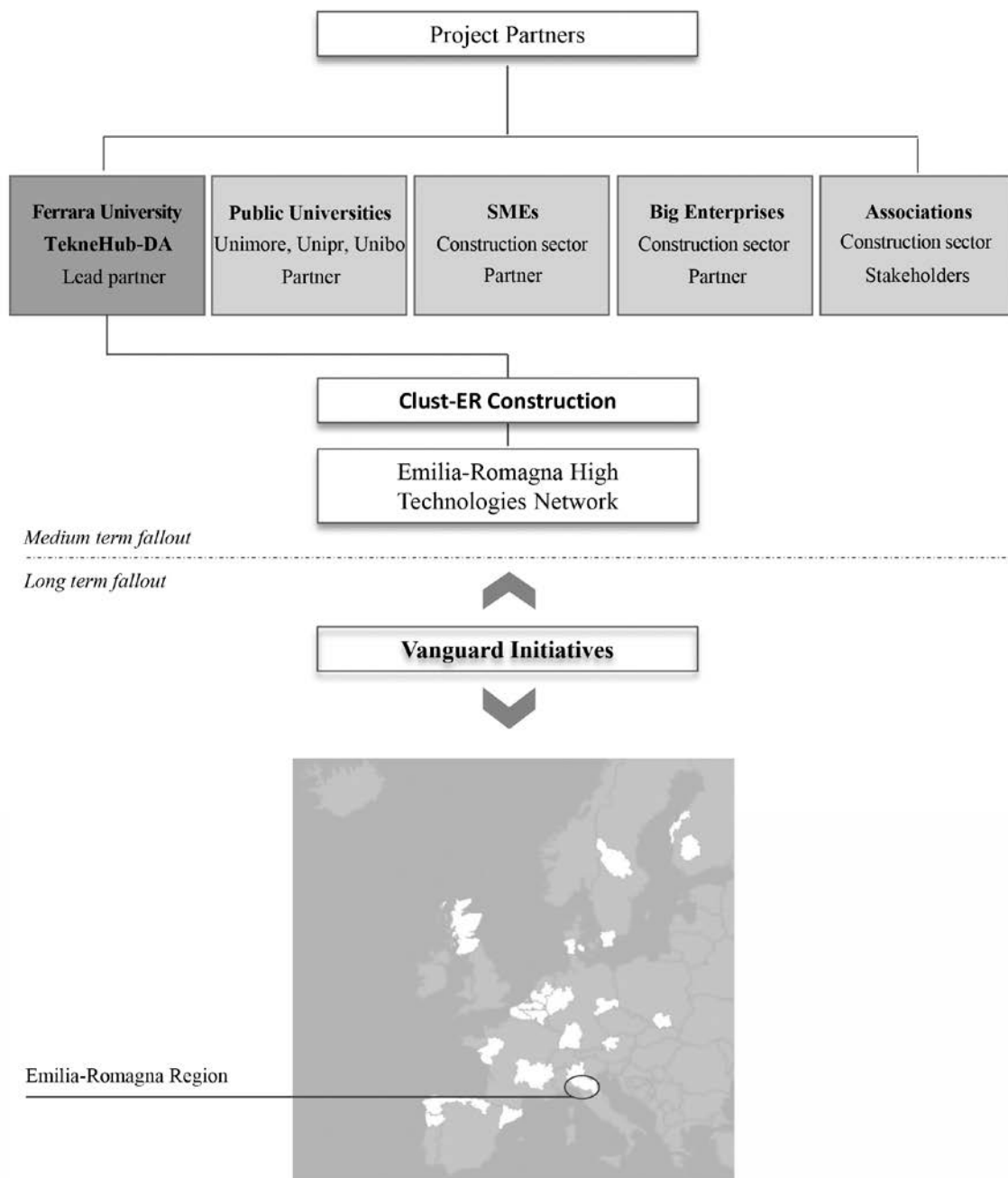


Figure 2: Projects partners. All the actors and stakeholders were involved at the early stage of the project

METHODOLOGY

As stated so far, the construction value chain is characterized by complexity, uncertainty, a fragmented supply chain, and short-term thinking which are obstacles for long-term innovation and learning (Oesterreich, Teuteberg, 2016, p. 123). However, Europe's Construction Value Chain (CVC) is a key industry, which accounts for 7% of European GDP, gross domestic product, and employs 11 million people.

Industry 4.0 requires, on the other hand, shared data-based knowledge which can only be reached through comprehensive data mining, data analysis and a risk management based approach along the entire value chain. As a result, the ability to manage this quantity of data became of crucial importance.

Subsequently, the research questions are as follows.

Research question 1: What impact does Industry 4.0 have on the regional higher education system in terms of updating skills and competencies? (RQ 1)

Research question 2: Are regional and national Qualification Frameworks consistent with the needs of the current construction industry? (RQ 2)

Research question 3: Which teaching methods are suitable with reference to the target of the end users involved? (RQ 3)

Research question 4: Which new research areas are supposed to be of great importance for the future of the regional construction sector? (RQ 4)

During the initial stages of the research, intensive brainstorming activity was conducted with all the stakeholders involved and, within the IPD methodology, the research indicator sets were defined, such as:

- The target of students/end users involved;
- The set of skills and competencies related to the digitization process of the construction industry;
- The regional and National Qualifications Framework;
- The European Qualification Framework.

Furthermore, for the purpose of answering research question 1, the whole set of higher regional diploma, graduate, postgraduate and doctorate courses is undergoing analysis with respect to the following parameters:

- Basic project management knowledge;
- Advanced project management knowledge applied to specific subjects, areas and phases of the value chain;
- Basic risk management knowledge;
- Advanced risk management knowledge applied to specific subjects, areas and phases of the value chain;
- Data mining based knowledge;
- Ability to manage data interoperability;
- Competencies in terms of human resource management;
- Transferable skills (ERA SGHRM, 2011);
- Skills from the knowledge based economy such as communication, entrepreneurship, IPR, ethics and standardization (ERA SGHRM, 2011).

To answer research questions 2 and 3, four pilot projects have been put in place and are under evaluation, such as: Post-graduate courses in the field of digitization (target: BIM manager and BIM coordinator for public and private sectors); (Adoption of) Specific PhD training paths in the field of collaborative design and management; Program of lectures in the field of digitization (target: professional development and continuous improvement)

Research in the field of BIM impact on design quality and process management (partners involved: private and public players). Meanwhile, the three main regional construction value chains have been taken under evaluation in relation to RQ 1, 2 and 3 in order to answer to question 4.

RESULTS AND LONG TERM FALLOUT

The introduction of digitization tools and methods could represent a great opportunity for improving the productivity of the construction sector. However, significant updating of skills is needed as well as ways of sharing professionals' knowledge among all the players in the construction sector.

With reference to the construction industry, the regional higher education system is characterized by:

- 3 higher regional diplomas;
- 14 graduate courses;
- 4 doctorate programs. (Figure 3)

Despite the high level of quality of the regional training offer, since 2006 the University of Ferrara has been the top University among national graduate courses in architecture (CENSIS, 2017). The research project made it possible to verify a lack of digital collaboration based knowledge issues within the courses, as mentioned before. The analysis of the regional education system also demonstrated the almost total lack of project management based knowledge even within five years courses.

In fact, there are huge numbers of courses in areas such as digital representation, virtual modeling for architectures and engineering, integrated ICT technologies for survey, 3D survey, GIS and high quality doctoral research on BIM, Big-Data management, 3D Printing tools for architecture and Artificial Intelligence tools and so on. On the other hand, the teaching of collaborative work tools and methods has not been introduced yet.

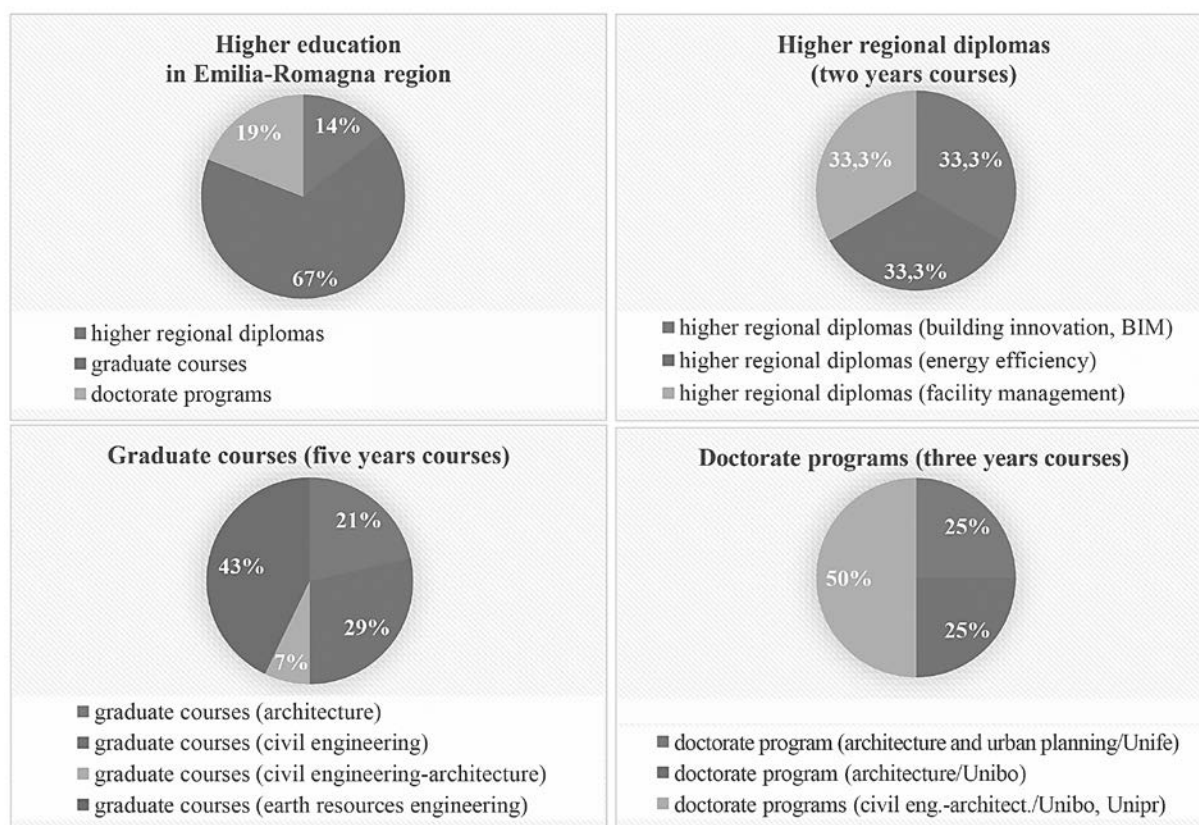


Figure 3: Emilia-Romagna higher education system.

However, with reference to the New Italian Procurement Code the following knowledge areas also need to be considered in order to achieve construction sector digitization:

- Strengthening the digitization of surveying and diagnostic processes;
- Supporting Public Procurement through data based decision-making processes;
- Developing a New Project Management approach for the construction sector (IM, Information Management and BIM, Building Information Modeling).

Furthermore, especially in the field of managerial knowledge and data-based decision making the lack of basic knowledge in master's courses is observed. This sort of difficulty can be properly managed through the introduction of project management knowledge at the beginning of five year courses. As a result, it would be possible to adopt more effective strategies, such as an inductive approach and on the job training, in post-graduate courses.

In conclusion, while the most important medium-term fallout is updating the National Qualification Framework there are other main goals to be achieved within three to five years:

1. Updating existing training courses, in specific areas, with reference to the new qualifications identified;
2. Scheduling the adoption of specific training methods (deductive training activities, on the job training etc.) to be applied in order to rapidly reach the expected target.
3. Updating bachelor, master, PhD programs (managerial knowledge, data based decision-making methods and tools, risk management, skills to enhance interactions between academia and Industry, awareness of financial tools)
4. Making post-graduate courses more effective (inductive approach, on the job training, etc.)
5. Strengthening the partnership between the public and private sector in the field of digitization in the construction industry.

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LEARNING GEOMETRY THROUGH MATHEMATICAL MODELLING: AN EXAMPLE WITH GEOGEBRA

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ABSTRACT

This paper is in line with the critical thinking and reflection process on the role of mathematical modelling with the use of technology in mathematics education. After some considerations about the teaching - learning of Geometry in Italian secondary schools and the analysis of the theoretical framework inherent mathematical modelling, the paper will illustrate a practical, coherent example of a classroom activity. Starting from a real object, the activity develops into mathematical modelling - that explores meaningful properties and concepts - which allows the simulation of a computer prototype in the dynamic geometry environment GeoGebra.

INTRODUCTION

Mathematical modelling is one of the topics in mathematics education, which has been the object of debate particularly in the last few decades. In classroom practice all over the world, however, modelling still has a far less prominent role than is desirable. The main reason for the gap between the goals of the educational debate and everyday school practice is that modelling is difficult both for students and for teachers. Today more than ever before, the teaching and learning of Mathematics play a crucial role in shaping thinking and reasoning as well as impacting on the whole personality. That is why we firmly believe mathematical modelling ought to be included in an updated mathematics secondary school curriculum as a sound basis for further education.

The International Commission on Mathematical Instruction (ICMI) has been promoting discussion on this topic at international level for some time (Blum et al., 2007; Stillman, 2013 and 2015; and many others), stressing - among other things - that teaching Mathematics must take into consideration not just the cultural role of the subject (which is generally accepted), or the reasons which consistently reinforce it in an ever - changing society, but also how school education is structured, with its procedures, trends as well as its restrictions.

Teaching while keeping in mind the mathematics-real world binomial signifies promoting active learning in class, turning studying into a process of discovery, thus aiding the understanding of mathematical concepts (Niss, 2003); moreover, it means providing the learners with the chance of cognitively reconstructing mathematical structures which echo and enhance students' natural cognitive structures, especially perceptive-motor ones (Gallese, & Lakoff, 2005).

For instance, in the teaching of Geometry the use of the Dynamic Geometry Software (DGS) continually opens up new didactic perspectives because it privileges the constructive aspect of the subject while at the same time maintaining the same degree of deductive accuracy, clarity of hypothesis and consequences pertaining to the discipline (Hannafin et al., 2001; Hohenwarter et al., 2008; Leikin et al., 2013). Thanks to the DGS, the graphic - constructive phase - both before the acquisition of some concepts and geometric properties, and afterwards as verification and/or in-depth analysis - greatly helps didactics, as it lends itself both to visualization and exemplification and/or exploration.

The real world stimulates both the connection with "significant geometric properties" (Enriques, 1921), and their simulation by means of modern technological tools. Indeed, it ought to be remembered that Geometry originated as modelling of the physical world and its surroundings. In the Italian school, the teaching of geometry has progressively endorsed the formal aspect of the subject, "de-contaminated"- so to speak - of even the smallest figural and constructive element. On the contrary it has been appropriately and explicitly claimed that 'geometrical concepts should not overlook the dual conceptual and figural aspect' (Fischbein, 1993), therefore it is advisable to incorporate both into everyday teaching, else geometry teaching will fail to contribute to informed learning. This paper illustrates an example of mathematical modelling in secondary school with the aid of the DGS GeoGebra.

THEORETICAL FRAMEWORK

The inclusion of modelling in school Mathematics curricula is crucial for the development of problem solving skills, and promotes a reflection on the relationship between Mathematics and sensible reality (Gallegos, & Rivera., 2015).

A real problem offers a learning opportunity in three dimensions (Wedelin, & Adawi, 2015):

- Familiarity with real-world problems:

A realistic problem and its solution (including any necessary derivation), acts as a representative case and contributes to a familiarity with real-world problems in the domain of interest.

- **Supporting knowledge:**
The concepts and methods required to solve the problem (known in advance or created as a part of the solution process).
- **Processes and skills:**
The particular way in which the solution (and its derivation) was found, and the modelling and problem solving techniques involved.

In addition, teaching Mathematics through problems is important because dealing with real life problems helps students to (Siller, & Greefrath, 2010):

- understand and cope with situations in their daily lives;
- acquire the necessary tools for moving from the plane of reality to that of Mathematics;
- have a clear picture of Mathematics, and in the process identify the tools they need for life;
- comprehend Mathematics and Computer Science in depth, so as to be able to recall important concepts with confidence at a later time;
- see the history of Mathematics as a kind of 'laboratory in which to explore the development of mathematical knowledge'.

Almost all of the research on learning with Mathematics modelling is based, with few exceptions, on an epistemological perspective that begins with an examination of the relationship between the real world and the world of the model. Doerr and Pratt (2008) suggest two epistemological foundations for mathematical modelling: the first entails a separate model from the world that must be modelled, while the second sees modelling as a cyclical and interactive process.

The epistemological position that separates the real world of the phenomenon from the world built with the model is in some way artificial; on the other hand, however, it is crucial for modelling. This separation is not a naive and modern version of a platonic point of view of reality, but is distinctly represented in a mathematical model. The essence of the epistemological position is that the two worlds - that of the phenomenon and the model - co-construct one another: the co-construction of the real world on the one hand, and the model world on the other, is highlighted by the way in which the models are planned and designed in the real world.

The real model may be affected by results, which are extraneous to it; therefore, the separation between the real world of the phenomenon and the mathematical model of the world is in a way artificial. At the same time, the separation of the phenomenon from the model is a crucial point in the meaning of a model.

The second epistemological position - based on research and practice in relation to mathematical models - takes on modelling as a cyclical and interactive process. The reason for this interaction is the attempt to validate in the real world the results, manipulations and objects in the model world. The results of the validation process are derived from a model, or generate a further cyclic modelling activity. The cyclic nature of this modelling paradigm (National Council of Teachers of Mathematics, 1989; Giordano, Weir, & Fox, 1997; Galbraith, & Clatworthy, 1990; Niss, Blum, & Huntley, 1991) is represented in Figure 1; the paradigm can also be subject to changes.

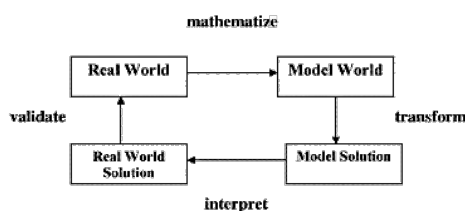


Figure 1: The cyclic nature of the modelling process.

In Figure 2 the most common Blum and Leiss' cyclical model (2007) is showed.

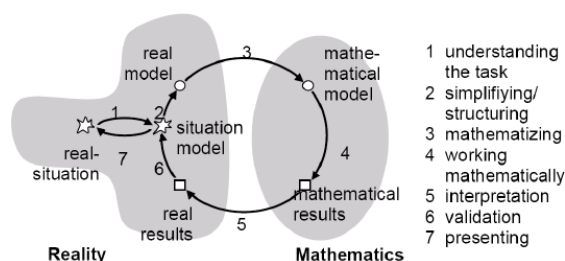


Figure 2: Modelling cycle of Blum & Leiss.

In Blum and Leiss' modelling cycle we can identify three fundamental points:

- Design and development:
Comparable to "Finding the real model" and to the step of "Translation" - Real situation to real model by including the situation model.
- Description:
Comparable to "Finding the mathematical model".
- Evaluation:
Comparable to "Finding (Calculating) mathematical results" and to the step of validating.

Several research studies recognize that the development of technology creates more opportunities for practicing mathematical modelling in the classroom (Galbraith, et al., 2007); this has led to the promotion of modelling activities in schools. In recent years the practice of modelling with the use of technology has been fully included in the Mathematics school curricula (CAS, DGS, spreadsheets, programming environments, etc).

Siller and Greefrath (2010) have implemented *Blum and Leiss' modelling cycle*, introducing the world of technology (Figure 3).

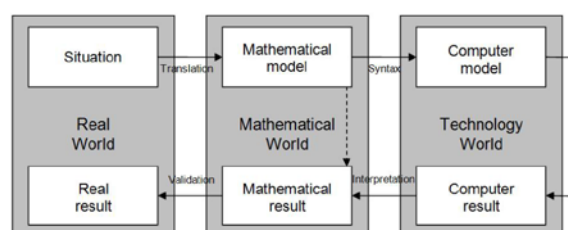


Figure 3: Extended modelling cycle-regarding technology when modelling.

The three worlds shown in Figure 3 are idealized, and influence each other. For example, the development of a mathematical model depends on mathematical knowledge on the one hand, and on the other hand is influenced by the technology.

The use of technology increases the chance to solve some mathematical models; in particular, the intelligent use of computers in teaching allows to increase motivation on the one hand and to recognize the importance of mathematics in life on the other. Unfortunately, many teachers prefer not to introduce modelling in classroom practice for different reasons, which include the lengthier learning process; at the same time, there are many reasons in favour of integration between modelling and technology (Siller, & Greefrath, 2010).

In classroom teaching practice, the use of technology allows you to create new opportunities in the processes of teaching-learning and at the same time operate active links between the ideas and the mathematical content (Frassia, 2016).

Fuchs and Blum (2008) quote the aims of Möhringer (2006) which can be reached through (complex) modelling with technology:

- Pedagogical aims:
With the help of modelling cycles it is possible to connect skills in problem solving and argumentation. Students are able to learn application competencies in elementary or complex situations.
- Psychological aims:
With the help of modelling the comprehension and the memory of mathematical contents is supported.
- Cultural aims:
Modelling supports a balanced picture of mathematics as science and its impact in culture and society (Maaß, 2005).
- Pragmatically aims:
Modelling problem helps to understand, cope and evaluate known situations.

The use of technology can help to simplify the difficulties typical of some modelling procedures. Siller and Greenfrath (2010) identify some key elements when you engage in modelling activities with technology: computationally-intensive or deterministic activities; working, or evaluating structuring of large data sets; visualizing processes and results; experimental working. In technology world, the geometry learning can be facilitated. In short, the surveyor's traditional tools (ruler, square ruler, compasses), retrieved and simulated by DGS, on the one hand facilitate geometrical intuition, while on the other raise and stimulate interest and learners' imagination, enabling speculation, which is sometimes immediately verifiable, thanks to the simultaneous computer feedback (Jones, et al., 2000; Hollebrands, 2007; Güven, & Kosa, 2008; Hohenwarter, et al., 2008; Ruthven, et al., 2008; Baccaglini-Frank, & Mariotti, 2010; Keşan, & Çalışkan, 2013).

The connection between a drawing and a geometric object in everyday teaching practice is nearly always

established through a process of approximation. This is based on the idea that with subsequent, better attempts the drawing can eventually achieve something close to the ideal figure. Geometric constructions made with traditional tools also fit this framework and are opposed to free-hand constructions in purely empirical terms of precision. The use of tools is then seen in practical rather than theoretical terms (Mariotti, 1995). However, in this way a fundamental aspect is ignored and remains unknown to students: each tool contains some knowledge, which is useful for the solution of a particular class of problems. In this sense a geometric construction appears like a geometrical problem (Mariotti, 1996) whose solution can be worked out within a given theoretical framework. Geometric construction, suitably contextualized in the teaching practice, helps the students to begin just this complex path which starts with the simple and evident and moves on to the complex and 'non evident' in a tangible, critical and rigorous way. The integrated tools offered by a DGS represent a valid aid along the way as they progress in the same way from what is predefined to what is made by the user (Serpe, & Frassia, 2015). The authors illustrate a practical, coherent example - based on the theoretical framework outlined - of a classroom activity about geometry: starting from a real object, the activity develops into mathematical modelling which allows the simulation of a computer prototype in the DGS GeoGebra. Specifically, the modelling example fits within the second epistemological position.

AN EXAMPLE WITH GEOGEBRA

On the basis of the overarching ideas established by OECD's PISA study and of recent international research in the field of didactics (Goos, et al., 2007, Doerr, & Pratt, 2008; Arzarello, et al., 2011), we have chosen a type of methodology with the aim of posing 'open' problems involving the modelling of real situations. Specifically, the task is for the students to model the Mercedes car maker's logo with GeoGebra, to be used as a means of constructing a new kind of knowledge that is nevertheless based on well-known basic concepts and knowledge in Euclidean geometry. In order to simulate any process, it is necessary to find an appropriate model for it and to create an efficient algorithm to evaluate the model (Henning, & John, 2011).

Modelling is crucial in mathematics learning and it is different from other mathematics topics because of its unique definition and steps. In this example - type activity Blum and Leiss' (2005) a simplified modelling cycle process (Figure 4) is used just so students can experiment how to apply the acquired skills in order to find out or verify properties, using inductive and deductive reasoning.

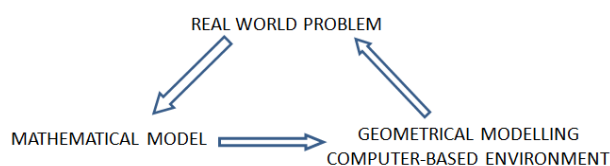


Figure 4: Modelling Cycle Process.

Now, we describe the example of activity carried out in the 9th (13-14 years) of a scientific high school and aimed at developing and enhancing of fundamental geometrical objects (point, segment, circumference, angle and triangle). The steps of activity are reported here in brief.

STEP 1 - Real World Problem

The class is divided into groups, and each group gets and becomes familiar with the object - Mercedes logo (Figure 5).



Figure 5: Mercedes logo

The teacher (T) invites the students (S1, S2, ..., S5) to record on the page the first geometrical intuitions. Some of the recorded comments are reported below:

- S1: I can see a three point figure - like a three point star - in a circle.
- S2: The outer edge consists of two concentric circumferences.
- S3: The inner figure is formed by three quadrilaterals with a common vertex, but the common vertex is in the middle.

The methodology of guided discovery encourages the students to formulate the first conjectures and to explore further; the conversation triggered and guided by the teacher is very important because it avoids the construction of formal games and it educates to reasoning before formulating conjectures and hypotheses, stimulating creativity, intuition and the imagination.

STEP 2 - Mathematical Model

The experimental analysis of the real model leads to the formulation of a possible mathematical model; this requires clear hypotheses and rigorous deductions.

This is a delicate phase not always easy to grasp (Serpe, 2007). In particular, the second step is based on recognition and characterization of geometric properties by measuring with ruler and goniometer.

S4: The quadrilaterals are congruent ... each quadrilateral is divided by a diagonal greater in two congruent parts.

T: What's the name of three quadrilaterals in the logo?

S3: The three quadrilaterals are kites or deltoids.

T: In fact, they are non-convex quadrilaterals with two pairs of adjacent equal sides. How are the three deltoids arranged?

S2: The three vertexes are all equidistant from each other.

S5: Each deltoid/kite is rotated by 120° in respect to the previous and/or successive one.

Now the teacher asks the students to trace the Mercedes Logo (Figure 6) and summarize on a chart all the observations made on the relations among the geometrical figures on the Mercedes logo (Table 1).

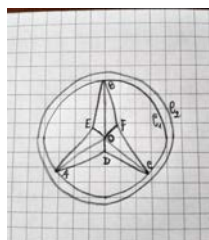


Figure 6: Mercedes logo

Geometrical objects	Geometrical objects names	Relations
<i>Circumference</i>	C_1, C_2	<i>Concentric</i>
<i>Segments</i>	$AO, BO, CO,$	<i>Congruent</i>
<i>Segments</i>	AD, AE, BE, BF, CF, CD	<i>Congruent</i>
<i>Angles</i>	$\hat{AOB}, \hat{BOC}, \hat{COA}$	<i>Equal</i>
<i>Triangles</i>	$ADO, AOE, BEO, BOF, CFO, COD$	<i>Congruent and Equivalent</i>
<i>Deltoids</i>	$ADOE, BEOF, CFOD$	<i>Congruent and Equivalent</i>

Table 1: Relations between geometrical objects

Now we have to make a prototype of the mathematical model both with traditional tools (ruler, set square and compasses) and with the aid of technology (computer and relative software); in both cases we need to formalise the solving algorithm.

STEP 3: Geometrical Modelling in Computer-Based Environment

At this point mathematical modelling allows an important conceptual leap: the short and objective description of the Mercedes logo requires the introduction of the acquired and tested concepts into the model study phase. Afterwards, the computer logo simulation leads the learners to structure the actions performed and their effects into a descriptive framework, a process through which they acquire familiarity with arguments and demonstrations of increasing complexity. The teacher then suggests the reproduction of the Mercedes logo in the computer lab using the GeoGebra spreadsheet. The students through the GeoGebra spreadsheet use the 'predefined objects' available in the tool bar: point, circumference, rotation, and polygon. This step requires the elaboration of the construction algorithm for the Mercedes logo, an essential phase which helps them to understand geometric properties.

The solving algorithm is as follows:

- 1) Draw a point O ;
- 2) Define a slider r ;
- 3) Trace the circumference c with center O and radius r ;
- 4) Draw a point A on the circumference c belonging to the vertical line passing through the point O ;

- 5) Draw a point B distant from A , $r + r/6$ and belonging to the vertical passing through O ;
- 6) Draw the point A' , A rotated of 120° with respect to O counterclockwise;
- 7) Draw the point A'' , rotated of A' by 120° with respect to O counterclockwise;
- 8) Draw point B' , B rotated by 120° with respect to O counterclockwise;
- 9) Draw point B'' , rotated B' of 120° with respect to O counterclockwise;
- 10) Draw triangles $OB'A$, OAB'' , $A'OB''$, $A'OB$, $A''BO$, $A''OB'$;
- 11) Trace the circumference of a concentric circle of radius $r + r/18$.

The output of the algorithm is reported in Figure 7.

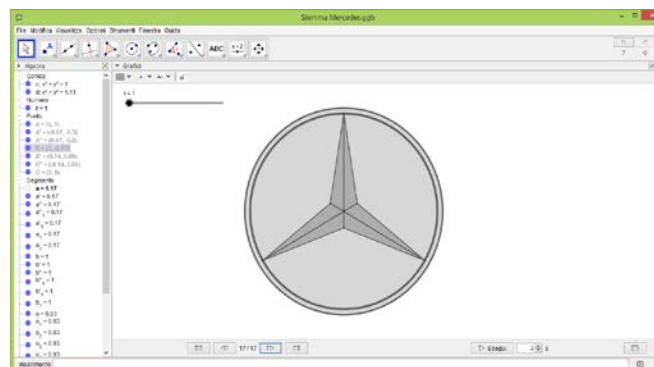


Figure 7: Output of the Mercedes logo.

CONCLUSIONS

The technology leads to the solution of many real world problems that had proved difficult to resolve with the conventional mathematical tools of the time: one of the powers of the technology is to produce images/figures to clarify and refine students' mental models of the situation.

In learning of Geometry, the introduction of a practical and representative dimension by means of a DSG like GeoGebra leads the students to structure the actions performed and their effects into a descriptive framework, a process through which they gradually acquire familiarity with arguments and demonstrations of increasing complexity. Moreover, the activity experience of interacting with the model is essential in order to characterize a construction and making it didactically relevant.

In the school of the Third millennium, modelling is important because it helps us to better comprehend the world around us, but also because through modelling one can acquire a flexible way of thinking which trains the mind to interpret, reflect and analyse the real world.

The use of mathematical and analogical models is strategic to the understanding of reality; from an educational and epistemological aspect, the "inductive method is compared to more rigorous scientific discussions until the logical-mathematical demonstration is achieved (Serpe, 2006).

The learning example was set up with the specific aim of guiding students to the understanding of the relationship between concrete versus abstract, staying away from purely theoretical mathematical concepts. (Serpe, & Frassia, 2016). Through the modelling process we can recover some mathematical terms linked to geometrical constructions, which are often neglected in traditional teaching in Italian schools. With the help of a DGS such as GeoGebra we can introduce didactic perspectives that are different from the usual ones, and enable the learners to experience the true meaning of mathematical discovery.

In our example, the students indeed approach geometrical concepts not just from a technical, mnemonic, almost 'distracted' angle, but as fundamental tools for research and planning. Through the help of DGS like GeoGebra, traditional solutions are proved and visualized in a modern way. So the role of modelling in education is enforced and students become aware of the enormous prominence of modelling in Mathematics education.

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LEARNING PROGRAMMING FROM SCRATCH

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ABSTRACT

The link between problem-solving and programming skills is well known. Students with higher problem-solving abilities find programming easy and they can master programming with no or little difficulties regardless of the programming environment. On the contrary, students with lower problem-solving abilities find programming difficult to understand and are often unable to master it. The before mentioned groups of students usually make up two thirds of the entire class, the top and lowest thirds, respectively. What about the "middle third" students? This is probably the most represented group; those are students who can master programming but with some difficulties. Visual programming language environments are tools designed to engage all students but maybe the "middle third" students would gain the most benefit from that approach. In this paper, we explore the educational and motivational effect of using Scratch for game-based programming on 5th-grade elementary school students based on their problem-solving abilities. Results presented here confirm the positive effect of using Scratch as the introductory programming language for game-based programming on "middle third" students, compared to Python as the text-based programming language.

Keywords: programming, Scratch, problem-solving, elementary school, "middle third" students

INTRODUCTION

Programming is difficult, and most children won't become programmers, so why should they learn to program? Programming, as a part of Computer Science, is also a part of everyday life, so learning programming as soon as possible should be the educational right of the 21st Century (Maloney, Peppler, B. Kafai, Resnick, & Rusk, 2008). It is well-known that programming requires higher problem-solving abilities and that by programming problem-solving abilities can be practised. Students with higher problem-solving abilities can master programming with no or little difficulties, so motivation is crucial to this group of students. On the other hand, students with low problem-solving abilities are facing a lot of difficulties during learning programming, and are often unable to master it. We could facilitate their efforts by choosing an appropriate pedagogical approach. Maybe the most interesting group are "middle-third" students who can master programming with some difficulties (Armoni, Meerbaum-Salant, & Ben-Ari, 2015). Motivation and appropriate pedagogical approach can be crucial for these students. Choosing the proper programming environment for target age may be the key factor.

Textual programming language approach rely on "real" programming approach with languages like BASIC, Python, etc. Those languages require high problem-solving skills and precision in syntax, so many children perceive programming as difficult. Programming is most commonly taught through solving various math problems. The question is: do children find programming based on this approach repulsive?

Visual programming languages are syntax error free and more attractive to children. Scratch is visual, block-based, programming language appropriate for elementary school children (Resnick et al., 2009). Using programming languages like Scratch has the advantage of eliminating syntax problems which allows students to focus on the language semantics. Besides that, elementary school students have yet to reach the appropriate level of abstract thinking required to program, which makes learning programming more difficult. Learning programming by using a visual programming language can provide concrete to abstract experience (Dann & Cooper, 2009), and can thus be used as a medium for mediated transfer (Dann, Cosgrove, Slater, & Culyba, 2012) towards "real" programming. By teaching programming in Scratch, we can also shift the context of programming from solving math problems, which is the most commonly used approach in text-based programming, to programming games, storytelling, etc. The question is: do students learn programming concepts or is it just fun?

Our previous research (Mladenović, Krpan, & Mladenović, 2016) showed that 5th-grade students with higher problem-solving abilities achieved better results in Python as "real", text-based programming language. When it comes to Scratch that is not the case. Students with intermediate problem-solving abilities achieved better results in Scratch than in Python. This led us to new questions, can we affect the "middle third" students to achieve better results in programming? Can we motivate the "higher third" students to take programming class? Can we measure the motivational factor of these languages? In this paper, we give answers to these questions. This research was

conducted in classroom settings. We analysed 5th-grade elementary school students' test results during their enrollment in elective course Informatics in two schools by both approaches using Python as textual language and programming games in Scratch. Students didn't have any programming experience, and their problem-solving abilities were tested prior to the experiment. Based on the problem-solving test results, students were assigned to one of three groups. Students were learning different programming concepts in two programming languages and were tested for both approaches. Test results were analyzed and compared for each problem-solving group. The results of our research are presented in this paper.

BACKGROUND

Novice programmers find it very difficult to master programming. In order to solve a programming problem, we first need to break the problem into smaller, more manageable steps. This is the process of developing an algorithm. Students who need to focus more on syntax commonly ignore this phase. Flow charts and trace tables are often used to take the students through the steps of structured problem solving which leads to identifying sequence, selection, and repetition (Whitfield, Blakeway, Herterich, & Beaumont, 2007). Afterwards, novices need to program these steps using some programming language. A programming language is perceived as a major obstacle for novices (McCracken et al., 2001), especially when it comes to elementary school children because novice often focus on programming language syntax rather than developing an algorithm. Visual programming languages may help with this issue since they have simpler syntax, which allows novices to focus on developing an algorithm (Grover & Pea, 2013).

It has been reported that students with lower mathematical skills can learn problem-solving and programming if provided with appropriate materials and the use of less complex visual tools (e.g. Java Trainer) before moving to IDEs which are considered more complex (Whitfield et al., 2007). It is also reported that children weren't aware that they were programming, they argued that they were making games, stories, interactive presentations in Scratch (Maloney et al., 2008). This phenomenon Randy Pausch called "head fake" (Dann & Cooper, 2009) (Pausch & Zaslow, 2008).

In one of our previous research, we compared students' success in LOGO, which is a text-based, and Scratch, which is a block-based programming language. Results showed that students' success in Scratch was better, especially with regard to the concept of a nested loop. There were only a few students who were able to fully understand basic programming concepts while using Logo, but after a switch to Scratch that number increased. When it comes to motivation, Scratch is far more positively accepted than Logo (Mladenović, Rosić, & Mladenović, 2016).

Therefore, we can conclude that the "middle third" students can benefit from using a visual programming language. Similar conclusions were made in other studies. It was demonstrated that the use of the Jeliot program animation system primarily benefited "middle third" students (Ben-Bassat Levy, Ben-Ari, & Uronen, 2003). The same conclusion was reported in a study where Scratch was used as an introduction to C# (Armoni et al., 2015). Besides, students can master basic programming concepts more quickly by using a visual programming language (Armoni et al., 2015) (Price & Barnes, 2015).

However, there are studies that indicate some possible bad habits of programming in Scratch. It's reported that during programming in Scratch middle-school students developed *bottom-up programming* and *extremely fine-grained programming* bad habits, although researchers were satisfied by motivation and developed technical skills of students by programming in Scratch (Meerbaum-Salant, Armoni, & Ben-Ari, 2011). These habits may have been developed as part of "natural learning" based on "scenario based learning" which fits with the idea of Scratch programming approach. These habits shouldn't be concerning (Gordon, Marron, & Meerbaum-Salant, 2012), especially when Scratch is used as part of formal learning in a classroom setting in which teachers can guide students.

Researchers analysed a total of 100 projects, and two other bad habits were discovered. The first one refers to character naming, where most students didn't change default names like *Sprite1*, *Sprite2*. Conversely, it was also reported that user variables are named correctly, i.e., semantically meaningful. A possible explanation is that when creating a new character, the name is given automatically which is not the case when adding new variables. The second bad habit is duplicating code in the same project which indicates that abstraction and modularization were not taught (Moreno & Robles, 2014). Teachers who use visual programming languages in their classroom need to be aware of bad habits to minimize their occurrence.

METHODOLOGY

In this study, qualitative and quantitative methods were used.

Research design

This research was conducted with the purpose to compare the basic programming concepts understanding, concerning two programming languages: Python and Scratch. The target group were elementary school students with no previous programming experience. In the Republic of Croatia Informatics is an elective course (Ministry of Science Education and Sports of the Republic of Croatia, 2005) from 5th to 8th grade, and programming is only one of several main topics in each grade. Therefore, 5th-grade students were appropriate for this research. Since programming is related to problem-solving skills and there is a positive correlation between math and programming (White & Sivitanides, 2003), the administered pre-test was designed to test student problem-solving skills. Students were first exposed to Python programming for four weeks with two hours per week which makes a total of eight hours. The lectures included selected programming concepts: variables, input, print, sequencing and conditionals. Student skills in Python programming were tested afterwards. Three weeks later (after winter school break), we introduced students to programming in Scratch. We have selected a game-based approach and students were required to program simple games. They were introduced to basic programming concepts like sequencing, conditional and iteration. The lectures were held for two hours per week for three weeks, and afterwards students' understanding of concepts in Scratch was tested. Additionally, they were given a questionnaire about their attitude towards programming after learning both Scratch and Python.

The participants of the experiment were students from two elementary schools in Split, in both of which the first author of this paper was the teacher. Prior to the experiment, the teacher had five years experience of teaching computer science in elementary schools and four years of experience in teaching computer science at the undergraduate level.

The research design is shown in Table 1.

Table 1: Research design

Experiment				
week		Topic	New terms and instructions	New concepts
Pre- test				
1	Python	Algorithms: sequencing, conditional and iteration	Algorithm, sequencing, conditional and iteration	Introducing algorithm term, basic algorithms: sequencing, conditional and iteration with examples from real life. Introducing to Python programming language.
2		Variable, input and output	Variable, input, print, int	Basic Python instructions, variable term and integers with examples in Python.
3		input processing, output process phases of the computer program	Arithmetic operations (+,-,*, /)	Solving simple problems in Python program using input, processing including basic arithmetic operations and output.
4		Conditional	If else	Solving simple problems including branching algorithm in Python using if else.
Python test, questionnaire about programming and python				
Three-week Christmas holidays				
1	Scratch	Aquarium simulation program	forward, left, right, repeat	sprites, concurrency, loops
2		Chasing ghosts game	If, variables	conditionals
3		Simple ricochet game	communication by messaging, conditional loops, Coordination and Synchronisation	loops with conditionals
Scratch test, questionnaire about programming and programming languages				

The primary goal of this research is to find the differences in students' results between pre-tests and tests following the Python and Scratch lectures. The second goal is to examine the differences in attitudes towards programming and the programming language used. Based on that, we defined the next hypotheses:

- H1 – Students with higher problem-solving abilities will be more successful in Python programming than students with lower problem-solving abilities.
- H2 - Students with higher problem-solving abilities will be more successful in Scratch programming than students with lower problem-solving abilities.
- H3 – attitude towards programming will be more positive after Scratch than after Python.

Participants

The research sample consisted of 54 5th grade students from two schools during the school year 2014/2015. Since programming was taught for seven weeks, some students didn't attend all of the lectures or tests. Hence, the final number of participants is 50, which includes 34 boys and 16 girls. Students had no previous programming experience, which means that this is their first contact with programming. Non-probability, purposive sampling (Cohen, Manion, & Morrison, 2013) was used, because our goal was to target pupils with no previous programming experience in elementary school.

Assessment instruments

The data was collected in three phases. In the first phase, students were tested for problem-solving abilities before the programming lectures began. In the second phase, they were introduced to basic programming concepts in Python like variables, input, print, sequencing and conditionals. Students' knowledge (acquired concepts) was tested using Python assignments. They also filled a short questionnaire about the attitude toward programming. During the last, third phase, students were learning basic programming concepts like sequencing, conditionals and iteration while programming games in Scratch. Again, after the third phase, their acquired programming concepts were tested using Scratch assignments. They also filled a short questionnaire about the attitude toward programming and programming languages.

Data analysis

Results were analysed by qualitative and quantitative techniques that are used for triangulation purpose (Cohen et al., 2013) to increase the validity of the findings. Kolmogorov-Smirnov test is used to determine the normality of data. Parametric independent t-test and non-parametric Mann-Whitney U test are used to compare results between groups. Parametric test paired t-test and non-parametric Wilcoxon Signed Ranks Test are used to compare student results in different tests. Non-parametric tests are used for data which doesn't meet the requirements for using parametric tests.

RESULTS AND DISCUSSION

Results are presented in this section.

Problem-solving test

The first test was a problem-solving test that was administered before any programming lectures were held. The maximum test score was 14 points. Based on the achieved score, students were placed in one of three groups: stronger, intermediate and weaker students. The test can be seen in our previous paper (Mladenović, Krpan, et al., 2016). Table 2 shows distribution of participants by strength groups.

Table 2: Distribution of participants by strength groups

Group	N	points	Mean	SD
Stronger	15	≥11	11,93	1,223
Intermediate	16	Between 7 and 11	9,69	0,704
Weaker	19	<8	4,05	2,97

Post-tests

Two post-tests were conducted in order to assess students' achievement. The first post-test was administered following the conclusion of Python lectures, and the second one following conclusion of Scratch lectures. Since the number of points in each test was different, we decided to use the percentage as a measure of success. Kolmogorov-Smirnov test showed that there is a normal distribution of data in both Python ($p=0,197$) and Scratch ($p=0,069$) tests, but not in all groups combined. Table 3 shows descriptive statistics results.

Table 3: Descriptive statistics

	Python test			Scratch test		
	Mean	SD	Shapiro-Wilk p	Mean	SD	Shapiro-Wilk p
Stronger	81,667	20,5116	0,006	76,953	19,7003	0,095
Intermediate	61,831	22,5395	0,278	71,575	19,0275	0,253
Weaker	38,910	21,9488	0,504	54,537	17,1179	0,505

Because the results of the Python test didn't satisfy the assumption of normal distribution, the Kruskal-Wallis test was conducted. The test showed statistically significant difference between strength groups ($\chi^2(2)=19.342$, $p=0.000$). As it can be seen in Table 3, stronger students achieved, statistically significant, better results compared to intermediate and weaker.

ANOVA test was conducted to compare group results in Scratch test. There was a statistically significant difference between groups as determined by one-way ANOVA ($F(2,47) = 6.943$, $p = .002$). As ANOVA showed statistically significant difference, we made further analysis by Man-Whitney U and independent t-test differences between groups whose results are presented in the following sections.

Comparing success based on problem-solving abilities

In order to compare student success based on programming language used, we used the Mann-Whitney U test. In the analysis, we considered only two-thirds of the participants, those with intermediate and higher problem-solving skills. Students with lower problem-solving skills were left out of the analysis. When the Mann-Whitney statistic was calculated to determine whether there was any statistically significant difference in the Python test scores ($U=62,5$, $z=-2,288$, $p=0,022$), a statistically significant difference was found between students with higher problem-solving skills and those with intermediate problem-solving skills. From these results, we conclude that the former group of students achieved better results than the latter. In the case of Scratch test scores, no statistically significant difference between groups was found ($U=99,5$, $z=-0,828$, $p=0,408$).

These results indicate that with programming language like Scratch we can boost “middle-third students” for programming. This finding is consistent with other studies which showed that “middle third” students have the most benefit from the use of animations (Ben-Bassat Levy et al., 2003) and visual programming languages like Scratch (Armoni et al., 2015).

Afterwards, we compared intermediate and weaker students by independent t-test for both test results. Results of the t-test showed that students from intermediate group achieved statistically significant better results on the Python ($t(33)=3,040$, $p=0,005$), and Scratch test ($t(33)=2.788$, $p=0.009$). These results indicate that weaker students are “struggling” with programming regardless of the programming language used.

Based on the result we accept H1 because problem-solving abilities are directly related to success in Python programming language. But, when it comes to Scratch success this is not the case, at least for intermediate students so we can reject H2 because “middle third” students are equally successful in Scratch as stronger students. Based on these results we can conclude that students with higher problem-solving skills can master programming regardless of the programming language or method used. An important finding is that by programming games in visual programming languages like Scratch we can stimulate the motivation of intermediate students. If we add a motivational factor, it's worth to give a chance to new programming languages and approaches to reduce quitting from programming.

Attitude towards programming

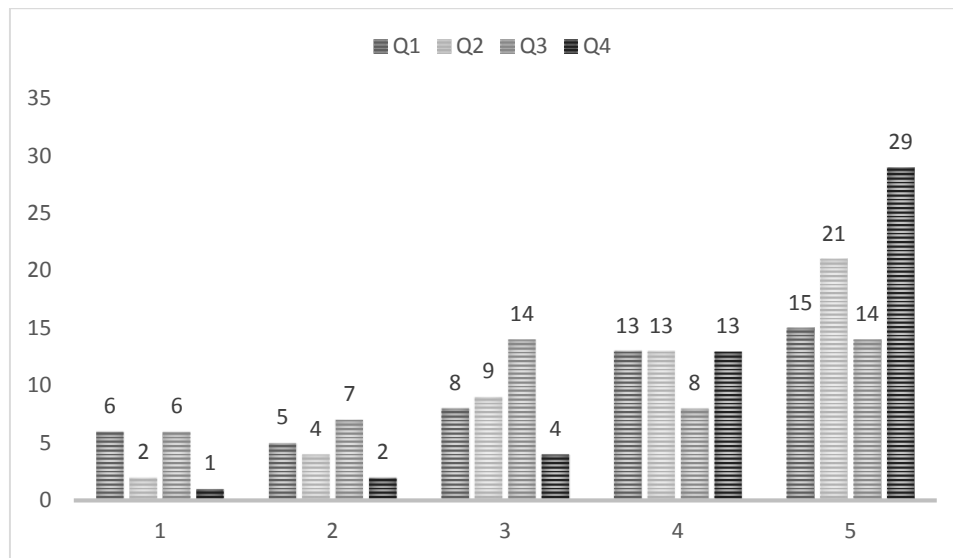
In H3 we assumed that a positive attitude towards programming would be higher after using Scratch compared to Python. After the lessons about programming in Python, students answered a Likert scale question of 5 items about their attitude towards programming. This question was repeated in the small questionnaire students answered after the Scratch lessons. The questionnaire was composed of four Likert scale questions regarding their attitude towards the programming languages used.

Table 4 shows the questions.

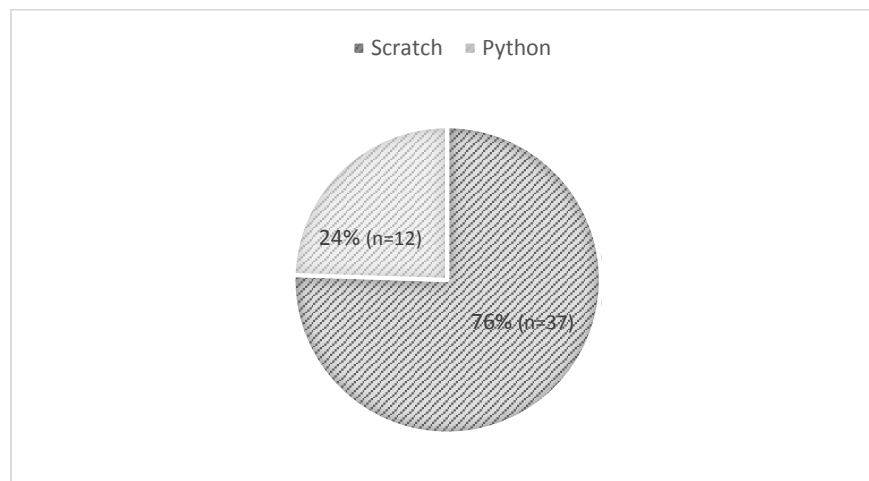
Table 4: Survey questions

	Questions	
After Python	Q1	How much do you like programming?
	Q2	How much do you like programming?
After Scratch	Q3	How much do you like Python?
	Q4	How much do you like Scratch?
	Q5	Which programming language do you prefer?

Figure 1 shows frequencies.

**Figure 1:** frequencies of the answers

From Figure 1 it is obvious that students liked Scratch more and that attitude towards programming is more positive after using Scratch. Figure 2 shows results for Q5.

**Figure 2:** Q5 results

We wanted to compare student attitude towards programming after Python (Q1) and after Scratch (Q2). The Wilcoxon signed test rank showed statistically significant difference between Q1 and Q2 groups ($Z=-2,012$, $p=0,044$). Students had a greater affiliation for programming after Scratch compared to Python. This confirms that Scratch had a positive effect on student attitude towards programming. Thus we can accept H3 and conclude that attitude towards programming is more positive after Scratch than after Python.

However, it came as a surprise that even after being introduced to Scratch, a handful of students still preferred Python. We assumed that these are the students that belong to the top third of the class with regard to their problem-solving abilities.

In the questionnaire, students had space to write their thoughts about programming. They wrote 32 comments, only 4 of them were negative. For example:

- *“this is boring”, “it’s too hard for me”, “it’s too complicated”.*

Some of the comments were neutral:

- *“sometimes is boring and sometimes fun” ...*

Most of the comments (22) about programming were positive:

- *“Programming is awesome.”, “Programming is cool.”, “Programming is great and interesting.”, “I like programming, and I would like to learn it again next school year.”, “I like programming because I learned something new”,*

Some comments referring to Scratch:

- *“I like Scratch more than Python”; “Scratch is extremely fun, it’s nice to see a game that I made.”; “I don’t like programming too much but I had fun while programming in Scratch”; “I like both Python and Scratch but I’ve chosen Python as favorite programming language because I was on Python programming competition”; “I like both programming languages, Python and Scratch”; “Scratch is awesome.”...*

Since the first author was the teacher in all classes, we can also confirm the observations (Armoni et al., 2015) which refer to early recognition of though concepts in a second programming language. Furthermore, we also observed a shortened teaching process which enables the teacher to assist students with weaker programming abilities, while those with higher programming abilities could explore new features in Scratch.

CONCLUSION

Programming novices, especially those at the elementary school level need a very gentle introduction to programming. Students should be able to focus on problem-solving and writing algorithms instead of thinking about syntax. Visual programming languages, like Scratch, offer the experience of syntax free programming which is suitable for novices. Furthermore, visual programming languages allow the teacher to shift the teaching context from solving math problems to programming games. Finally, it improves positive attitude towards programming. Considering statements above we need to be careful not to forget that the main reason for using visual programming languages is to focus on teaching programming concepts. Scratch should be a media or a tool used for transfer of those programming concepts into “real” text-based programming languages like Python.

Students with high problem-solving abilities can master programming easily, regardless of the programming language. On the other hand, students with lower problem-solving abilities encounter significant difficulties while learning programming, and might be unable to truly master it. These two groups usually constitute two-thirds of students in a class. The “middle third” students are the ones that we can influence the most. This is a group that is able to master programming with some difficulties. Based on some previous studies we assumed that the use of Scratch might boost their motivation, attitudes and achievement. With the teacher’s help, Scratch can be used as a tool for mediated transfer of programming concepts from block-based to text-based programming languages and can improve the motivation for all students.

There is a lack of empirical research which compares the use of text-based and block-based visual programming languages in school settings at the K-12 level. We conducted research among 50 5th-graders in two elementary schools. Students were learning programming in Python, and later in Scratch. Results showed that students with higher problem-solving abilities were more successful in Python programming than students with lower problem-solving abilities. This is not the case when it comes to Scratch. In the case of Scratch, there were no differences in the success between better and “middle third” students which proves the usefulness of using Scratch to learn programming. Most students had more positive attitude towards programming after Scratch than after Python. It is important to note that students learned Python first, which is more difficult than Scratch. This order of introducing different programming languages might seem inversed, but we believe that it had a positive influence on the student’s motivation. We believe that their motivation would be smaller if the languages were introduced vice versa.

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LEARNING STRATEGIES ENHANCING ON STATISTICAL EDUCATION

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ABSTRACT

Learning statistics is a requirement for tertiary science students. Many students encounter difficulties while learning statistics. Mobile learning is a strategy that allows students to learn in their own way, and to develop a learning strategy through technology. This research aims to develop resources to assist learning statistics on mobile device. Learning materials were containing forty statistical technical terms which included terminology, formulae, examples, and their usage in research. Fifty volunteers were randomly selected from undergraduate students interested in learning statistics. Findings suggest that the quality and usage of media can be effective. Moreover, students' feedback indicates that students maintained a positive attitude to learning statistics.

INTRODUCTION

Learning statistics has become important and necessary in the Information Age. People more than ever need to be statistically literate, not only in the workplace but also in their daily life. Statistical literacy is the ability to communicate relevant and important information accurately (and within a margin of error) to statisticians and non-statisticians alike. Everyone encounters data and has the need to make decisions based on that data. Much of the information in the world is determined through the use of statistics. Statistics are widely used across different fields of expertise including business, economics, manufacturing, engineering, and the sciences. Rational and proper usage of statistics is useful in determining the past which can also assist in predicting the future. Therefore a knowledge and understanding of statistics is not only important, but also compulsory to learn at the undergraduate and postgraduate education level. Giesbrecht (1996) pointed out that almost every discipline, the ability to understand, interpret, and critically evaluate research finding are becoming an essential core skill.

Most, if not all teachers and students are challenged in conveying and understanding statistics. While statistical ideas and rules can be complex, difficult to understand, and appear contradictory to common-sense, it can be difficult to motivate students to engage in hard statistical work. Additionally, many students have difficulty with the underlying mathematics, equating statistics with mathematics and the focus on numbers and computations. For students, statistical terminology can also have a different meaning. This issue was highlighted by Gigerenzer, et al. (2007) and Lipkus (2007), who highlighted the need to train statisticians to communicate more effectively. Yilmaz (1996) also agreed that the methods of teaching statistics are not effective.

The growth of the Internet has impacted on virtually every aspect of society. Online learning is becoming a favored training option in industry, government, and higher education. Ooms and Garfield (2008) pointed that educators' interest in using online educational resources has steadily increased. Learning and teaching statistics by using online resources provides several benefit and advantage above a traditional teaching. CDW-G (2010) noted that while students use technology including mobile devices, blogs, and podcasts in their lives, these are largely absent from the classroom. Mobile learning technologies offer teachers and students a more flexible approach to teaching and learning. And this is in spite of a number of websites dedicated to the interactive learning of statistics which include a substantial amount of free download interactive statistical programs. Maridakis and Winker (1984) indicated that Interactive Statistical Programs is a comprehensive system for learning and teaching purposes. Educators should explore and employ mobile technologies to deliver knowledge in line with how students normally obtain information and offer more online learning to support development of student interest communities that disseminates information beneficial to academic pursuits. Gikas and Grant (2013) highlighted the advantages in the use of mobile devices for student learning, including 1) quick access to information, 2) communication and content collaboration, 3) the variety of learning tools, and 4) different learning environments. Greenhow (2011) summarized that using social media tools in learning promotes a more student-centred course. It caused that mobile learning has become a new educational paradigm where teaching and learning can be performed by anyone, anytime, and anywhere. This study aims to develop better strategies in statistical education learning by the use of mobile devices.

The report subsequent to the Guidelines for Assessment and Instruction in Statistics Education (GAISE) Project

(2010) suggested emphasizing statistical literacy and developing statistical thinking, using real data, stressing conceptual understanding, rather than possessing mere knowledge of procedures. Educators need to foster active learning in the classroom, and make use of technology for developing conceptual understanding for analyzing data, and to use assessments to improve and evaluate students' learning. Furthermore, Tishkovskaya and Lancaster (2012) showed that the statistical education in the 21st century has benefited from the development of technological resources via internet such as computer-based and Web technologies.

Most statistics teachers are not only focused on improving the cognitive aspects of instruction but are also interested in influencing the students' attitude in overcoming any feeling of intimidation that the students have (Estrada et al., 2011). Nowadays, attitudes towards statistics have increasingly been considered in statistics education. Pajares (1996), and Gal, Ginsburg & Schau (1997) noted that the attitude towards statistics influences a person's statistical behaviour inside and outside the classroom, and their willingness to attend statistics courses in the future. Schau (2003) pointed out that positive attitudes towards statistics would help students to understand that understanding statistics is useful for their professional and personal lives, and that students can be trained to understand and use statistics.

THE STUDY

The statistical education media on mobile device was developed by using C++ Builder 2009 and JQuery Mobile enhanced by R-program for applying applications. The database was utilized Microsoft Access. The statistical education learning media procedure consisted in the following: 1) collect the statistical analysis in statistical education by applying R-program 2) design Database 3) establishes database and application 4) system implementation and 5) evaluation.

Appropriate assessment of the statistical education learning material contained 10 items. A 5-point Likert scale was used. The options are 5-Very effective, 4-Effective, 3-Average, 2-Ineffective, and 1-Very ineffective. In addition, the attitude assessment instruments were developed by adapting SAS, ATS, and SATS (Schau (2003), Wise (1985), Sutarso (1992)) in evaluating attitude towards statistical education by using mobile devices.

This study was performed at Suan Sunandha Rajabhat University (SSRU) involving 1) fifty volunteer students that were randomly selected including both genders, 17-21 yrs-of-age and with an interest in statistics. They were invited to practice with the learning media.

A quantitative approach was used in assessing the evaluation survey on statistical education learning resources by 50 students' opinion in using mobile learning sources completed by the students using mobile learning resources. The survey used following rating system for quality evaluation of the learning media as defined in Table 1.

Table 1 Rating of quality / Attitudes evaluation

Mean	Quality Classification.	Attitudes Level
4.50 - 5.00	Very effective	Strongly Agree
3.50 - 4.49	Effective	Agree
2.50 - 3.49	Average	Uncertainly
1.50 - 2.49	Ineffective	Disagree
1.00 - 1.49	Very ineffective	Strongly Disagree

FINDINGS

In assessing the descriptive statistics concerning quality of learning resources for statistical education on mobile devices, it was determined that parameters governing students' opinions were effective (mean = 4.15/5). The result was shown as Table 2. Furthermore, the students' attitude assessing towards to statistical education using mobile devices was shown as Table 3.

Table 2 Quality assessment of the statistical education learning resource

Items	\bar{X}	S.D.	Assessment
1. Search time statistical data	4.27	0.45	Effective
2. Content description	4.17	0.69	Effective
3. Content presentation	4.33	0.69	Effective
4. Content accuracy	4.49	0.57	Effective
5. Screen display	4.03	0.67	Effective
6. Homepage design	3.97	0.65	Effective
7. Command buttons	4.07	0.73	Effective
8. Manual and web board	4.23	0.71	Effective
9. Speed and accuracy for analyzing data	4.10	0.88	Effective
10. Flexible and easy usage	4.17	0.63	Effective
Total	4.15	0.38	Effective

From Table 2, the highest average of students' opinion was 4.49 in accuracy of the statistical content and the lowest average was 3.19 in homepage design. In attitudes assessing towards to statistical education by using mobile devices was shown in Table 3.

Table 3 Students' Attitude assessment in the statistical education using mobile devices

Items	\bar{X}	S.D.	Assessment
1. Benefit in learning statistics by mobile applications	3.95	0.51	Agree
2. Motivation to learn statistics via mobile applications	3.78	0.54	Agree
3. Mobile devices in class was a useful tool in learning statistics	3.67	0.63	Agree
4. The use of mobile applications enhanced learning statistics	3.83	0.81	Agree
5. Mobile learning made statistics class more interactive and interesting	4.06	0.89	Agree
6. New statistics content is usually easy for me to understand	4.52	0.40	Strongly Agree
7. I feel comfortable seeking and finding my statistics problem	3.51	0.68	Agree
8. I am interested and willing to use Statistics on the job and my daily life.	4.58	0.60	Strongly Agree
9. I look forward to teaching statistics.	3.41	0.78	Agree
10. I would be more likely to participate in statistics class if the course is mobile applications.	3.37	0.83	Agree
Total	3.71	0.80	Agree

In assessing the Attitude towards to Statistical Education using mobile devices (Table 3) indicated that the students are Strongly Agree in Item 6 and Item 8 and they are Agree in the rest of questions.

CONCLUSIONS

Assessment of the statistical education learning strategies on mobile devices indicated that the educational media via mobile technologies achieved an effective level of learning based on students who interested in statistics education. Research finding affirms and realizes as UNESCO pointed that in the twenty-first century, computers are viewed as a crucial component to learning, but mobile technologies will undoubtedly become more integrated and commonplace in both formal and informal education (Shuler, et al., 2013). In addition, Tishkovskaya and Lancaster (2012) also highlighted that statistics teaching has benefited from the development of technological resources that are available. This study pointed that there are more gain for enhancing learning strategies on Statistical Education on Mobile Devices. It would be beneficially for statistics teacher to concern them to build strong synergies both cognitive and non-cognitive skills in teaching.

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LEARNING THE PHONETIC OF FFL BY TURKISH LEARNERS: NEED FOR SPECIFIC TEACHING MATERIALS

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Abstract

This study is meant to analyze the evolution of the pronunciation problems encountered by Turkish learners of French as a foreign language at the University of Uludag from preparatory class to the fourth year of license. The first part of this study highlights the fact that the learners in question cannot be considered as generic students and that the specificities of these learners can be correlated with their pronunciation mistakes: mistakes that tend to persist and can be fixed during learning. In the second part, the lack of teaching materials in the field of phonetics for Turkish learners will be highlighted by comparing specific difficulties with books available. Finally it is shown how this study serves as a theoretical basis for a project related to the learning of phonics by Turkish learners.

Keywords: phonetic, French as a foreign language, Turkish learners, didactic material.

1. Introduction

In FFL teaching, communicative competence plays a major role since the birth of the communicative approach and the Common European Framework of Reference for Languages (now the Framework) (2001) in which it is called "the communicative language competence." The acquisition of this skill is proposed by the Framework in three competences (2001, p. 17-18): linguistic competence, sociolinguistic competence and pragmatic competence, all three considered in different language activities such as reception, production, interaction and mediation which can be accomplished in oral and / or written activities.

In the teaching of foreign languages, these activities refer to four basic communication skills: oral comprehension and oral production skills, and skills of reading comprehension and written production. Such differentiation of these skills facilitates the organization of the order of skills to teach and also that of teaching programs. While all skills are necessary for a good command of a foreign language, one skill stands out from the others: the competence of oral communication. The importance of this skill in language teaching is emphasized with the communicative approach in which it is addressed through the components of perception and production.

The acquisition of oral communication skills through learning the phonetic which Borel (1991) underlines the importance: "To correctly identify the meaning, it must first be correctly identified the sound support. In fact, without a good phonetics, we did, in speaking, no chance to pass a message to be understood, even if the words were well chosen and if the syntax is correct. Moreover, prosody, through its intonation structures, accentual and rhythmic, provides, for the most part, the syntax orally. The meaning is accessible only if the syntax is decoded."

Hence, the need for the teaching / learning of phonological skills in a non-French-speaking environment and the need for appropriate support for the aural learners' mother tongue differ, because the difficulties are not the same for all languages.

2. The problems encountered by Turkish pronunciation learners FFL: overview

Although the phonetic alphabet is universal for French, pronunciation difficulties in learning a foreign language vary depending on the mother tongue of the learner. In regard of a Turkish EFL learning audience, many recent research focuses on analyzing the specific difficulties. From Özçelik's (2008) research, one can summarize that the pronunciation problems Turkish students encounter is possibly because of their mother tongue

1. The relationship between spelling / sound, a category consisting of several difficulties encountered in Turkish learners are :

- the tendency to read the words as they are written ; ex : Tu as ... ? → /tua ... / → [tya ...]
- the pronunciation of the dropped "e" (ə) that should not be pronounced; ex : J'entre → /ʒantRe / → [ʒātR]
- the pronunciation of the dropped "e" /ə/ like the "e" oral vowels simples /e/ ; ex : je serai → / zeseRe / → [ʒ(ə)s(ə)Re]
- the tendency to pronounce the "h" silent; ex : Eh bien! → /ehbjen/ → [ebjē]

- the pronunciation of double consonants; ex : d'accord → */dakkoR/ → [dakɔR]
 - the correct pronunciation of nasal vowels creates problems for Turkish learners; félicitations! → /felisitasjon/ → [felisitasjɔ]
 - the change of the phonemic structure which can be in various forms such as by adding a phoneme to create a syllable, ex : des projets → */depɪRʒɛ/ → [depRɔʒɛ] ;
by replacing phonemes /b/, /c/, /d/, /g/ when in syllable-final (which never happens in Turkish) by the phonemes /p/, /ç/, /t/, /k/, ex : b → p Je t'embrasse → */ʒɛtampRas/ → [ʒɛtābRas] ;
by the omission of one or more phonemes during pronunciation, ex : travailler → /tRavaj/ → [tRavaje],
and by the substitution of phonemes, ex : On s'appelle → /onsaple/ → [ɔsapel].
2. The ability to recognize words, which means that the learner read more easily and fluently the words he already knows
 3. The wrong segmentation of rhythmic groups, ex : [Le chat] [est] [sur] [la chaise]
 4. The intonation of interrogative and exclamatory sentences are problematic
 5. Misplacement of the tonic accent due to the interference the mother tongue as the emphasis in Turkish is an increase in the intensity and not the duration and that due to the interference of English where the emphasis is lexical.
 6. Sequencing; Turkish learners struggle to perform successive chains.
 7. The link; Turkish learners do not respect the binding rules, including mandatory connections
 8. The rhythm, the reading speed and lack of punctuation knowledge are sources of pronunciation problems among Turkish learners
 9. The pronunciation / R / "uvular" is problematic but does not prevent access to meaning
 10. The English language skills have influences on the French pronunciation (Özçelik, 2008, p. 206-213)

The research performed by Onursal-Ayırır (2012) about the problems of perception due to the connection with dictations shows that learners have less difficulties in the perception of words and / or phrases often encountered such as « de temps en temps », « de plus en plus », « comment allez-vous ? »..., however, to overcome difficulties in discriminating links, learners attempt to compensate their deficiencies by various methods:

1. Replacing expressions containing links with already known words, ex : « la porte est ouverte » become *"la porte tout vert"
2. Creating new words or phrases, ex. « un petit homme » → *"un petito"
3. The links "adjective + noun" masculine becomes feminine, ex. « le premier acte » → *"le première acte"
4. The addition of the letters in the case of link, ex. « elle m'a beaucoup aidé » → *"elle m'a beaucoup paidé"
5. The addition of phoneme appeared in the link, ex. « prend-il des médicaments ? » → *"Prend-t-il des médicaments ?"
6. Notwriting the unheard links (Onursal-Ayırır, 2012, p. 40-41).

To these problems of discrimination and production, may be added the problem of assimilation of successive phonemes. For example in words such as « pilule », « habitude »... where phonemes [i] / [y] are consecutives, an assimilation of the phoneme [i] is observed that comes close to the phoneme [y]. The phonemes [ʒ] and [z] in the final become respectively [ʃ] and [s].

For example, "cage" [ka: ʒ] pronounced [kaʃ] without lengthening and this refers to the verb "cacher", "age" [a: ʒ] becomes [aʃ] and means "la hache" or "hacher". The same for the [z] final, the most representative errors are "française" [frɑ̃sɛ: z] pronounced [frɑ̃sɛ: s] or "anglaise" [ɑ̃glɛ: z] pronounced [ɑ̃glɛ: s]. the phonemes [w] and [ɲ] that do not exist in Turkish, so during the pronunciation of the first there is the addition of the phoneme [v], "trois" pronounced [truva] or "toilette" pronounced [tuvalet]. For the phoneme [ɲ] two different pronunciations can be heard; while in the word "magnifique" [maɲifik] this phoneme is pronounced [magnifik] in the word "montagne" [mɔtaɲ] the same phoneme becomes [mɔteɲ].

3. Research Objective

This research aims to analyze in detail certain difficulties encountered by our students through an analysis of the sources of error and an analysis of the degree of persistence of the types of errors; to list other error generating variables for a given phoneme in order to develop the most appropriate material to our audience, who are future teachers of FFL.

For this research, the difficulties are approached in two views: discrimination and production. At the level of the selection of phonemes analyzed, two types of phonemes have been chosen:

- Phonemes existing in mother tongue and foreign language [i]/[y]/[u]. The reason, according to Borel (1991) is that « "The sound and / or phonemes, facing in both languages seem to be identical, but there are often differences more or less apparent. Moreover, there are distribution problems: identical phonemic units may have, in both languages, different uses in the speech. There is therefore a real teacher training problem. " »
- Phonemes that do not exist in Turkish mother tongue, namely the nasal.

4. Method

4.1. Univers of the research

The universe of the research consists of four license classes of didactics department FFL of Uludag University in Bursa in Turkey and two classes of preparatory to this higher school Licensed Foreign Language of the same university.

The numbers of learners who participated in the research are shown in the table below (table 1), for a total of 146 learners with few exceptions, the first foreign language is English which they do not master at the same level.

Table 1: The number of participants

	preparatory class	License 1	License 2	License 3	License 4	Total
Number of participants	37	25	44	25	15	146

4.2. Corpus research

The experimental corpus has been made up from extracts of phonetic exercise books intended for a broad public. They are : « *Les 500 exercices de phonétique, Niveau A1/A2* » and « *Les 500 exercices de phonétique, Niveau B1/B2* » of D. Abry and M.-L. Chalaron published respectively in 2010 and 2011, that of C. Martins, J.-J. Mabilat « *Sons et intonation : exercices de prononciation* » published in 2004.

This corpus consists of 8 exercises of oral comprehension and 9 exercises of oral production in isolated words sentences and in texts.

5. Findings

5.1. Discrimination exercises results review

Table 2 presents the results of discrimination to the phonemes [i] / [y] / [u] in single words in the first three activities, and in the fourth case in complete sentences including only one of the specified phonemes. This table allows us to observe and compare the difficulties of discriminating phonemes that exist in native language and in foreign language.

Table 2: Results of sound discrimination [i]/[y]/[u]

	1-Discrimination [i]/[y]		2-Discrimination [u]/[y]		3-Discrimination [i]/[y]/[u]		4-Discrimination [u]/[y]/[i]	
	percentage of correct answers	Percentage of errors	percentage of correct answers	Percentage of errors	percentage of correct answers	Percentage of errors	percentage of correct answers	Percentage of errors
End of Preparatory Class	84	16	80	20	79	21	85	15
License 1	89	11	85	15	86	14	89	11
License 2	93	7	86	14	89	11	87	13
License 3	92	8	83	17	92	8	86	14
License 4	99	1	92	8	95	5	91	9

The first corpus representing the evolution of the number of errors regarding the discrimination of sounds [i] / [y] during the training license, shows that the amount of errors decreases over time to be virtually zero at the end of

the license (at the beginning 16% errors of discrimination against 1% error in the fourth year). Therefore, discrimination [i] / [y] does not generate significant problems when these phonemes are in single words.

The corpus 2, which is about the evolution of the number of errors for discrimination [a] / [y], shows that the discrimination of these phonemes still poses no persistent problems so that the error rate is slightly higher than the previous phoneme. These 8% of errors concern mainly the word "habit[y]de" which is pronounced "habit[u]de" in English.

As for discrimination of phonemes [i]/[y]/[u] in the corpus 3, the conclusion is the same: there are some persistent errors even when the experiment is done on discrimination of these three phonemes. What is different concerning the discrimination of phonemes [u] / [y] / [i] is that these phonemes are integrated in complete sentences. Note that the error rate is slightly higher when discrimination is made in complete sentences when it is made into single words. (15% errors in preparatory class and 9% at the end of license cycle). Indeed, learners must "isolate" the phoneme and not be influenced by the rest of the sentence.

The results of discrimination to the phonemes [ã] / [õ] / [ɛ], phonemes that do not exist in the native language but which are specific to French, are presented in Table 3.

Table 3 : Les résultats de discrimination des sons [ã] / [õ] / [ɛ]

	5- Discrimination [a]/[ã]		6 - Discrimination [o]/[õ]		7 - Discrimination [õ]/[ɔ]/[o]		8 - Discrimination [ɛ]	
	percentage of correct answers	Percentage of errors	percentage of correct answers	Percentage of errors	percentage of correct answers	Percentage of errors	percentage of correct answers	Percentage of errors
End of Preparatory Class	80	20	85	15	87	13	65	35
License 1	81	19	92	8	92	8	78	22
License 2	86	14	92	8	98	2	72	28
License 3	87	13	94	6	100	0	76	24
License 4	85	15	92	8	100	0	85	15

The corpus 5 representing the evolution of the percentage of correct answers on discrimination of phonemes [a] / [ã], demonstrates not only that the discrimination of these phonemes generate problems in preparatory (20% errors), but also that the relative errors persist sustainably: 15% error in the fourth year license. This could be explained by the fact that nasal sound [ã] does not exist in Turkish.

Discrimination of phonemes [o] / [õ] corpus 6, creates some problems in preparatory classes (15% errors). At the end of the first year of the license, the error rate is divided by two (8%) and remains constant throughout the license (8%). Errors on discrimination of these phonemes persist although quantitatively less important than the discrimination of phonemes [a] / [ã] seen previously.

Contrary to the previous corpus in which discrimination between the nasal [õ] and the closed "o" created some problems in this corpus 7 discrimination between the nasal [õ] and open "o" less problematic. Only 13% of errors in preparatory classes.

As for discrimination [ɛ] in the corpus 8, we see that 33% of preparatory class answers are wrong. The error rate decreases gradually during the licensing cycle but errors persist in the end cycle (15%), the percentage of errors of this phoneme is as high as that for the nasal [ã].

Regarding the part of the problems of discrimination of phonemes groups [i] / [y] / [u] and [ã] / [õ] / [ɛ], it is possible to say that discrimination does not create concerns in general. Even if learners do not evolve in a French environment outside the school system, mistakes in discrimination do not persist or very little if at all. This shows the need to find or develop a more appropriate way to make the ear more sensitive to persistent problems.

5.2 The results review of oral production exercises

In this second part of the statistical study the mistakes made in oral production were analyzed, reading more

precisely, on problematic phonemes for Turkish learners.

Table 4: Results of the pronunciation of sounds [y] / [u] / [i]

	9 – Speaking [i]/[y]- consecutive		10 – Speaking [y]/[i]- consecutive		11 – Speaking [u]/[y]- consecutive		12 – Speaking [y]/[u]- consecutive	
	percentage of correct answers	Percentage of errors	percentage of correct answers	Percentage of errors	percentage of correct answers	Percentage of errors	percentage of correct answers	Percentage of errors
Preparatory Class	63	37	55	45	55	45	51	49
License 1	68	32	63	37	61	39	52	48
License 2	60	40	64	36	77	23	47	53
License 3	60	40	77	23	77	23	35	65
License 4	69	31	84	16	95	5	83	17

As it can be observed in the corpus 9, discrimination of phonemes [i] / [y], create problems for Turkish learners, even if they exist in the Turkish language. In this corpus we gave words to read to learners in which the phonemes [i] and [y] were chained. Throughout the five-year cycle, the error percentage is about 33%. This can be explained by the spelling of the phoneme [y] in French is "u" whereas the Turkish phoneme is used for the phoneme [u]. Moreover, most learners have a level of English B1. This prior knowledge of English is then presented as a didactic obstacle during the pronunciation of the suffixes "-ue" and "-us" as the word "issue" [ɪʃu:] and "virus" [vaɪrəs].

The corpus 10 also concerns the phoneme [y], but this time it precedes the phoneme [i] (while in the previous corpus he succeeded him). Results show that in the beginning of the cycle, still under the influence of English, the spelling "u" to be pronounced [y] is 50% pronounced [u] in transparent words "public", "single" "multiple". The percentage of errors is greatly reduced in the fourth year (16%).

The results of the corpus 11 show that preparatory class consecutive pronunciation of phonemes [u] and [y] is very problematic (45% errors). In the fourth year of the license, the percentage of errors is only 5%. Under the influence of English suffixes "-ture" and "-lure" are mispronounced. This type of error does not seem to be persistent.

However in the corpus 12, the order of the phonemes is inverted relative to the preceding case. The error rate is 49% in preparatory classes. The error is quite persistent in the fourth year (17% of pronunciation errors). Suffixes such as "-our" as in "humour". [u:mər] are problematic because of the English interference. Conducting this analysis we noticed another kind of error: the "dropped e" in the last syllable "tu louches" pronounced /tu louch[e]/

Finally, according to the corpus 9 and 10, it is apparent that not only the place of the phoneme [y], but also the adjacent phonemes, cause variations in the percentage of errors and the persistent nature committed pronunciation errors. In our case, the pronunciation of the phoneme in the corpus 9 [y] at a word succeeding phoneme [i] has shown itself the most problematic. Regarding the corpus 11 [a] / [y] and 12 [y] / [u], we see that the sequence of phonemes [y] / [u] is more problematic.

In the following tables the results of pronunciation problems made in complete sentences and texts are presented.

Table 5: 13 Speaking [y]/[u]/[i] in sentences

	End of preparatory class	License 1	License 2	License 3	License 4
Percentage of correct answers	37	38	30	45	63
Percentage of wrong answers	63	62	70	55	37

In this exercise, the phonemes [y] / [u] / [i] are present in the same sentence consecutively. The results show that students experience great difficulty to pronounce these phonemes in this configuration. In preparatory classes 63% (2 thirds) sentences have errors. In the final year of the license there are fewer errors: 37% but (1/3) of the sentences have errors.

Table 6 : 14 – speaking [y]/[u]/[i] in a text.

	End of Preparatory Class	License 1	License 2	License 3	License 4
Average fault per learner	8	5	3	3	1

In this corpus 14, the phonemes [y] / [u] / [i] are placed into groups of words in a text, but the phonemes are not consecutive. We notice here that the average error is greatly reduced by learning throughout the cycle: 8 errors on average in preparatory class to an error in the final year of license. We do not take into account here the problems concerning the division into rhythmic group, links and chains.

Table 7 : 15 – Speaking : the nasal [ã] (graphie ant/ent)

	End of preparatory class	License 1	License 2	License 3	License 4
percentage of correct answers	45	55	39	38	60
of errors	55	45	61	62	40

In this exercise, the corpus 15, 5 sentences containing -ent -ant and spellings were read by the students. This exercise has proven the most difficult for learners. Preparatory class, 55% of sentences include pronunciation errors. At the end of the fourth year, 40% of sentences contain what do they contain?. In the corpus, the phonemes [ã] have been read very often [ing]. The phonemes constituting verb endings in the third person plural (-ent) tend to be read [ã].

Table 8 : 16 – Speaking : the nasal [õ] in sentences

	End of Preparatory Class	License 1	License 2	License 3	License 4
percentage of correct answers	15	57	71	64	71
Percentage of wrong answers	85	43	29	36	29

The sentences of the corpus 16 on the nasal [õ] located at the end of a word in sentences also contain the phoneme / o / closed. We noticed a high percentage of errors in preparatory classes (85%). After the phonetics classes and course understanding /speaking first-year license, the error rate was halved.

Tableau 9 : 17 – Speaking : nasal [õ]/[ã]/[ẽ] in a text

	End of preparatory class	License 1	License 2	License 3	License 4
Average fault per learner	8	6,6	6,4	6	2

The results of this last corpus 17 representing the evolution in the average number of errors made by students regarding nasal embedded in a text, shows that during the first years of license, the pronunciation of the three nasals create persistent problems. In the last year, according to the results the problem visibly decreases. However, this decline is relative since learners have a strong tendency to read word by word without paying attention to rhythmic groups, links and chains.

6. Conclusions and proposals

We can summarize the findings of our experiment in four points:

1. First, we find that reading exercises (spelling / speech), namely to associate a phonemes spelling, pose a lot of problems even for phonemes in which discrimination does not constitute a major difficulty. Besides, it is an observation already made by Özçelik (2008).
2. In the statistical analysis we noticed the influence of the place of the phonemes within a word or group of words and the subsequent nature (or not) of phonemes sources of error.
3. Previous knowledge of learners is likely to create a didactic obstacle. In our case the knowledge of English (level B1 for the majority of our learners), generate pronunciation errors in transparent words ("false friends") or

like syllables (eg, “personne / person, objet/ object”). False friends words in the native language are also sources of errors (eg « pantalon / pantolon », « camion/ Kamyon »).

4. It is observed that the majority of progress both in terms of discrimination on the production plan have been achieved during the first year of license. We can explain this by the nature of the first year courses. Indeed these are language courses separated by subject: phonics and spelling lessons, during production and oral reception, grammar, speaking and reading comprehension.

This study finally ends to the following conclusion: a Turkish learner FLE needs specific teaching phonetic materials adapted to his needs because currently such books do not exist on the market.. Despite the quality of the available literature, they have shortcomings in the treatment of certain phonemes, prosodic topics in some sources of problems for Turkish learners. Our project's main objective to overcome deficiency by creating educational materials dedicated to Turkish students about learning phonics to improve their competence in listening, oral output (pronunciation) and written production (spelling speech) . This material must be used in class and independently by students outside class.

In the context of the project "Uludag FLE" for the development of specific training materials for phonics phonetics, inspired by a similar project dedicated to the Spanish public and carried out in Spain at the University of Leon (<http://flenet.unileon.es/phon/phoncours.html>), so we have the goal of achieving a composite didactic material constituted by a book and an Internet Site providing interactive exercises workable autonomy. This material will specifically designed to be adapted to Turkish learners.

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Lifelong Learning Tendencies of Primary Education Teachers

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ABSTRACT

This study determined the lifelong learning tendencies of primary education teachers and compared these tendencies using different variables. The participants included 140 primary education teachers from several primary schools in Afyonkarahisar selected through random sampling. The Lifelong Learning Tendency scale developed by Coşkun (2009) to determine the lifelong learning tendencies of primary education teachers was used to collect data. Confirmatory factor analysis (CFA) confirmed that the scale in both the original study and this study had four factors. In addition, the Cronbach Alpha coefficient was 0.90. The data displayed a normal distribution in the dimensions of motivation and persistence, but a non-normal distribution in the dimensions of lack of regulating learning and lack of curiosity. The results revealed that participants have high tendencies towards pursuing lifelong learning. In particular, the tendencies in the motivation dimension were the highest. A significant relationship was only found in the dimension of lack of curiosity with female participants. It was determined that the lifelong learning tendencies of primary education teachers do not differ significantly according to grade level, education level, or professional seniority.

INTRODUCTION

The lifelong learning concept has been known for centuries, but only came to the forefront in the last quarter of the past century. Due to rapid developments in information and communication technologies, we live in the information age and an information society and, consequently, individuals have been forced to update their knowledge. Thus, this situation has propelled the lifelong learning concept to the forefront. Lifelong learning aims to restructure the current education system and develop the ability to recognize education beyond formal education to also include informal educational activities (Güleç, Çelik, & Demirhan; 2012). According to Aktan (2007, 22), this is a concept that includes continuous learning from childhood to retirement. Lifelong learning includes informal as well as formal learning.

The paradigm of lifelong learning was first described in a meeting of higher education ministers from European Union member countries as follows (Aktan, 2007, 23): “Implementing the lifelong learning approach requires a close relationship between working and learning, which requires a closer relationship between education and business life. For this reason, continuing education should be considered more in terms of initial training and instruction. Educational institutions and companies should be learning organizations working in cooperation based on partnership.” There are objectives and practices related to lifelong learning in the European Union projects (Akbaş & Özdemir, 2002). The contribution of lifelong learning and vocational training to employment and the necessity of providing lifelong learning for all ages and occupations are among the foundations of the Leonardo da Vinci program, a European Union program (Duman, 2001). The lifelong learning concept began to be discussed in our country in the 2000s; thus, the General Directorate of Lifelong Learning was established within the Ministry of National Education. Now, lifelong learning is one of the attitudes fostered in the primary, secondary, and higher education (Coşkun, 2009). Therefore, it is of critical importance to determine the views and actions of primary education teachers. This study aims to reveal the lifelong learning tendencies of primary education teachers. In addition, these tendencies were investigated in terms of variables such as gender, grade level, education level, and professional seniority.

METHODOLOGY

This study was designed as a survey study. Surveys revealed the respondents' attitudes, views, and past or present behaviors (Neuman, 2007). The primary education teachers in the center of Afyonkarahisar constituted the study population. The participants consisted of 140 primary education teachers from randomly selected

primary schools. The information regarding participants' gender, grade level, education level, and professional seniority is presented in Table 1.

Table 1: Participant demographic information.

Variables	Total
Gender	Female
	Male
	Total
Grade level	1 st grade
	2 nd grade
	3 rd grade
	4 th grade
	Total
Education Level	Associate's degree
	Bachelor's degree
	Graduate degree
	Total
Professional seniority	1-5 years
	6-10 years
	11-15 years
	16 years and more
	Total

The participants were somewhat evenly distributed between grade level taught. Most teachers were male, had bachelor's degrees, and had taught for more than 16 years."

The Lifelong Learning Tendency scale developed by Coşkun (2009) to determine the lifelong learning tendencies of primary education teachers was used to collect data. The scale has 27 items with a 6-point Likert-type (6=Strongly Agree, 1=Strongly Disagree). Based on the factor analysis performed by Coşkun (2009), the scale has four factors: motivation, persistence, lack of regulating learning, and lack of curiosity. The Cronbach Alpha internal consistency coefficient (α) of the scale is 0.89.

This study performed confirmatory factor analysis (CFA) in order to ensure the construct validity of the scale. CFA is used to test an existing theory (Matsunaga, 2010). The CFA results determined that the scale had four factors, similar to the original report, and fit indices were obtained ($\chi^2=544.36$; $df=318$; $\chi^2/df=1.711$; $RMR=0.11$; $SRMR=0.069$; $GFI=0.78$; $CFI=0.87$ $AGFI=0.73$; $RMSEA=0.072$). A coefficient of 0.85 and over (Anderson & Gerbing, 1984; Cole, 1987; Marsh, Balla & McDonald, 1988) or a coefficient of 0.90 (Kline, 2005; Schumacker & Lomax, 1996) for GFI, CFI, and AGFI is assumed to be a good fit. A RMSEA value of 0.10 or less is considered sufficient. A value between 2 and 5 for the χ^2/df ratio indicates a good fit, whereas a value less than 2 indicates a perfect fit (Jöreskog & Sörbom, 2001). These results indicate that the model is an acceptable model. In addition, the Cronbach Alpha coefficient was 0.90. The Cronbach Alpha coefficients regarding the sub-dimensions were 0.72 for motivation, 0.87 for persistence, 0.75 for lack of regulated learning, and 0.92 for lack of curiosity. The number of items in each dimension and their Cronbach Alpha coefficients are presented in Table 2.

Table 2: The number of factors, items, and reliability coefficients.

Factor	The number of items	n	Alpha
Motivation	6	140	0.72
Persistence	6	140	0.87
Lack of regulating learning	6	140	0.75
Lack of curiosity	9	140	0.92
Total	27	140	0.90

SPSS software was used to analyze the data. A single sample Kolmogorov-Smirnov test was applied to test the data distribution. According to the coefficients of skewness, the data displayed a normal distribution in the dimensions of motivation and persistence and a non-normal distribution in the dimensions of lack of regulating learning and lack of curiosity, as seen in Table 3. A coefficient of skewness between -1 and 1 indicates that the data does not deviate significantly from the normal distribution (Büyüköztürk, 2007; p. 40). Therefore, both parametric and non-parametric tests were used in the study. The independent samples t-test was used to determine the tendencies of primary school teachers in the dimensions of motivation and persistence according to gender. The Mann Whitney-U test was used to determine whether the dimensions of lack of regulating learning and curiosity differ according to gender. The one-way ANOVA test was used to determine if the lifelong tendencies of primary education teachers in the dimensions of motivation and persistence differ according to grade level, the level of education, and professional seniority. The Kruskal-Wallis H-test was used to determine whether the dimensions of lack of regulating learning and curiosity differ according to grade level, the level of education, and professional seniority.

Table 3: The Kolmogorov-Smirnov test results and the coefficients of skewness.

Factor	N	p	Coefficient of Skewness
Motivation	140	.000	-.548
Persistence	140	.000	-.949
Lack of regulating learning	140	.000	-1.319
Lack of curiosity	140	.000	-1.528

FINDINGS

The mean scores and standard deviation for the data factors collected to determine the primary education teachers' tendencies towards lifelong learning are presented in Table 4. The primary school education teachers' tendencies regarding the motivation dimension were high and this was followed by the lack of curiosity, lack of regulating learning, and persistence dimensions.

Table 4: Primary education teachers' lifelong learning tendencies.

Factor	N	Lowest	Highest	Mean	sd
Motivation	140	4.17	6.00	5.4571	0.40794
Persistence	140	2.50	6.00	5.0643	0.68808
Lack of regulating learning	140	1.00	6.00	5.0702	0.97389
Lack of curiosity	140	1.00	6.00	5.1095	1.04223

The independent samples t-test was conducted to reveal whether the tendencies of participants regarding the dimensions of motivation and persistence varied according to gender (Table 5). The motivation dimension did not reveal any significant differences between genders ($t_{(138)} = 1.10$, $p > 0.05$). In addition, persistence did not reveal any significant differences between genders ($t_{(138)} = 0.11$, $p > 0.05$). Thus, male and female teachers had similar motivation and persistence tendencies.

Table 5: The t-test results regarding whether the primary school education teachers' lifelong learning tendencies varied according to gender.

Factor	Gender	N	X	S	sd	t	p
Motivation	Female	63	5.41	0.41	138	1.10	0.27
	Male	77	5.49	0.41			
	Total	140					
Persistence	Female	63	5.07	0.71	138	0.11	0.91
	Male	77	5.06	0.67			
	Total	140					

In order to ascertain whether the tendencies of the participants revealed any difference regarding the dimensions of lack of regulating learning and lack of curiosity, the Mann Whitney-U test was used (Table 6). The tendencies of primary education teachers regarding the lack of learning regulation did not reveal any significant differences based on gender ($U = 2174.500$, $p > 0.05$). Therefore, all primary education teachers' tendencies toward the lack of regulating learning were similar. However, the tendencies of primary education teachers revealed statistically significant differences for lack of curiosity by gender ($U = 1794.000$, $p < 0.05$). The mean score ($X = 80.52$) of

female teachers regarding the lack of curiosity dimension was higher than the male teachers' mean score ($X=62.30$). Thus, female primary education teachers were less curious than the male primary education teachers were.

Table 6: The Mann Whitney-U test results regarding the differentiation of primary education teachers' tendencies based on gender.

Factor	Gender	N	Mean Rank	Total Rank	U	Z	p
Lack of regulating learning	Female	63	74.48	4692.50	2174.500	1.061	0.289
	Male	77	67.24	5177.50			
	Total	140					
Lack of curiosity	Female	63	80.52	5073.00	1794.000	2.662	0.008
	Male	77	62.30	4797.00			
	Total	140					

In order to determine whether the tendencies of primary education teachers regarding the dimensions of motivation and persistence revealed any significant differences according to the grade level taught, an independent samples one-way ANOVA test was conducted (Table 7). The tendencies of primary education teachers regarding the motivation dimension did not reveal any significant differences according to the grade level taught ($F_{(3-136)}=0.666$, $p>0.05$). Additionally, the tendencies of primary education teachers did not reveal any significant difference regarding the persistence dimension ($F_{(3-136)}=.213$, $p>0.05$). Therefore, motivation and persistence for lifelong learning did not differ based on the grade level taught.

Table 7: The One-Way ANOVA test results regarding the lifelong learning tendencies of primary education teachers according to grade level taught.

Factor	The Class Level	N	X	S	F	p
Motivation	1 st Grade	33	5.54	0.41	0.666	0.575
	2 nd Grade	27	5.40	0.41		
	3 rd Grade	38	5.45	0.41		
	4 th Grade	42	5.44	0.40		
Persistence	1 st Grade	33	5.13	0.58	0.213	0.887
	2 nd Grade	27	5.07	0.72		
	3 rd Grade	38	5.00	0.76		
	4 th Grade	42	5.06	0.69		

A Kruskal-Wallis H-Test for unrelated measurements was conducted to determine whether the tendencies of the participants regarding the lack of regulating learning and lack of curiosity varied according to the grade level taught (Table 8). The tendencies of primary education teachers regarding the lack of learning regulation revealed no significant differences according to the class grade levels ($\chi^2=2.180$, $p>0.05$). Additionally, no significant difference was found in the tendencies of primary education teachers regarding lack of curiosity and the class grade level ($\chi^2=3.280$, $p>0.05$). Thus, primary education teachers teaching at different class levels revealed similar tendencies regarding lack of learning regulation and lack of curiosity.

Table 8: The results of Kruskal-Wallis H-test regarding the differentiation of primary education teachers' tendencies according to grade level.

Factor	Grade level	N	Mean Rank	sd	Chi-square	p	Significant Difference
Lack of regulating learning	1 st Grade	33	76.21	3	2.180	0.536	-
	2 nd Grade	27	72.98				
	3 rd Grade	38	71.80				
	4 th Grade	42	63.24				

Lack of curiosity	1 st Grade	33	70.03	3	3.280	0.350	-
	2 nd Grade	27	79.80				
	3 rd Grade	38	73.18				
	4 th Grade	42	62.46				

In order to determine whether the tendencies of the sample primary education teachers regarding the dimensions of motivation and persistence differed according to educational level obtained, the independent samples one-way ANOVA test was conducted (Table 9). There was no significant difference regarding the education level of primary education teachers' and their tendencies regarding the motivation dimension ($F_{(2-137)}=1.477$, $p>0.05$). Additionally, the primary education teachers' tendencies regarding the persistence dimension did not reveal any significant differences ($F_{(2-137)}=0.707$, $p>0.05$). Thus, primary education teachers from different educational backgrounds revealed similar tendencies regarding motivation and persistence.

Table 9: The ANOVA results regarding the differentiation of primary education teachers according to their education level.

Factor	Education Level	N	X	S	F	p
Motivation	Associate's Degree	20	5.45	0.50	1.477	0.232
	Bachelor's Degree	113	5.44	0.39		
	Graduate Degree	7	5.71	0.27		
Persistence	Associate's Degree	20	5.15	0.72	0.707	0.495
	Bachelor's Degree	113	5.03	0.70		
	Graduate Degree	7	5.31	0.29		

In order to determine whether the participants' tendencies regarding the dimensions of lack of regulating learning and lack of curiosity differed, a Kruskal-Wallis H-Test for unrelated measurements was conducted (Table 10). There was no significant difference in the tendencies of primary education teachers regarding the lack of regulating learning dimension in relation to the level of education ($\chi^2=2.714$, $p>0.05$). The primary education teachers with a different level of education revealed similar tendencies regarding the lack of regulating learning dimension. In addition, the primary education teachers' tendencies regarding the lack of curiosity dimension revealed no significant differences according to the level of education ($\chi^2=1.627$, $p>0.05$). The tendencies of primary education teachers with different educational backgrounds regarding the lack of curiosity dimension revealed similarities.

Table 10: The results of Kruskal-Wallis H-test concerning the lifelong learning tendencies of primary education teachers in relation to the education level variable.

Factor	Education Level	N	Mean Rank	sd	Chi-square	p	Significant Difference
Lack of regulating learning	Associate's Degree	20	60.85	2	2.714	0.257	-
	Bachelor's Degree	113	73.18				
	Graduate Degree	7	54.86				
Lack of curiosity	Associate's Degree	20	63.83	2	1.627	0.443	-
	Bachelor's Degree	113	72.52				
	Graduate Degree	7	56.93				

An independent samples one-way ANOVA test was conducted to determine whether the primary education teachers' tendencies regarding the dimensions of motivation and persistence revealed any significant differences according to professional seniority (Table 11). The primary education teachers' tendencies regarding the motivation dimension revealed no significant differences in relation to professional seniority ($F_{(3-136)}=0.758$, $p>0.05$). Additionally, the primary education teachers' tendencies regarding the persistence dimension revealed no significant differences according to professional seniority ($F_{(3-136)}=0.142$, $p>0.05$). Therefore, primary education teachers with different professional seniority revealed similar tendencies regarding motivation and persistence.

Table 11: The One-Way ANOVA test results regarding the differentiation of primary education teachers' lifelong learning tendencies according to professional seniority.

Factor	Professional Seniority	N	X	S	F	p
Motivation	1-5 years	8	5.29	0.39	0.758	0.519
	6-10 years	12	5.37	0.46		
	11-15 years	15	5.52	0.40		
	16years or more	105	5.47	0.41		
Persistence	1-5 years	8	5.02	0.51	0.142	0.935
	6-10 years	12	4.96	0.56		
	11-15 years	15	5.03	0.88		
	16years or more	105	5.08	0.69		

In order to determine whether the participants' tendencies regarding the dimensions of lack of regulating learning and lack of curiosity differed according to professional seniority, a Kruskal-Wallis H-Test was conducted (Table 12). Primary education teachers' tendencies regarding the lack of regulating learning dimension revealed no significant differences according to professional seniority ($\chi^2=6.007$, $p>0.05$). The primary education teachers did not reveal any statistically significant results regarding the lack of curiosity dimension according to professional seniority ($\chi^2=2.722$, $p>0.05$). Thus, primary education teachers with different professional seniority levels revealed similar tendencies regarding the lack of learning regulation and lack of curiosity dimensions.

Table 12: The results of Kruskal-Wallis H-test regarding the differentiation of primary education teachers' lifelong learning tendencies according to professional seniority.

Factor	Education Level	N	Mean Rank	sd	Chi-square	p	Meaningful Difference
Lack of regulating learning	1-5 years	8	103.00	3	6.007	0.111	-
	6-10 years	12	74.04				
	11-15 years	15	63.50				
	16 years or more	105	68.62				
Lack of curiosity	1-5 years	8	79.13	3	2.722	0.436	-
	6-10 years	12	58.17				
	11-15 years	15	60.50				
	16 years or more	105	72.68				

CONCLUSION, DISCUSSION, AND IMPLICATIONS

This study assessed the lifelong learning tendencies of primary education teachers and compared these tendencies using several variables. In this study, the primary education teachers' lifelong learning tendencies levels were first determined. According to the findings, the lifelong learning tendencies of primary education teachers were high. Similarly, Kılıç and Tuncel's (2014) study found that lifelong learning tendencies of primary education teachers were high. Additionally, the teachers that participated in Ayra and Kösterelioğlu's (2015) study also revealed high lifelong learning tendencies. Özçiftçi and Çakır (2015) found the lifelong learning tendencies of teachers who were enrolled in a distant education non-thesis master's program to be high. Additionally, the primary education teachers' tendencies were highest in the motivation dimension. Similarly, in Ayra and Kösterelioğlu's (2015) study and Özçiftçi and Çakır's (2015) study, the motivation dimension had the highest mean score among other dimensions in the lifelong learning tendencies scale. This finding suggests that primary education teachers generally attach importance to developing new knowledge and skills in different fields. Therefore, they acquire new knowledge and skills to enable personal development. This finding is important for the teaching profession. The motivation dimension is followed by lack of curiosity, lack of regulating learning, and persistence.

Secondly, in this study, the primary education teachers' lifelong learning tendencies were compared according to different variables. Motivation, persistence, and lack of regulating learning tendencies of primary education teachers did not reveal any significant differences according to gender. In light of these findings, it was concluded that the tendencies of teachers from different genders were similar with regard to these three dimensions. In Tunca, Alkın-Şahin, and Aydın's (2015) study, the prospective teachers' motivation, persistence, and lack of learning regulation sub-dimensions had no significant difference according to gender. The results of

Yaman and Yazar's (2015) study also suggested that there was not a significant difference between female and male teachers' lifelong learning tendencies. In this study, a significant difference was found only in the lack of regulating learning dimension in favor of female teachers. This study is in line with Tunca, Alkın-Şahin, and Aydın's (2015) findings who suggested that female teachers viewed libraries as boring, did not want to do research to learn anything new or participate in courses/seminars unless required, and preferred to spend time with the people they love or their hobbies rather than for their self-development.

Motivation, persistence, lack of regulating learning, and lack of curiosity sub-dimensions of lifelong learning tendencies of primary education teachers did not reveal any significant difference according to the grade level, level of education, or professional seniority variables. Özçiftçi and Çakır's (2015) study also revealed no significant difference between the professional seniority variable and teachers' lifelong learning tendencies. The findings suggest that the grade level, level of education, and professional seniority did not influence the lifelong learning tendencies of teachers.

Based on the results of this study, in order for teachers to become lifelong learners, activities for their personal and professional development must be organized and teachers must be encouraged to participate in these activities. In parallel, teachers must be encouraged to pursue graduate education and the necessary arrangements must be made in order to enable teachers' personal and professional development. A qualitative study regarding what primary education teachers know and what activities they do for lifelong learning can be conducted. This study can be replicated with a larger sample.

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LIMITATIONS OF PEACE EDUCATION IN DIVIDED SOCIETIES: THE CASE OF CYPRUS

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ABSTRACT

This paper explores the constraints of peace education in divided societies and takes the case of Cyprus as the research model. It displays the major obstacles to pursuing peace education in the schools of the Turkish and Greek Cypriot communities. The majority of students across the divide attend segregated schools, in which their classmates and teachers originate from the same ethnic backgrounds and where they are subjected to ethnocentric education and official versions of history. School curriculums, particularly the history textbooks, on both sides contain nationalistic themes and historical myths that promote ethnic divisions. History education is used as an instrument of ideological manipulation and propaganda; thus, curricular reform remains an area of contestation. An education system that constructs enmity and fear and promotes distrust or hatred cannot encourage the reconciliation and peaceful co-existence of the two communities. Within this context, this study suggests the incorporation of a peace education lesson into the curriculum on both sides as a course separate from history classes, which will represent an interim solution and has the potential to resolve some of the experienced dilemmas.

Key words: Peace Education, Divided Societies, Curricular Reform

INTRODUCTION

‘Peace education has largely been developed as a scholarly field over the past 40 years and has emerged out of its ‘parent’ field of peace studies’ (Bajaj and Chiu, 2009, p.442). UNFICEF’s definition of peace education refers to the process of promoting the knowledge, skills, attitudes and values needed to bring about behavioural changes that enable children, youth and adults to prevent conflict and violence, both overt and structural; to resolve conflict peacefully; and to create conditions conducive to peace, whether at an intrapersonal, interpersonal, intergroup, national or international level (Fountain, 1999). In this sense, the primary aim of peace education is to educate and empower individuals to achieve peace by assuming individual responsibility. This responsibility will affect one’s sense of respect for neighbours and strangers, while promoting the larger goals of conflict transformation and ultimately supporting the movement towards greater respect for human rights. Peace education also deals with elements of antiracism, conflict resolution, multiculturalism and encounters the challenge of mutual animosities, shared painful memories, and strong views of the ‘self’ and the ‘other’ (Salomon and Nevo, 2002, p.7).

Education has a vital role in the development of personal identity and it is one of the most important agencies for cultural reproduction, socialization and communal identity formation. In ethnically divided societies, particularly where conflict lasts for generations, children have been taught to fear, distrust and hate the other, considered by the nationalists as the ‘enemy’. Social mechanisms and schools play a key role indicating the ‘enemy’ and building prejudices. On the other hand, politicization of education is dangerous for peace and reconciliation. Ethnic attitudes are shaped early and, once positive or negative prejudices are formed, they tend to be decisive for the future. In this respect, school education and socialization experiences are critical in the formation of ethnic attitudes.

One of the greatest obstacles to peace education in areas with intractable conflicts is the existence of official narratives that explain the conflict in a way that legitimizes its own position and de-legitimizes the other’s (Solomon and Nevo, 2001; Tinker, 2016). Prominent scholars such as Ernest Gellner (1997), Anthony Giddens (1991) and Anthony Smith (1991) argued that national curricula, history education and textbooks, are designed to transmit ideas about the nation and the state, as well as to create, maintain and reinforce national identity. Official narratives are generally reflected in national education systems and shape history textbooks and school curriculums. History education is usually determined by political factors. Education systems become crucial institutions for the survival of the nation, as the official history education provides a basis for “a collective narrative that reiterates the inevitability of the nation’s existence and grandeur” (Christou, 2007, pp. 710-711). In this direction, schoolbooks contain statements glorifying their own nation and disparaging others (Pingel, 1999). The national history curriculum reproduces a nation’s desirable vision of itself and ignores any references to its ‘dark pages’ in history (Christou, 2007, p.711). Thus, in many conflict and/or post-conflict societies, the revision of history textbooks portraying the other as an ‘historical enemy’ have been on the conflict transformation agendas of peacebuilders, whether they are local or international.

A survey of the national narratives reflected in the history textbooks on both sides of Cyprus shows that each side has used history to construct its own identity while marginalising the other (Latif, 2010; Papadakis, 1998; Spyrou, 2002). As in many post-conflict societies, education is used as a tool to promote the conflict on the divided island. Schools are used for endorsing nationalism and militarism through activities such as celebrating national motherland days, naming schools after military heroes, showing pictures of atrocities and holding competitions in poetry and essay-writing based on nationalistic themes or glories of the past of each nation (Hadjipavlou, 2000). After the division of the island in 1974, education had become extremely politicized and the school books developed by both sides described the past in accordance with their own interpretations, cultural myths, stereotypes and prejudices. Hence, the elimination of dividing elements from the textbooks and curriculums used in the schools of both communities in Cyprus has been essential for peace and reconciliation in the following years.

HISTORICAL FRAMEWORK

Cyprus has been religiously and culturally diverse since medieval times, inhabited by various civilizations, and colonized by various empires and outside rulers such as the Romans, Byzantines, Lusignans, Venetians, Ottomans, and the British. This diverse, although somewhat integrated, society of the island during the Lusignan dynasty of the twelfth to fifteenth centuries lasted until the end of Venetian rule in the sixteenth century. Ensuing rule by the Ottoman and British empires respectively led to the division of the inhabitants along Orthodox Christian and Muslim religious lines. The distinct separation prevailing between Christians and Muslims since Ottoman times was maintained by the British colonial administration. Under the Ottoman “millet system,” which was used to administer the island from 1571 to 1878, Ottoman subjects could identify themselves according to their religion and were divided into religiously oriented communities. Each “millet” possessed a significant degree of autonomy regarding its own social, cultural, educational and legal affairs. Orthodox Christians were acknowledged as separate “millet” and the other religious communities then gradually integrated and/or assimilated into the larger Greek Orthodox society. The Turkish Muslim community that came from Anatolia after the Ottoman conquest in 1571 was subject to Islamic law. Education was provided for the Muslims in medreses and tekkes. The head of the Orthodox Church was the supreme authority for the education of the Greek Cypriot community. This separation of the school administration was maintained by the British and has remained in practice to the present day in Cyprus.

The principal division of the two main communities of the island, the Greek and Turkish Cypriots, started in the mid-1950s. The inter-communal conflict began against British colonialism, and developed into a violent struggle with bloodshed in the late 1950s. Similar to a number of former colonies, Cyprus achieved independence in 1960 from the British Empire. After the establishment of the bi-communal Republic of Cyprus, two communal chambers exercised legislative powers with regard to all religious, educational, and cultural matters. The Greek and Turkish communal chambers coordinated their education policies with their motherlands, Greece and Turkey respectively, which contributed to the creation of two rival communities rather than a united Cypriot state (Karagiorgos, 1986, p.152). The Republic of Cyprus, which was designed on the basis of a consociational federation, collapsed within three years due to the relapse of inter-communal disputes. The physical division of the island came after the Turkish military intervention following a coup d'état by Greek army officers in 1974. In response to the failing negotiations for finding an acceptable solution to the Cyprus problem, the Turkish Cypriot community declared the Turkish Republic of Northern Cyprus (TRNC) in 1983, which is only recognized by Turkey.

A number of unsuccessful talks were coordinated by the United Nations (UN); however, the two principal communities diverge on a number of significant issues. The most comprehensive UN attempt at a solution to date, the ‘Annan Plan’, was negotiated over a period of two years, during which five different versions were produced before a referendum was held in 2004 (Varnava and Faustmann, 2011). The final version of the Plan was accepted by 65% of the Turkish Cypriots, but rejected by 76% of the Greek Cypriots in the April 2004 referendum, which ultimately led to its failure. Consequently, the Republic of Cyprus entered the European Union (EU) on 1 May 2004 as the only ‘legitimate state’ on the island. At present, the EU acquis is suspended in the areas administered by Turkish Cypriots and even the formal accession of Cyprus to the EU was not a sufficient catalyst to forge reunification. Following a breakthrough, the current round of negotiations that commenced in 2008 is now continuing at the official level with the aim of reaching an acceptable solution for the reunification of the island.

CONTESTED HISTORY TEACHING AND POLITICIZATION OF EDUCATION

Since the division of the island, public schools, national curricula and history education and textbooks have been used on both sides to further political goals, legitimise official narratives and solidify ethnic identities defined vis-à-vis the other (Makriyianni et al., 2011; Vural, 2012). In divided societies, educational systems, particularly history teaching, which is often supervised by the state, is commonly used to propagate a narrative focusing on the suffering of the nation in order to legitimize its political goals. Through school education, the Greek and Turkish

Cypriot communities both legitimize their respective political positions in such a way that future citizens are prevented from developing a critical approach (Latif, 2010). The official historical accounts of the Greek and Turkish Cypriot communities mirror each other in a way that they construct blame, silence the pain and delegitimize the historical existence of the 'other'; ignoring any processes of socio-cultural interactions between them (Kizilyurek, 1999; Vural and Özuyanık, 2008; Papadakis, 2008). The conflicting historical narratives of each community presuppose that Cyprus 'belongs' to them on historical grounds (Papadakis, 2008). Each community relays and justifies its interpretation of events in the light of current political discourses, predominantly using history education and textbooks.

For instance, to counterbalance the Greek Cypriot official narrative stressing the Greek and Hellenic origins of Cyprus, the Turkish Cypriot national history emphasized the Ottoman/Turkish nature of the island instead. Before the division of Cyprus in 1974, the official Greek Cypriot history and narrative focused on endorsing the demands for the unification of Cyprus with Greece (Kızılyürek, 1999). After the 1974 war, the Turkish Cypriot education system aimed at the legitimization of the division of Cyprus on the basis that "the two communities in Cyprus cannot live together" (Latif, 2010; Kizilyurek, 1999). The period of intercommunal tension from 1964 to 1974 was presented in history textbooks as a "dark period" for the Turkish Cypriots, where "the whole responsibility lies on the Greek Cypriot side." (Latif, 2010; Makriyianni, et al., 2011). The "happy end" for the Turkish Cypriot community arrived in 1974, when Turkey undertook a military intervention. The narrative of the history textbooks argues that "with the declaration of the TRNC, the Turkish Cypriot people, who have been fighting against all sorts of oppression and cruelty for years, founded their own state after hundreds of years, in which they will eternally live in freedom and independence" (Latif, 2010, 40). On the other hand, while the 1963-1974 period is not adequately mentioned in the Greek Cypriot textbooks, the 1974 war and its consequences is regarded as an invasion (Papadakis, 2008). From an ethnocentric perception, the 1974 war is depicted as the tragic end for the "Greeks of Cyprus" without acknowledging the suffering of the Turkish Cypriots. The inter-communal strife in the 1960s also has a very limited space in the textbooks and is described from a Greek Cypriot perspective (Makriyianni et al., 2011; Papadakis, 1998). The post-1974 Greek Cypriot education system's primary objective included the "I don't forget and I struggle" slogan (Christou, 2007).

International peacebuilding initiatives for conflict transformation and official narratives promoted by school education thus work for cross purposes. The conflict transformation method intends to address the root causes of the conflict, alter the negative attitudes and empower parties to handle their conflict by peaceful means. In contrast, the central educational systems of each side focus on constructing national identities and shaping national collective memories and remembrance, which is not helpful in creating an understanding of the 'other' and encouraging the peaceful co-existence of the two communities.

This issue has been raised in the past by foreign peace mediators, who questioned how any settlement would work given the nationalistic content of school history books (Cyprus Mail, 2006). During the Annan Plan negotiations, a member of the Council of Europe, Mr. Valter Svimer, after a meeting between the two parties to consider the Council's contribution to the settlement of the Cyprus issue, stated that 'the Council would take initiatives in promoting the revision of history books by both communities so as to wipe out any allusion to hatred or any misinformation with respect to either sides' (Cyprus Mirror, 2003). The goal of such initiatives has been to redefine and re-identify 'us' and 'them'. However, in order to reconceptualize national identity, and thereby pave the way to reconciliation between the conflicting parties, there is a need for such a political demand to materialize within the wider society.

Although during the Annan Plan negotiations the Council of Europe demonstrated an eagerness to cooperate with both the Turkish and Greek Cypriots to revise the secondary education history books, the outcome has been only partially successful. On the Greek side, an Educational Reform Committee was established to implement a general reform in 2004. The Committee's report concluded that the general orientation and ideology in Cypriot education remains to a large extent "Greek-Cypriot centric", "ethnocentric" and "culturally monolithic" (Philippou and Makriyianni, 2004). The Greek Cypriot authorities' efforts at curricular reform led to divisions within the previous coalition government. Although the Republic of Cyprus Committee for Educational Reform proposed a report with suggested changes, the Greek Cypriot Minister for Education and Culture did not announce any revision of Cyprus history textbooks. On the Turkish side, after the pro-reconciliation Republican Turkish Party (CTP) came to power in 2003, a visible change took place, both in the education system and in history textbooks. The Cyprus history textbooks in use since 1971 with an ethnocentric and ethno-nationalist approach were re-written in 2004 following the Annan Plan referenda.

The revised Cyprus history textbooks deviated from the previous ethnocentric perception of history and they declined any obvious indication of the national enemy or the 'other' and adopted multicultural and student-centred

approaches (Karahasan and Latif, 2010). After this reformation of history education, right wing circles instigated a fierce debate over the content and approach of the new textbooks, arguing of the dangers of an erosion of national identity and termination of national consciousness. Shortly after the National Unity Party (UBP) were elected to the government following the general elections in April 2009, the revised Cyprus textbooks were replaced by new Cyprus History textbooks, reverting to the old-style texts. Although the change of Turkish Cypriot history textbooks in 2004 was used to stimulate a debate for the revision of Greek Cypriot history textbooks, the latest change has now lifted the pressure on the South. Ironically, this inaction of the Greek side may have contributed to the re-revision of the Turkish history books.

In parallel to the attempts of the Council of Europe, the failed Annan Plan proposed the establishment of an impartial Reconciliation Commission to promote dialogue and understanding among Turkish and Greek Cypriots. This Commission was intended to promote dialogue regarding the past, prepare a report on the history of the Cyprus problem as experienced and interpreted, and also to make recommendations including guidelines for publications and school textbooks. However, since the rejection of the Plan, sufficient improvement has not been implemented regarding reconciliatory education, except for the funding of several education projects (Yaman, 2007) by the EU Commission and UNDP-ACT. The Association of Historical Dialogue and Research (AHDR) and the POST-Research Institution (POST-RI) are the two exceptional NGOs that have been working on the teaching and learning of history, and have developed a range of projects, activities and publications, such as teacher training workshops and the creation of supplementary materials.

Since July 2014, the European Union has been funding a project entitled 'Education for a Culture of Peace as a Vehicle for Reconciliation in Cyprus' implemented by POST-RI in partnership with the AHDR. As part of the project, the Republic of Cyprus Ministry of Education and Culture allowed the project partners to provide in-service training to the Greek Cypriot teachers in regard to the culture of peace (Beyidoğlu, 2016). On the other hand, a positive development occurred in November 2015, when the Greek Cypriot and Turkish Cypriot Presidents, Nicos Anastasiades and Mustafa Akinci respectively, agreed on the establishment of a new technical committee for education, which was tasked with reviewing educational practices. The committee is working on how education can contribute to conflict transformation, peace and reconciliation (Christou, 2015). Nevertheless, a transformative outcome has not currently been achieved from either initiative.

CONCLUSIONS

One of the main approaches of peace education is to empower individuals to achieve sustainable peace through inquiry, critical thinking and dialogue towards greater equity and social justice (McGlynn and Zembylas, 2009; Johnson, 2013; Tinker, 2016). There is an emergent need for such alternative educational perspectives to help the new generation of Cypriots learn impartially about each other, break fixed ideas, and construct discourses and ideologies about the 'other'. Students need to be introduced to the skills through which they can evaluate historical facts depicted by the school curriculum and textbooks critically and independently using a multi-perspective approach. A possible instrument other than the revision of textbooks and reformulation of national narratives, which could not be achieved until this point due to constraining political structures and processes, may be the incorporation into the curriculum on both sides of a peace education lesson as a course separate from history classes. This would constitute an interim answer and could potentially add to other peacebuilding efforts in Cyprus and resolve some of its dilemmas.

While governments and educational authorities have been reluctant to change their history curriculums, international peacebuilding actors in Cyprus could be instrumentalized to exert pressure on the parties to at least take this incremental step. In this framework, peace educationalists and experts in this field should develop programmes, separate from history classes, curriculums, and other educational material, to integrate peace education classes into all levels of education. They should explore new frontiers of peace-based education and offer practical suggestions on how to implement them within the existing education system. The subject matter of peace education classes can cover topics including gender, environment, race, democracy, human rights and sustainable development. Additionally, introducing conflict resolution training, cooperative learning programmes and other instruments of peace education in schools would enable students to develop attitudes to resist societal ideologies, resolve conflicts in a constructive way and examine methods to effectively apply these methods into their lives (Castro and Galace 2008, p.26). In the long run, such an undertaking would spread a culture of peace to the wider society.

With the help of such an approach, young people would be able to evaluate the Cyprus conflict beyond the limits of national narratives, by deconstructing and transforming them. Additionally, a class on peace education would introduce students to practical skills that could promote harmonious co-existence and tolerance for diversity, empathy, eliminate discrimination and create a pedagogical culture of peace, not only for one another but for the

differences. Moreover, peace education lessons would enable students to challenge the culture of disempowerment; thus creating a shift from passive learning to participatory and active learning for social empowerment. This would eventually contribute to inter-ethnic understanding, enhance inter-community relations, and take the youth beyond the Cyprus conflict towards restoring relationships.

Besides, peace education has the potential to create civil peace. Peace education not only develops values and critical thinking skills to empower individuals but also to understand how global issues such as peace, development and the environment interact and are relevant to their everyday lives and their local conflict. In post-conflict settings, there is a tendency of educational systems and texts to reify ethnical divisions, stereotypes and negative perceptions, making the task of conflict resolution harder. Peace education classes may assist in eliminating the stereotypes that often plague societies with ethnic conflicts. Peace education can lay the foundation for healing; rebuilding and transforming with its bottom-up conduct and contribute to the development of a cooperative multi-ethnic society. Educating and empowering individuals about a set of values and behaviour conducive to nonviolence and solidarity could resolve local conflicts.

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LINES AND SURFACES: METHOD AND CREATIVITY IN DESIGN PROCESS

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ABSTRACT

The paper deals with a didactic experience through courses that are part of the first year of studies for the Schools of Architecture and Design of the Politecnico di Milano. One of the themes of these courses concerns geometric problems, in order to introduce students to 3D space. The peculiarity of the didactic method used is, first of all, to induce the student to observe the real object by identifying its geometric characteristics (symmetries, proportions, contours, and surfaces enveloping it). Subsequently, the goal is to teach how to translate the observed form into mathematical language and finally draw it on the computer.

The virtual reconstruction of the architectural form of the official symbol for EXPO2015 in Milan (Italy) is presented as an example of application of the method using dynamic surfaces.

The basic mathematical background for application in Computer Graphics is 3D parametric analytical geometry and matrix calculus, along with a basic approach to the SCILAB® library.

The most characteristic aspect of this teaching method is the sense of success achieved by students who can quickly manipulate and control complex lines and shapes by improving familiarity with geometry and stimulating creativity.

INTRODUCTION

Mathematics is usually considered a noble and abstract discipline, very close to philosophy. However, in applied sciences, such as physics, biology, chemistry, engineering, mathematics is recognized as a pillar for the simulation of natural phenomena. Even as regards geometry, essential tool for the work of Architects and Designers, it is generally seen as means of classifying curves and surfaces and describing their characteristics. Rarely mathematics is considered as an aesthetic and creative intellectual activity. This is the aspect of mathematics that is highlighted in this paper.

On the other hand new technologies, heavily computer based, like 3D printers, renew the designer figure, by imposing an effort on common design between designers, architects, mathematicians and engineers. This fusion of artistic, scientific and technological cultures brings with it a creative project based on a revised geometric sensitivity. In fact, the designer responds to this renewed cultural baggage by creating objects of geometrically innovative shape or, otherwise, using classical geometric forms in an innovative way (see Pottmann, 2007, for a very interesting formalization of this idea). The tendency is to design in a way apparently disordered, but in reality linked to geometric harmony.

In this direction the didactic experience, here presented, within the Schools of Architecture and Design is developed.

The first goal of this proposal is to learn, with the eye of the artist, to grasp, among the aesthetic aspects, in nature, in art, in buildings and in artifacts, the geometric component, which brings with it harmony, symmetry, dynamism and consequent beauty (see for example, Marchetti, 2012).

A second goal is to learn how to design, at any scale, by giving priority to harmony that is determined through geometric characteristics.

Another objective is to find the right tool. The painter has his brush, the writer the pen. What expressive tools does the mathematician want to give to the designer? Obviously a mathematical tool that offers the ability to express and manipulate, taking into account all the geometric features, even complex forms, in a simple way. An expressive and creative mathematical tool, as well as rigorous, is 3D analytical geometry (Caliò, 2016). Here, lines, surfaces, classical and more generic shapes can be represented not only with pencil, ruler and compass, but also with a few equations. This vision requires a sensibility that is certainly different from that of a painter or writer, but still can be defined as artistic. Another example of mathematical tool is the matrix calculus (Caliò, 2016). Thanks to this instrument we are able not only to virtually represent, deform and move objects in space, but also to create, define and construct them (Caliò, 1997).

Now the subsequent steps of the didactic method are described.

- The student observes the form of a real or ideal "object" (some images of architectural buildings or Design objects are presented) from an aesthetic point of view and comes to this consideration: each object designed, understood as a structure that defines a space, is delimited by surfaces.
- The student understands that, from the figurative point of view, besides the other factors - static, material, functional, social and so on - the object is characterized by the configuration of its surfaces.

- The student points out the peculiarities and the geometric nature of the surfaces.
- The student, using a suitable software provided with rigorous instructions, virtually represents the surface reconstructed or imagined.

In order to give a significant example of how the didactic experience develops, the attention is focused on particularly interesting surfaces, called dynamic surfaces: their epistemological nature is identified and the mathematical language is able to interpret their dynamism.

The dynamic surfaces are special surfaces obtained by continuous transformation of a planar or skew curve or by deformation of a given surface (Caliò, 2000, Marchetti, 2002, Caliò, 2012).

A curve that is subjected to a transformation is generatrix, a curve leading the transformation is directrix. A continuous transformation is rotation, translation or combination of them.

A surface acquires its physiognomy through the definition of the generatrix curve and through the law of movement.

The rotation surfaces (or revolution surfaces) are generated by a generatrix line rotating around an axis. Many examples of them are found in Design (for example the table lamp *Taccia* by *Castiglioni* and the *Bombo* tables by *Giovannoni*). More contemporary rotations can lead to very famous and strange surfaces : *Moebius* strip or *Klein* bottle (Caliò, 1997).

The translational surfaces are generated by the movement of a generatrix along a directrix and assume qualitatively different aspects, because they are strongly influenced by both curves (generatrix and directrix). The translation of generatrix curves along rectilinear lines creates indefinite cylinders of different nature (for example the roof of the *Theatre* in Lyon designed by *Nouvel*), whereas curved lines generate saddles and twisted tubes (for example the roof of the *Royal Theatre* in Torino designed by *Bertone*).

The combination of the two movements (rotation and translation) gives rise to forms that Architecture appreciates and adopts with enthusiasm (*Wright* in *Guggenheim Museum* is an example): helicoids of every type (dependent on generatrix, from the rotation axis and the directrix of translation).

Deformation of the simplest surfaces (plane and sphere) generates surfaces that acquire a remarkable significance from aesthetic point of view (*Isosaki Tower at City Life* in Milano gives example of architecture whose reading key can be the controlled deformation of plans).

This transform-oriented vision of reality is the principal subject here presented on which the didactic method is illustrated.

This idea has proven to be successful thanks to the fact that not only the searched target can be easily and pleasantly reached but also it can be somehow overridden. In fact it is intrinsic to this approach the capability of generating new unpredictable shapes whose aesthetic and validity can be verified a posteriori. It is a fantasy stimulating approach.

In the next Sections of the paper the generative process of the shape is described and an example of this procedure is illustrated . Final remarks will concern the skills of students acquired through this methodology.

GENERATIVE PROCESS:

What it is meant by 3D parametric geometry?

The 3D parametric analytical geometry is understood as the evolution of 3D analytical geometry, which in turn constitutes the evolution of the synthetic geometry language, superimposing the algebraic language to the geometric language. Precisely:

- given a Cartesian orthogonal reference system, a point P can be represented in 3D space through Cartesian coordinates;
- there is correspondence of point P as well as with an algebraic 3-component vector, as well as with a geometric vector, starting from the origin of the Cartesian system and terminating into the point P;
- a curve is expressed by means of an algebraic vector depending on a single parameter and it is geometrically described by the set of the terminating points of the geometric vector corresponding to the different values of the parameter;
- a surface is expressed by means of an algebraic vector depending on two parameters and is geometrically described by a set of generating curves related to each other through some given law;
- an affine geometric transformation (i.e. translation, rotation, reflection, scaling, ...) is obtained from the application of an appropriate matrix to a vector and by imposing a translation to the result. It is possible to compose some transformations. Each linear transformation is described by a generic matrix equation:

$$A\mathbf{v} + \mathbf{b} = \mathbf{w} \quad (1)$$

where A is the transformation matrix, \mathbf{b} the translation vector, \mathbf{v} the current vector that must be transformed and \mathbf{w} the transformed vector.

What it is meant by the generative process of a surface?

It is meant firstly the interpretation and secondly the representation of the genesis of surface shape.

Using the dynamic surface definition and the mathematical tools introduced, we can get to describe the generative process. Precisely:

- the shape is analyzed;
- a geometrical genesis (i. e. generation law) of the shape is determined;
- a basis curve is selected (generatrix curve) and parametrically expressed;
- an action is applied to the curve by means of an algebraic parametric transformation (one parameter is introduced in the matrix of transformation). Successive elementary transformations are composed if needed;
- the parametric equation (two parameters) of the surface is determined;
- finally the surface is graphically obtained.

LABORATORY EXPERIENCE: THE TREE OF LIFE

The didactic experience here presented is integrated by laboratory activities. The main purpose of the laboratory is to graphically implement and visualize the theoretical results obtained at the lessons. The open source software SCILAB® (<http://www.scilab.org/>) is used. The SCILAB® software allows very easy manipulations of one- and two- parameter equations and an immediate application of matrix calculus. Moreover it gives dynamic rendering of the image during the generation of forms. It can be used as an introductory tool to more professional and complex products.

The following example illustrates the laboratory activities.

The architecture object chosen is the symbol of EXPO 2015 (EXPO 2015, 2015): The Tree of Life [Figure 1]. This item is proposed for different reasons. Firstly it is, surely, attractive because it is a very recent work, a symbol of a popular event of very successful. Moreover its form, which gives us a concrete example of dynamism, is closely related to its meaning. The base, roots of the tree, and the terminal part, the tree's branches, take on the look of regular plot formed by basic elements that are close to the leaf and to the drop of water. The base and the top connect to each other in a vortex movement that seems to describe not the shape of the tree, but its growing, slow and regular. The surface of the object is realized by means of lines and voids that, for our benefit, highlight the forms to be grasped and reproduced.



Figure 1: The *Tree of Life*

Below the principal steps related to the virtual reconstruction in the 3D Cartesian space $Oxyz$ of the *Tree of Life* are described.

The first step of the algorithm is to generate the top and the basis of the tree.

In particular:

- i) The projection on the horizontal plane of a singular arc forming the top and the basis of the tree is assumed as lemniscate arc (Caliò, 2000).

$$\Gamma_0 : \begin{cases} x = A(a, t) = -a + a \cos(t) \sqrt{\cos(2t)} \\ y = B(b, t) = b \sin(t) \sqrt{\cos(2t)} \\ z = 0 \end{cases} \quad t \in \left[-\frac{\pi}{4}, -\frac{\pi}{40}\right] \cup \left[\frac{\pi}{40}, \frac{\pi}{4}\right] \quad (2)$$

where the variation of the parameter t identifies the portion of the arc, and the coefficients a and b are related to the shape of the real curve.

The (2) in vectorial form is $\mathbf{v} = [A(a, t) \ B(b, t) \ 0]^T$.

ii) The complete basic plane form with 12 arcs is achieved by 11 rotations of Γ_0 around z -axis with angle of rotation $\alpha = \pi/6$. Applying to vector \mathbf{v} a suitable matrix of rotation according to (1) it follows:

$$\Gamma_1 : \begin{cases} x = C(a, b, c, t) = c(\cos(k\alpha)A(a, t) - \sin(k\alpha)B(b, t)) \\ y = D(a, b, c, t) = d(\sin(k\alpha)A(a, t) + \cos(k\alpha)B(b, t)) , \quad \text{with } k = 0, 1, \dots, 11 \\ z = 0 \end{cases} \quad (3)$$

This basic form is inscribed in an ellipse with semi-axes c and d , suitable to the desired form.

The surface delimited by the ellipse can be considered formed by continuous rotations of Γ_0 around z -axis, but only 12 of them are selected in Γ_1 .

Thanks to this transformation, it is evident the relation between the basic forms and the decoration of the Campidoglio pavement (in Roma), one of the symbols of the Italian Renaissance [Figure 2].

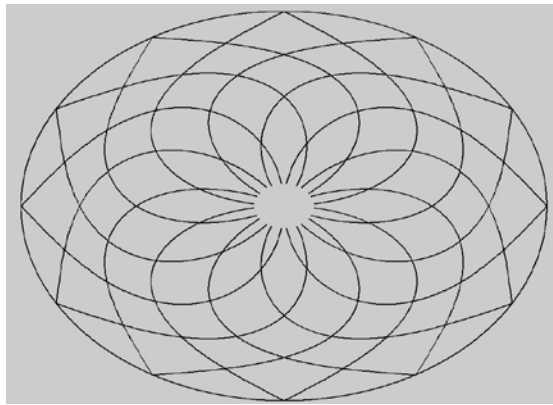


Figure 2: Virtual image of Campidoglio pavement

iii) The top and the basis in 3D are obtained as projection of Γ_1 on a revolution logarithmic surface of equation:

$$S : \begin{cases} x = v \cos(u) \\ y = v \sin(u), v > 0, 0 \leq u < 2\pi \\ z = \log v \end{cases} \quad \text{that can be parameterized as } S : \begin{cases} x = u \\ y = v \\ z = \log(u^2 + v^2) \end{cases}, u \in R, v \in R.$$

Consequently projecting suitably Γ_1 on S :

$$\Gamma_2 : \begin{cases} x = C(a, b, c, t) \\ y = D(a, b, d, t) \\ z = h \pm \ln((C(a, b, c, t))^2 + (D(a, b, d, t))^2) \end{cases} \quad (4)$$

In (4) the values of h and the choice \pm are related to construction the top or basis.

2) The trunk of the tree is obtained by the projection, on a trunk of cone, of two sets of twelve Archimedean spirals, symmetric with respect to a center. That is:

$$\Gamma_3 : \begin{cases} x = (k_1 t + k_2)(\cos(k\alpha) \cos(t) \mp \sin(k\alpha) \sin(t)) \\ y = (k_1 t + k_2)(\sin(k\alpha) \cos(t) \pm \cos(k\alpha) \sin(t)), k = 0, 1, \dots, 11 \\ z = k_3 t + k_4 \end{cases}$$

The values of k_1, k_2, k_3, k_4 are chosen according to the shape of the trunk. In [Figure 3] the whole tree is represented in two perspectives.

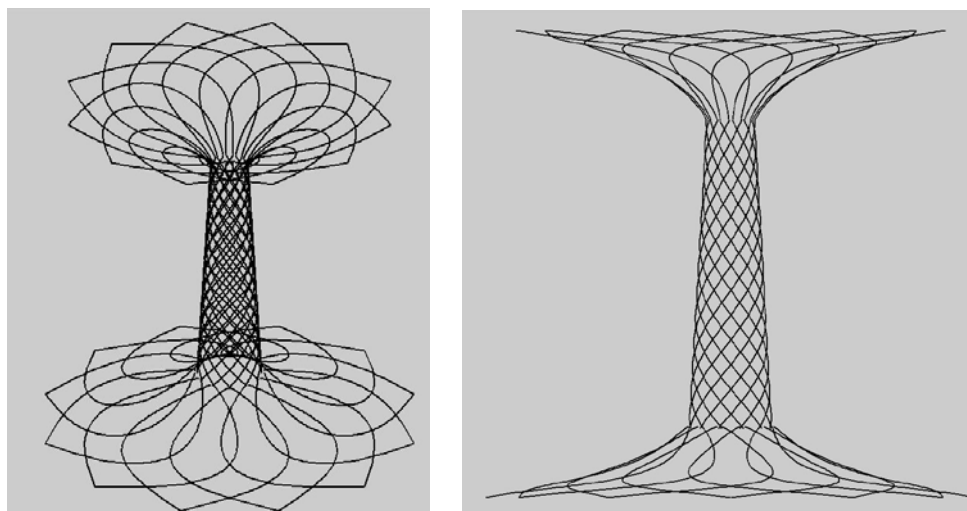


Figure 3: Virtual reconstruction of the *Tree of Life*

FINAL REMARKS

The didactic method in teaching the geometric component of mathematics in Architecture and Design Schools exemplified in this work leads to interesting results, suitable to the audience to which it is addressed.

Firstly, it educates the student to thoroughly observe the object, to be described or to be designed, with an aesthetic eye, focusing on the geometric aspects of the surfaces that characterize the object.

Secondly, the student incorporates the possibility of creating complex forms with the modern and agile mathematical language of the parametric 3D geometry. As a result, students are sensitized to the potential of mathematical language itself, which will be an indispensable cultural basis for those who are oriented to virtual design.

Finally by the virtual reconstruction of the object, the student understands that he has in his hand a tool that allows to manipulate the object, for example to correct its dimensions and shape.

This latter consideration allows the student to grasp the aspect of less obvious and unusual mathematics: the creativity. In other words, following the particular path proposed in this paper, the knowledge and study of the genesis of the surface stimulates the designer to develop creative abilities, which allow him to go further the possibility to observe, understand and then communicate the already realized projects.

This method seeks to consolidate the deep and ancient bond between art and science, contributing to the collapse of the separation between scientific culture that it observes and it studies and the humanistic culture that it thinks and creates.

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LİSANSÜSTÜ EĞİTİMDE KARŞILAŞILAN SORUNLAR VE ÇÖZÜM ÖNERİLERİ: ÖĞRENCİ GÖRÜŞLERİNE DAYALI NİTEL BİR ARAŞTIRMA

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Üniversitelerin en önemli görevlerinden biri, ülkenin ihtiyaç duyduğu nitelikli insan gücünün yetiştirilmesidir. Bu bağlamda üniversite bünyesinde açılan yüksek lisans ve doktora programlarının oldukça önemli bir işlevi bulunmaktadır. Lisansüstü eğitim sürecinde öğrenciler bir dizi sorunla karşı karşıya kalmaktadırlar. Bu süreçte sorunlarla karşılaşılması doğal olmakla birlikte bu sorunların neler olduğunun bilinmesi ve bunlara ilişkin etkili ve sağlıklı çözümlerin üretilmesi lisansüstü eğitimin niteliğine ve dolayısıyla nitelikli insan gücünün yetiştirilmesine katkı sağlayabilir. Lisansüstü eğitimin niteliği noktasında özellikle küçük ölçekli şehirlerde bulunan üniversitelerde yeterli sayı ve nitelikli öğretim üyesinin bulunmaması ya da uygun bir araştırma ortamının yokluğu bir dizi başka sorunlar gündeme gelebilmektedir. Bu itibarla mevcut araştırmanın amacı Karabük Üniversitesi Sosyal Bilimler Enstitüsü bünyesinde bulunan farklı anabilim dallarında lisansüstü öğrenim gören öğrencilerin bu süreçte yaşadıkları sorunların ve bu sorunlara ilişkin ortaya koydukları çözüm önerilerinin belirlenmesidir. Nitel araştırma yöntemi ve durum çalışması deseni kurgulanan mevcut çalışmaya Karabük Üniversitesi Sosyal Bilimler Enstitüsü bünyesinde farklı anabilim dallarında yüksek lisans öğrenimini tamamlamış toplam 10 öğrenci katılmıştır. Araştırmanın katılımcılarının belirlenmesinde amaçlı örnekleme yöntemlerinden ölçüt örnekleme ve maksimum çeşitlilik örnekleme yöntemi kullanılmıştır. Buna göre mevcut araştırmaya katılım için belirlenen ölçüt Karabük Üniversitesi Sosyal Bilimler Enstitüsü bünyesinde bulunan anabilim dallarından herhangi birinde yüksek lisans eğitimi tamamlamış olmaktır. Nitel araştırmanın doğası gereği katılımcılardan araştırma problemine ilişkin derinlemesine veri toplamak gerekmektedir. Bununla birlikte mümkün olduğunca farklı anabilim dalında yüksek lisans yapan öğrencilerden veri toplamak suretiyle maksimumçeşitlilik örneklemesine uygun hareket etmeye özen gösterilmiştir. Araştırma verileri yazarların ilgili alan yazına ve araştırmanın amaçlarına uygun olarak oluşturdukları yarı-yapılandırılmış bir görüşme formuyla toplanmıştır. İlgili görüşme formu uzman görüşüne sunulmuş, bu uzmanların araştırma konusuna benzer konularda ve nitel çalışmalar yapıyor olmalarına özen gösterilmiştir. Uzman görüşleri doğrultusunda görüşme formuna son hali verilmiştir. Verilerin analizinde içerik analizi ve betimsel analiz tekniklerinden faydalanılmıştır. Araştırma an itibarıyla verilerin analizi sürecindedir. Araştırma sonucu ortaya çıkan sonuçlar, ilgili alan yazınla ilişkili bir biçimde tartışmaya açılacak ve araştırma sonuçlarına dayalı öneriler sunulacaktır.

Not: Bu bildiri, KBÜBAP-17-YD-308 nolu Karabük Üniversitesi Bilimsel Araştırmalar Projesi tarafından desteklenmektedir.

LİSE ÖĞRENCİLERİNİN ÖZ YÖNETİMLİ ÖĞRENMEYE HAZIRBULUNUŞLUKLARI İLE ELEŞTİREL DÜŞÜNME EĞİLİMLERİNİN İNCELENMESİ

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Araştırmanın amacı lise öğrencilerinin öz yönetimli öğrenmeye hazırbulunuşlukları ve eleştirel düşünme eğilimlerini belirlemektir. Araştırma karma yöntem araştırma desenlerinden yakınsayan paralel desen yaklaşımıyla gerçekleştirilmiştir. Araştırmanın nicel aşamasında betimsel araştırma yöntemi olan tarama modeli kullanılmış, nitel aşamasında ise açık uçlu sorular yoluyla veriler elde edilmiştir. Araştırmanın nicel bulgularının elde edilmesi için, “Öz yönetimli Öğrenmeye Hazırbulunuşluk Ölçeği” ve “Eleştirel Düşünme Eğilim Ölçeği” kullanılmıştır. Nitel aşamada ise, açık uçlu sorular kullanılarak bulgular elde edilmiştir.

Araştırma, 2014-2015 eğitim öğretim yılının ikinci döneminde Türkiye’nin Mersin ili merkez ilçelerindeki (Akdeniz, Mezitli, Toroslar, Yenişehir) birer genel lise ve birer meslek lisesi olmak üzere sekiz lisedeki öğrenciler ile gerçekleştirilmiştir. Araştırmanın nicel boyutunda 1280 öğrenciden, nitel boyutunda ise, seçilen sekiz okulun herbirinden 30 öğrenci olmak üzere toplam 240 öğrenciden veri elde edilmiştir.

Nicel verilerin analizinde ölçeklerin yapı geçerliğini belirlemek amacıyla faktör analizleri yapıldıktan sonra betimsel istatistikler yapılmıştır. Nitel verilerin analizinde tümdengelimsel nitel analiz yapılmıştır.

Lise öğrencileri “özyönetimli öğrenmeye hazırbulunuşluk ölçeği” ve “eleştirel düşünme eğilim ölçeğine” “katılıyorum” yönünde görüş bildirmişlerdir. “Katılıyorum” aralığı her iki ölçekte de “4” yani “iyi” düzeyine denk gelmektedir.

Lise öğrencileri özyönetimli öğrenmeye hazırbulunuşluk ölçeği alt boyutlarında öğrenme istekliliği (\square)=3.84, öz kontrol (\square)=3.79, öz yönetim alt boyutunun aritmetik ortalaması (\square)=3.77 dir. Lise öğrencileri Eleştirel düşünme eğilim ölçeği alt boyutlarında yenilikçilik (\square)=3.90, katılım (\square)=3.87, bilişsel olgunluk alt boyutunun aritmetik ortalaması (\square)=3.78 dir.

Araştırmanın nitel kısmından elde edilen sonuçlara göre ise, lise öğrencilerinin özyönetimli öğrenmeye hazırbulunuşluk düzeylerine ve eleştirel düşünme eğilim düzeylerine ilişkin algılarının iyi düzeyde olduğu görülmüştür. Öğrencilerin özyönetimli öğrenmeye hazırbulunuşluk ve eleştirel düşünme eğilimi anlamında bir çok strateji izledikleri görülmektedir. Nicel ve nitel bulgular birbirini destekler niteliktedir. Bu sonuçlar alan yazın ışığında tartışılmıştır.

LISTENING COMPREHENSION IN FRENCH LANGUAGE TEACHING – THE SITUATION AT SECONDARY SCHOOLS IN THE CZECH REPUBLIC

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ABSTRACT

Listening as a receptive skill represents one of the main objectives in language acquisition, and it is an irreplaceable source, as well as a means, to learn and command the phonic aspects of a target language. It occupies a pivotal position in language communication and embodies the most frequent speech ability in foreign languages. The paper focuses on the standing of listening comprehension in teaching French as a foreign language at secondary schools in the Czech Republic. Its objective is to inform how this aspect is perceived by students and teachers of French; how often, how regularly, and in what form listening is used in lessons; how popular it is with Czech students and their teachers; whether (and if so, what kind of) impact it has on other language skills: reading, writing and speaking. The paper analyses the data gathered during the realized researched via methods of questionnaires and interviews. Importance of the discussed topic is corroborated by the well-known fact concerning the important role verbal communication and auditory perception play nowadays, when knowledge of foreign languages has become indispensable.

INTRODUCTION

According to Marie Krčmová (2009), a great number of world's languages exist based on two basic realizations – spoken and written. “While expressing various messages or ideas, both spoken and written modes are equal; it can be generalized that a language system (langue) corresponds with two speech realization types (parole) – spoken and written.” (Krčmová, 2009, p. 8) Focusing on spoken realization of language, speaking and understanding come to the fore. Being able to speak a foreign language is equally important to being able to understand it.

It is relatively simple to ensure being understood by using a few words and a number of gestures and facial expressions. When listening to another person, however, it is necessary to be equipped with basic language knowledge which provides the meaning to what was heard. Listening is thus a natural method of foreign language acquisition: children observe and understand far earlier than they are able to speak.

The present paper analyses listening comprehension as a receptive language skill – one of the main target skills to master a foreign language. The paper briefly outlines specificities of French language education at secondary schools in the Czech Republic, especially the role of listening in relation to other language skills. Finally, the paper introduces the research conducted at secondary grammar schools of Hradec Králové region in the Czech Republic. The obtained data are commented and research results presented.

FRENCH LANGUAGE LESSONS AT SECONDARY SCHOOLS IN THE CZECH REPUBLIC

As a second language, French is taught at Czech secondary schools most frequently next to German, Spanish and Russian. The scope of languages at secondary schools reflects the qualification of teachers, a fact already significant at primary schools. The Czech school system introduced compulsory education of the second foreign language in the school year of 2013/2014. While English language is compulsory from the third grade, the second language classes start no later than in the eighth grade, i.e. with a minimum duration of two years. Primary school students hence start attending secondary schools equipped with the basic knowledge of a second language and usually continue with studying the second language further, if possible.

However, there is a chance of selecting a language they did not at primary schools, therefore they begin it at the elementary level.

The choice of the second language varies regionally (regions bordering Germany) and also in time. Particular foreign languages are subjects to fashion waves among students or parents. Quite recently there has been relatively low interest in French language, which is caused by the increased demand for Spanish. French is considered a difficult language with problematic pronunciation, whereas Spanish seems simpler. To avoid problems with selecting the second foreign language, such as fragmentation of groups or forcing small groups of students to join the majority, several secondary schools offer only one Romance language, mostly French.

Secondary grammar schools aim at students reaching the output level of their second foreign language at B1 of the Common European Framework of Reference for Languages (hereafter CEFR). Language classes are usually divided, with the number of average group at 15 students. In reality, there exist heterogeneous language level groups resulting from different output level while leaving primary schools. Another complication is groups with exceeding number of students (20 or more). This results from particular school requirements (organization of language lessons, timetables, qualified teachers), and willingness to adapt to students' wishes (the language is selected by too many students, or too few – by accepting the choice too uneven groups consequently appear). The usual volume is three lessons per week; older students can elect optional seminars thus increasing the weekly amount by other two lessons. The seminars are conducted more on the conversation basis or the preparation for the school leaving exam.

LISTENING COMPREHENSION AS A FOREIGN LANGUAGE SKILL

The development of language skills is one of the crucial tasks of a foreign language teacher. Foreign language education focuses on the practice and development of all language skills. The present paper discusses four elemental language skills, paying special attention to listening comprehension at secondary schools.

Ludmila Kollmannová (2003) identifies listening in a foreign language as the most frequent language skill. "W. M. Rivers expresses quantitation ration in the relationship of four basic language skills (i.e. listening, speaking, reading and writing) as 8:5:4:3. No matter how imprecise the statistics in humanities appear and how particular individuals' practical use may differentiate, the priority and frequency of listening remain an objective reality. Another objective reality, although a negative one, is the fact that listening as an autonomous language skill, requiring specific educational methods, is paid inadequate attention in practice." (Kollmannová, 2003, p. 7)

The above cited facts reflect all foreign language acquisition; according to Lancien (1998) and Perrin (1998), listening comprehension plays a seminal role in communication. The role of listening, while the subject receives and process spoken information, is unsubstitutable for the development of other language skills in a foreign language.

"To communicate means to understand and speak. Listening is often considered more passive than speaking, since it appears that while listening one does nothing. However, this idea is wrong: listening represents a highly intensive activity. One can hear sounds difficult to identify which need to be transformed into words carrying a certain meaning. This includes the way one imagines a particular situation of the subject of the discussion. All new information mentioned by the speaker must be monitored. Listening is thus a highly complex activity, since all aspects of lingual and extra lingual communication contributing to the meaning of the utterance must be processed." (http://epc.univ-lorraine.fr/EPCF_T/methode_11_FT.html)

Psycholinguists agree on the fact that understanding a language is not a purely reception and decoding of a language signal, but an active process. If a subject's goal is to understand a spoken language, it aims from a sense percept of a spoken signal (i.e. auditory perception of a spoken utterance) to understanding of its message and hence the speaker's intention.

It is obvious that a good level of understanding enables one to orient themselves in words and expressions which can be used consequently in a similar situation.

RESEARCH PREPARATION AND REALIZATION

Listening comprehension was the chief aspect of the research conducted from April to May 2017 at secondary grammar schools in Hradec Králové region in the Czech Republic. The aim was to map the role of listening comprehension in French language lessons; secondly the project aimed at locating the most efficient existing materials in understanding French spoken language. Based on the research findings (obtained from testing and students' own evaluation), the project finally attempted to recommend most effective aspects and materials for foreign language lessons.

While choosing the topic the following statements were considered (reflecting their long-term presence in schools – noted by the rich teaching experience of the author as a teacher at secondary and tertiary school level: teaching French, French lesson observations):

- students are worried from not understanding spoken texts;
- listening does not belong among favourite language skills;
- listening is not regularly and sufficiently included by teachers in French lessons;

The author is convinced that

- there are materials leading to more successful understanding of authentic texts in a foreign language;
- there is a direct proportion in the frequency of listening practice and undersetting success, which positively influences other language skills (most notably speaking) and motivates students.

The research question was formulated as follows: How often and how frequently is listening included in French lessons? What is the influence on students' success in understanding the spoken mode?

Complementary sub questions were asked:

Q1: What is students' attitude to listening?

Q2: What is teachers' attitude to listening?

Q3: What are noticeable positive results (improved understanding) of regular listening exercises during lessons?

Q4: Is listening beneficial for the improvement of the other three language skills (speaking, writing, reading)?

Q5: Is the inclusion of listening useful and efficient for learning French language?

The main hypothesis and partial hypotheses were formulated in the following way:

H: Regular inclusion of listening in French lessons leads to the improvement of understanding and further motivation of students.

H1: Students are worried about not understanding.

H2: Listening comprehension is not a favourite language skill among students.

H3: Listening comprehension is not a favourite language skill among teachers.

H4: Teachers do not regularly and sufficiently include listening comprehension during French lessons.

H5: The more frequently students practise listening, the more successful they are in understanding speaking.

H6: Successful understanding positively influences other language skills, mainly speaking (pronunciation, intonation, vocabulary).

H7: The inclusion of listening in French lessons is useful; listening is an essential part of French lessons.

The research addressed secondary grammar schools from Hradec Králové region. The schools addressed included state, private and church secondary grammar schools with four, six and eight year programmes. The choice of schools was limited by their offer of French language as a second foreign language taught. Out of totally 11 addressed schools five schools agreed to participate in the research, resulting in groups of seven teachers. Two schools refused to participate from time constraints (school leaving examination preparation, school planned events or being behind their thematic plans). Two schools refused on the basis of having insufficiently advanced French language classes.

The research included 101 students aged 16-19 (age and gender criteria were insignificant to the project) of the required B1 level (sometime reaching B2) according to CEFR. Students' language level was pre-discussed with particular teachers and consequently verified by consulting their listening comprehension test results. All teachers of participating groups agreed to join in the research. The sample consisted of seven teachers – six females and one male, aged 30-58 with their teaching experience from 7 to 25 years, however, in majority 10-15 years. All respondents were informed about the anonymous use of names, the project outline, schedule and aims. The principle of the mixed design was used by combining qualitative and quantitative approaches to data collection and analysis.

The aim of the research was to identify how frequently and regularly listening comprehension appears in French language lessons, what particular type of listening is used, how popular the language skill is among students and teachers, and how the understanding to spoken mode in a foreign language can be made easier. The research was conducted via questionnaires distributed among students of French language; to obtain data from teachers semi-structured interviews were used. The interviews were recorded and obtain data transcribed and analysed via open axial coding based on the grounded theory (Strauss and Corbinová, 1999).

The questionnaire *Listening Comprehension in French Lessons at Secondary Schools in Hradec Králové Region* (devised by the author) identifies how frequently and in what form listening is used in French language lessons. It further questions its sufficient use, the relation to other language skills, in particular what is the time allocated to each language skill and to what extent they are popular with particular students. Furthermore, whether the relation between popularity and success in listening positively influences the development of other language skills and if so, how this is manifested. Next, the questionnaire identifies students' attitudes towards listening and what in particular contributes to successful listening. Finally, the questionnaires ask if students experience French language outside of class from their own initiative.

The aim was to obtain relevant data from both participants in educational process – from the students and the teachers – and to compare them. The semi-structured interview as a research method was allocated to teachers. Formulated questions could be modified in response to the answers provided: teachers could express their opinion or fill in relevant information. The research results benefited from differences in the length of teachers' experience, variety of age groups represented, and from the diversity of answers.

Most of questions from students' questionnaires were mirrored in the interviews with teachers. Besides that, the interview identified teachers' attitude to listening in French lessons, most particularly teacher's own proposal to make understanding in a foreign language easier.

Besides questionnaires and interviews a pilot experiment was conducted to test the understanding using three didactically prepared reports from French TV channel TV5Monde. The aim was to identify which multimedia materials lead to more successful understanding, yet reflecting students' individual styles of learning.

COMMENTS AND RESEARCH RESULTS

Data collected from questionnaires and interviews provided results which are presented and commented below:

Teachers include listening in French lessons on the following way:

- listening exercises from textbooks

Such exercises, however, are not satisfactory for some teachers who then look for additional materials mainly on the internet. This results in time demanding preparation since there are many sources whose quality and language level are difficult to designate. Teachers would appreciate didactically prepared short (max. 5 minutes) listening comprehension recordings. Listening exercises from textbooks are also the most frequent listening methods students of French lessons experience (81%).

- songs

From teachers' experience songs are usually popular among students. This fact is confirmed by students who place songs (besides films) as the most enjoyable listening activity for improving the understanding of spoken language.

- films with French subtitles (for advanced) and Czech subtitles (for less advanced students)

From time-saving reason teachers more frequently include film excerpts or trailers rather than whole films. Subtitled films, short films and short fairy tales appear next to songs among most popular listening activities among students.

- television and radio broadcast, namely TV5Monde and RFI

News reports also features among listening activities most favoured by students.

Teachers agree that it is vital for students to be absolutely sure what is required from them. Listening exercises aimed at choosing a relevant information from the text seem effective. The important phase is the listening exercise preparation and task articulation so that students can focus their attention on essential information. These findings were confirmed by several students' answers responding to the relevance of activities leading to the improvement of listening skills: YES/NO choice or multiple choice.

Students' answers reveal that listening comprehension exercises are included in lessons in various ways using diverse materials. Students and teachers agree that listening exercise includes also listening to the teacher using the target language during the lesson. The majority have agreed that the use of target language in lesson should be encouraged more.

Most students agree that the practice of all four language skills (listening, reading, speaking and writing) is represented evenly in French language lessons: 54% completely agree + agree, 34% disagree, 12% cannot say. When a multiple choice question should indicate the activity practised the most, students select most frequently speaking (58%), followed by reading (25%); listening is selected as the last skill (7%). This fact does not fully correspond with teachers' answers where only the position of speaking as first agrees with students' choice. This may be affected by the fact proven by other answers that several students might have misunderstood the notion of "reading" (although each language skill was initially explained). Reading was not understood as "reading comprehension," but "reading aloud" – hence including all possible texts read in class.

Students favoured lesson activities aimed at speaking practice 49%; only 6% state listening as the most popular. Listening is thus most frequently stated as the least successful language skill (based on the scale I am most successful at... and least successful at...). Only 2 students mention listening on the first place. However, the first place most frequently includes reading (54 students) and speaking (28 students). There is a correlation between a favoured language skill, the feeling from its successful management, and the most frequently practised skill.

Based on respondents' answers the increase in foreign language understanding would be enhanced by the contact with native (stated by 100% or interviewed teachers), ideally from the beginning stage of the language learning process. The issue of native speakers appears equally in students' responses – *"The contact with a native speaker enables further understanding; not only sounds but visual contact would help."* Unfortunately, native speakers are absent at the majority of participating schools.

Regarding the understanding of spoken language, teachers mention their practice via short didacticized, thematically and vocabulary aimed videos for secondary school students. Some respondents mentioned the absence of image during listening practice from textbooks, which would enable better understanding. Besides essential regular training, the already mentioned "aids" are focused listening via prepared exercises, accompanying transcripts, or thematic knowledge. Students frequently highlight beneficial aspects of successful listening interesting topics, topical issues, familiarity with the theme or repeated listening. Both teachers and students agree that visiting France or a Francophone country is highly contributive because of the authenticity of language and the setting. Therefore, teachers of French organise school trips to France and if possible, attempt to run exchange schemes with French parties. Students are interested in such activities, however, in majority (64%) do not seek any extracurricular activities to experience spoken French language.

It is necessary to point out that interviews frequently included the issue of time constraints during a school year. Proposals supporting the increase in hourly volume of foreign language lessons at secondary schools appeared mentioning at least one double lesson per week.

HYPOTHESIS VERIFICATION

H1 *Students are worried about not understanding* was confirmed.

The majority of teachers (57%) consider students' worry and fear listening exercises if included in marked tests. On the contrary, if not marked, listening exercises are popular (*"they quite like it"*) in lessons, especially in form of songs.

When asked if worried about not understanding during listening comprehension practice, 91% students responded positively (always, often, sometimes). The choice "absolutely not" was selected only by 4 students. The fear from listening (I am afraid a lot, quite, a bit) was expressed by 75% questioned.

H2 *Listening comprehension is not a favourite language skill among students* was confirmed.

29% of teachers claim that general attitude or majority reaction of students cannot be expressed. Listening is popular among language gifted students (*"trying to listen to native speakers is motivating for them"*); listening is a threat to not talented language students. There are opinions holding that listening gains popularity with age. An

important fact has been raised: if students are familiar with what to concentrate on, and the language level corresponds with theirs, there are positive reactions in all classes.

Regarding the popularity of listening among students, 49% identifies with (absolutely agree, agree) the statement *I like the parts of French lessons when we practise spoken language understanding (listening)*. There is a difference between the popularity of listening among teachers, see below. When asked to choose from four language skills, only a small amount of questioned students like the most listening exercises – mere 6%. Only 2 students mention listening as the most successful skill (I am the best at...) from all language skills. As already mentioned, the obtained data demonstrated a correlation between the preferred language skill and the success rate in the language skill. In their own words students most frequently claim success in their favourite activity, or vice versa, they prefer the skill which they excel in.

H3 *Listening comprehension is not a favourite language skill among teachers* was not confirmed.

Interviewed teachers expressed positive attitude to listening. Listening is their favourite language skill: *"I love it."*, *"I like listening activities."*, *"It is an absolutely vital competence which I would like to focus on more."* This fact is reflected in the representation of individual language skills in French lessons measured in time – teachers mostly (71%) emphasize that the ration should be balanced, yet the most frequent activities in their lessons they mention listening and speaking. Some teachers observe that foreign language lessons should be focused on listening from initial stages referring thus to mother tongue acquisition, when before actually speaking, children first observe and understand the communicated language.

H4 *Teachers do not regularly and sufficiently include listening comprehension during French lessons* was partially confirmed.

"Researches confirm that listening as a specific form of human cognitive activity improves its quality by frequent repetition (Piaget, 1966, 1971; Leontiev, 1966 and others)." (Hendrich, 1992/93, s. 327) Foreign language lessons thus need to provide sufficient suitable stimuli for exercising and improving listening comprehension.

100% teachers stated they include listening regularly in their lessons (*"Yes, I use listening regularly."*), although in various amount: 57% include at least a short exercise (almost) every lesson; 43% at least once a week by adjusting the lesson content according to the mood of the class. 29% of teachers are satisfied with the amount of listening in their classes; 71% would prefer to incorporate listening more frequently, which is, however, due to their time constraints impossible. Thematic plans need to adhered to and other skills to be practised.

76% of students' answers support teachers' statements and further claim that listening composes a regular part of the lesson (8% disagree, 16% do not know or cannot judge). 48% consider listening in lessons sufficient, 26% insufficient; more than a quarter of questioned students cannot evaluate sufficiency/insufficiency. It is clear that unlike teachers, who mostly see listening insufficiently present in lessons, almost a half of students considers the amount of listening sufficient. 39% of students would appreciate more frequent inclusion of listening. 35% think the amount of listening is just right. 26 % manifest they would not appreciate more frequent use of listening in French lessons. Average frequency of listening comprehension in lessons was mostly (64%) agreed to be once a week, which corresponds with teachers' answers.

H5 *The more frequently students practise listening, the more successful they are in understanding speaking* was confirmed.

100% of teacher agree with the statement. Teachers express the need to start including listening from the first lessons. Listening is an inseparable and vital part of any foreign language lesson. Students must necessarily get accustomed to listening exercises as well as test forms and principles reappearing in international exams.

A half of students agree (absolutely agree/agree) with the statement. A recognizable number of students (33%) select the option "I do not know/ I cannot judge." Mere 16% disagree with the correlation between listening frequency and successful understanding of spoken language.

H6 *Successful understanding positively influences other language skills, mainly speaking (pronunciation, intonation, vocabulary)* was confirmed.

Based on their own experience, most teachers (71%) state that successful understanding positively influences other language skills. It is beneficial chiefly for speaking (*"Most students can transfer the success to production, it has positive influence on speaking."*, *"It is reflected in more natural speech, writing and reading are unfortunately unaffected."*) as well as for writing (*"It returns in production – speaking, writing, vocabulary is fixed by listening."*, *"They benefit most from the listening since all grammar, word order, intonation, syntax, pronunciation – all can be then used in French."*, *"They remember phrases, context is important."*).

Students are not able to judge; a half of students selected the option "I do not know/ I cannot judge." However, I can be supposed that this item might have been influenced by the fact that if answered positively students would have to fill in the following item specifying particular language skills were positively influenced. This

presumption is supported by many cases where students changed the originally positive answer to “I do not know/ I cannot judge.” If still students agree, most frequently mentioned benefit affects speaking (97%). Particular improvement is mentioned regarding pronunciation, fluency, richer vocabulary, intonation and accent. Speaking is followed by reading (44%), where positive influence affects comprehension and vocabulary. Due to the structural and syntactic improvement from listening, writing (31%) is affected by fixing and smoother application of grammar and faster sentence creation.

H7 The inclusion of listening in French lessons is useful; listening is an essential part of French lessons was confirmed.

The obtained data unambiguously proved that the inclusion of listening in French lessons is beneficial (100% teachers). Teachers expressed the following justifications: “*It is absolutely vital.*”, “*It is necessity.*”, “*The ability to understand is a basic ability in foreign language.*”, “*It is the first thing they need when encountering a native speaker.*”, “*It is necessary to understand a context not words.*”

This part reflected only teachers answers as there was no question concerning the utility of listening explicitly present in students’ questionnaires.

It can be argued that the stated hypothesis **Regular inclusion of listening in French lessons leads to the improvement of understanding and further motivation of students** was confirmed. The item regarding motivation proved that 76% of students acknowledge motivation to study a language further providing they understand its spoken mode. Similarly, teachers locate significant motivation among students who are traditionally successful at understanding spoken French language.

MULTIMEDIA UNDERSTANDING MATERIALS

The fact that multi-channel nature of media contributes to successful understanding of authentic speech in a foreign language was validated already in students’ questionnaire results. The findings confirm the role of sight as a sense important during a language acquisition process. Most frequently mentioned (85%) materials enabling easier understanding were accompanying texts or subtitles. These were followed by extra videos or pictures. Students emphasized also written form of the recording is one of other possible ways to improve understanding. Based on the pilot research conducted at secondary grammar schools, materials enabling easier understanding of spoken French language will be evaluated. These should enable most effective positive changes, i.e. students either mentioned them as useful, or they demonstrated more successful results in tests. The data obtained from questionnaires aimed at learning strategies and styles will be processed. The relation between learning strategies/styles will be examined by selecting particular materials focused on speaking understanding and its success.

CONCLUSION

Although the conducted research was of a limited scale and its results cannot be applied generally onto the population of the particular age group or in the Czech Republic, the obtained results are beneficial for foreign language teaching at secondary schools.

It was verified that listening is not a favoured language skill among students. On the contrary, listening is popular among teachers, who attempt to utilize various forms of listening comprehension activities and arouse students’ interest in these. Teachers include listening regularly in lesson, but having not been limited by time, they could utilize it more.

The feedback obtained from interviews with teachers contributed to obtaining results suggesting teachers’ interest to cooperate on popularising listening skills among French language students.

Listening should not be a threat to students. Teachers should help students overcome their worries by including activities aimed at improving their listening skills. Therefore, it is essential to pay sufficient attention to the pre-listening phase, task and exercise preparation. Materials should be selected in accordance with students’ level of language (the manageability of the task for students), the topicality of the theme and its proximity to young students. Students need to be demonstrated that understanding is possible, even if it is with difficulties. It is essential to teach students to catch the relevant information, not necessarily understand everything. Last but not least, individuation and differentiation in lesson must be utilised: individual differences among students require various amount of time and number of repetitions of recordings, or other materials which lead to students’ effective understanding of speech in a foreign language.

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LOOKING FOR NEW MODELS OF SOCIETY: THE EXAMPLE OF THE FENCING TEAM

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ABSTRACT

Man has an extraordinary relationship with change: following Paulo Freire's theory, he has the capability of being part of change inventing it. Thanks to this capability, he has redesigned and continues to redesign human society. Before becoming action, however, the invention needs a *vision* that suggests a "general" (that is entire and overall) representation of the desired, dreamed and hoped society. This vision has to indicate its limits and borders; it has to point out a role and a position for each element that takes part in society; it has to show and promote its ultimate aim. What is this vision? It is a representation that is worthy as meaning: it is a "symbolic mirror" that does not invent a new content of change, but its sense of value. What vision of society can man have for future change? Starting from the presentation of two city models that represent two different ways of designing human society (the first one designed by Frank Lloyd Wright; the second one by Paolo Soleri), the paper will discuss the possibility of completing the (structural but static) paradigm of architecture with the (dynamic) paradigm of sport that implies, necessarily, movement and strategy. In particular, it will test the validity of the sports paradigm through a pedagogical interpretation of the specific social relationships "invented" in the fencing team competition, presenting them as a possible model for change of society: the ultimate aim is not simply the sum of the single fencers' scores.

Key words: Society, Paradigm, Model for Change

INTRODUCTION

The 20th century was crossed by a deep and continuous reflection on the direction that man has given to change (Rosa, 2013). This reflection is the result of a long but accelerated transformation change which man started thanks to his extraordinary capacity to invent. The theory which Paulo Freire reconstructs and interprets man's presence in the world: "The invention of 'existence' necessarily involves the emergence of language, culture, and communication at a level of complexity much greater than that which obtains at the level of survival, self-defence, and self-conservation" (Freire, 2001, p. 53).

Man invents because he is capable of comparing, judging and choosing; furthermore he invents because he resists and desists; lastly because he is capable of deciding and intervening. This complex of capabilities "makes men and women capable of acts of greatness, of dignity, and at the same time, of the unthinkable in terms of indignity. This capacity makes men and women capable to make the world either beautiful or ugly". Due to this capability, man has built a "second nature": human existence develops in a wider and deeper space, marked unprecedented and unpredictable borders because caused by chance – the human one – "infinitely improbable" (Arendt, 1958, p. 178). The marvel of man's capability is tried out and lived in daily experience: the capability to invent – that is above all power – characterizes human action in each one of its manifestations. In front of power that these capabilities give to man, it is not possible to remain indifferent or neutral. "The question – following Hannah Arendt – is how much reality must be retained even in a world become inhuman if humanity is not to be reduced to an empty phrase or a phantom" (Arendt, 1968, p. 22).

Therefore, first of all, it is necessary to recognize the power that man has on himself, on others and on the world (Ricoeur, 2005). But it is necessary, at the same time, to reflect on the consequences of this power: "The world is not humane just because it is made by human beings, and is does not become humane just because the human voice sounds in it, but only when it has become the object of discourse" (Arendt, 1968, p. 24). Reflection and confrontation are not merely a calculation. When man invents he does not predict the future: "Some time ago someone came and asked me – Paul Valéry remembers – what I augured of life and what I thought things would be like in fifty years. As I shrugged my shoulders, the questioner lowered his sights and his prices, and said: 'Well, where shall we be in twenty years?' I replied: 'We are backing into the future' [...] In short, more and more it is becoming useless and even dangerous to make predictions based on evidence from yesterday or the day before; but it is still wise, and this will be my last word, to be ready for anything, or almost anything. We must keep in our minds and hearts the will to lucid understanding and precision of mind, a sense of greatness and risk, a sense of the extraordinary adventure on which mankind has set out, departing perhaps too far from the primary and natural conditions of his species, and headed I know not where!" (Valéry, 1932, p. 113).

Therefore, it is necessary to make an effort to define a vision that, in advance, anticipates invention representing it in an idea that contains its possibilities and limits, but above all the direction of sense for the change proposed (dreamed and hoped). Over time, there have been many representations that anticipated the future. Each one of these has imagined human society in its attempt to transform it into a more human society. Among the many, the architectural idea testifies very well the search for a vision that is a model for a truly human society.

THE ARCHITECTURAL IDEA OF SOCIETY

The possibility to invent existence starting from the transformation of social space has interested two brilliant – even though very different – exponents of urban architecture: Frank Lloyd Wright¹ and Paolo Soleri². Both felt the need to think of an “urban renewal” for a “social renewal” with a democratic meaning; the two architects planned to create “the perfect community” designing two opposing models of a city: the former based on “modularity”; the latter on “organicity”.

According to Wright's ideal community, cities should not be centralized. The utopian city – Broadacre City³ – is made up of a network of square blocks that include small and medium sized farmhouses, markets and social centres, surrounded by woods available for growth in the future. The city does not have a central district: Wright had in mind a “city of independent homesteads where people would be quite isolated from one another to insure family stability, but connected enough through modern telecommunications and transportation, to achieve a real sense of community” (Wright, 1935, p. 344). It is the space created by new technology: there, the automobile reigns supreme and the wonder of radio or telephone bind a *sprawling collection of houses*. It is even the indispensable space for recuperating human wholeness destroyed by modern cities (dense and crowded conglomerations). There, life can be a combination of manual and intellectual work, every day.

In that piece of land, therefore, Wright saw the “secret” for human happiness: a social system based on personal freedom and dignity through land ownership was the only way to guarantee the harmony and the welfare of everyone (Wright, 1935, p. 345). Opposing Wright's urban sprawl, Soleri's city – Arcosanti⁴ – does not have any outskirts: it stages residential houses, commercial and public spaces all within easy access to each other. The ideal city presents in fact an integrated and compact urban form. This “miniaturization” should allow or facilitate interactions: living, working and playing spaces are all intermingled to promote social relationships. That is a city characterized by community spaces (private spaces, even though present and evident, are limited). As the integration of life and work is the main goal of the project, Arcosanti includes a theater, workshops, studios, meeting areas and other spaces dedicated to social activities.

Soleri imagines the city as a social space because he thinks of society as a living organism. The goals of the Italian architect “were to create a historically sound conception of the morphology of the city as an evolving organism” (Soleri, 2006, p. 131). Using the paradigm of organism, the city is meant to be a living process, constantly engaged in improving itself. As such, it is a social laboratory (Soleri, 1983).

There are two visions that interpret in different ways – often opposing each other – the same dream of a social reform with a democratic meaning. As regards Wright, the democratizing force was land-ownership: it is the foundation of freedom. He believed that a “citizen in his own life, in his own home with his feet on his own ground is a truly free man” (Baxandall, Ewen, 2001, p. 21). As to Soleri, this force was “the body-social” (Soleri, 1969, p. 56): it is “the congruence (an advanced sense of community) based upon compassion (a universal bond, stronger even than our current secular conception of human brotherhood)” (White, 1971, p. 80). Wright's vision was unbuilt; Soleri's has never been officially finished: Arcosanti's construction continues, carried out by students and volunteers.

In both cases, the architectural idea “invents” existence proposing a structure capable of characterizing individual and social life with a democratic meaning. The possibility to start a democratic society – in both Wright's and Soleri's versions – has however one condition: “The specific and usually irreplaceable in-between which should have formed between individual man and his fellow men” (Arendt, 1968, pp. 4-5). What is peculiarly characteristic of human invention is that “something” takes place between one person and another. With reference to Martin Buber, in fact, it is possible to recognize that “the fundamental fact of human existence is neither the individual as such nor the aggregate as such. The individual is a fact of existence in so far as he steps into a living relation with other individuals. The fundamental fact of existence is man with man” (Buber, 1967, p. 202).

¹ Frank Lloyd Wright (1867-1959) was the architect who revolutionized the architecture of the 20th century. His worldview – however – is not confined to architecture: his prairie houses are not simply places to live, but a way to live.

² Paolo Soleri (1919-2013) was one of the best-known utopian city planner. His vision “archeology” (architecture and ecology) formulated a path aimed to realize a city in the image of man.

³ Broadacre city was presented in model form in March 1935.

⁴ Building the experimental city of Arcosanti took place in 1970.

However, this condition is not the subject of the architectural vision: in fact, it is a structural vision that gives back an image, inevitably static of society. It cannot be otherwise: attention is focused on the form of contents that mark and anticipate the social border, proposing its need and possibility, direction and destination. Moreover, all that animates the dynamic of daily social life remains implicit and unexpressed.

What type of dynamic life could there be at Broadacre or at Arcosanti? What type of connection between men can create a democratic society, starting and cultivating it? What is the “between” that may realize a truly democratic human society? It certainly cannot be a fixed between: if it were, it would betray the democratic meaning that the ability to invent tries to realize. Which between must be situational: as such it can only be improvised, without being – however – left to chance. If the architectural vision does not bring to light this connection, the sports idea can do it since “the democratic impetus is built into the structure of sport” (Reid, 2002, p. 8).

THE SPORTS IDEA OF SOCIETY

The sports idea distinguishes itself from other visions because it invents existence as proof of effort and fatigue, but above all as proof of will, liberty and equality (Arnold, 1997; Reid, 2002).

First of all, sport designs and forms human character: through games, sport permits man to discover his capabilities and his limits: “It is an idea – affirms Valéry – that leads us to cultivate one of our native qualities to its highest point while keeping them all in balance; for a sport that deforms its subject is a bad sport. Well, any sport seriously practiced is a test requiring privations (sometimes severe ones), hygiene, concentration, and regularity, all measured by the results in short, a true morality of action that tends to develop the human type through a training based on the analysis and systematic stimulation of one's abilities. It might be characterized in a phrase, a seeming paradox, by saying that it consists in the training of our reflexes by reflection” (Valéry, 1935, p. 158). As a result, sport is not only a game (Huizinga, 1938): in fact, it is a vision that stages a practice with an ethical meaning. As such, it trains human beings towards a form that only man can have: it trains them towards respect and responsibility.

In fact, in the sports representation, man is tested as responsible for: he must make himself responsible for everything that permits him to play (for example, sportswear, equipment, ...); at the same time, he must make himself responsible for everything he does (he must answer, for example, for his absences or his lateness, his misbehaviour, ...). However, it is not only an economic responsibility that constrains him from responding to the consequences of his actions. Responsibility that sport contributes to inventing is also and above all the responsibility that follows from the ultimate cause of existence: transforming nature into culture, sport trains human beings to take part in a cause where everyone that plays must become responsible. In fact only this responsibility is able to move and direct existence transforming it into a living social space with participatory democracy (Jonas, 1984, p. 134).

Therefore, sport proposes a cause that goes beyond the single individual and that unites everyone that practices it. In sport, each athlete is truly a witness and representative of a political goal: the preservation and the awareness raising of human dignity (Reid, 2002, p. 24). In this direction, sport shows and tests human social life. It has in fact “the capacity to speak as a world” (Edgar, 2013, p. 1).

However, how do athletes relate to this ultimate cause? How does this participation take place? Does everyone have the same role and the same position in society? Which strategy guides the participatory dynamic? How can one contribute to this common cause?

THE EXAMPLE OF THE FENCING TEAM

The invention referring to this kind of participation is staged very well by the sports team. Its action is as much representative as transformative: it is representative because it shows how a society with a democratic meaning could function; it is transformative because it is able to direct and mark in a democratic sense sports practice making it a citizen authentic social conduct. This ethical invention of existence is sustained by continuous and persevering experience of interdependence (Twine, 1994).

Interdependence is in fact an essential condition of a sports team. There are different levels of interdependence among players: it can be pooled, sequential or reciprocal (Daft, 2015, pp. 289-290). In the first case (baseball, for example), interdependence among players is low: “Each member acts independently, taking a turn at bat and playing his or her position. Players practice and develop their skills individually. If each player is successful as an individual, the team should win”. In the second case (in football, for example), “interdependence among players is higher and tends to be sequential”. The players are organized in sections and operate as a coordinated unit. “Each player has an assignment that fits with other assignments” according to the rules of the game. In the last case (basketball, for example), interdependence is at its highest level and “tends to be reciprocal. The game is free-flowing, and the division of labour is less precise than in other sports. Each player is involved in both offense and defence, handles the ball, and attempts the score. Team member interacts in a dynamic flow to achieve the victory”. Because of this interdependence, players “must learn to adapt to the flow of the game and to one another as events unfold”.

Consequently, the relationship of interdependence may present itself as a relationship between autonomous individuals, as a relationship between groups that are sequentially interdependent or as free flow of reciprocal players (Keidel, 1984). Low or high, interdependence among team players shows an evident ethical character. Through these three levels of interdependence, the sports idea proposes three different ways to interpret “between” on which it is possible to build a social democratic society.

There is however another way to interpret interdependence: it is the “between” that characterizes the fencing team. In the fencing team, interdependence is reciprocal: in fact, even though the game takes place sequentially (9 fights, one after the other), the final result is not only the sum of individual points, but the concatenation of “calibrated” actions in relation to the 9 overall fights that have to be played. Each player has 5 touches at his disposal for each fight, but the task does not request him to use them all. The task has not failed if he obtains a lower number of points. Each fight is studied based on the necessary contribution in relation with the other 8: on each fight, each player is directly responsible for the entire game.

Following the above mentioned, even though reciprocal, the individual player in turn takes on the role of protagonist: the responsibility of the individual player requires a strategy and a performance that is valid for the whole team. The social connection that the fencing team highlights is personal responsibility: one cannot delegate or withdraw. At the same time, the player whose aim is to be better than the others in order to show his own capability does not carry out his role as a member of a team correctly.

Reciprocal interdependence implies a responsibility that does not compel the members to carry out the same performance: the connection between the individual players is strongly ethical because it requires each person to interpret the game bearing in mind the interest of the team. At times, the success of the team can imply a sacrifice for personal performance. It is in other words responsibility that does not follow the logic of consequences. The interactions among players are nonlinear (Hristovski *et al.*, 2014). Although this sports team presents a numbers of moves that are sequential and causal, it responds to the situation: consequently, it always includes a situated creativity (Joas, 1997). It is in this creative space that a different way of participating in the common cause can start. It is not merely a space where the individual players must find alternative solutions to unpredictable situations. It is neither a problem of finding “the magic pill”. The situation of the game is an open and suspended space in which it is necessary to involve ones own capability to judge, it is in this space that man can prove and test a different way to interpret the human constraint of responsibility.

If in a sports team the way that each player interacts with the others in the surroundings of the game generally influences the actions of the players within the same team, in the fencing team the players’ interdependency transforms the system of responsibility *from equal to personal*. Referring to fencing, reciprocity does not imply a division of labour that is not very precise. The team members do not play at the same time. Added to this, a model of society in which participation is not only subdivision can be invented. A special form of individual responsibility emerges, which opens up to a vision of society where each member is always protagonist in his action as well as always responsible for his action.

CONCLUSIONS

The invention of a democratic way to live existence can have different interpretations. The interpretation is valid when it realises the democratic connection as the interrelationship between free and independent subjects; it is also valid when it recognises the democratic collection as a communitarian connection. When it comes to the failures or to the partial successes of the different models of a democratic society (there are many cases of irresponsibility or of individualism), it is possible to identify a further model that highlights the personal responsibility for the common cause. The dynamic and strategy of the fencing team may seem to be going towards this direction. Even in the fencing team, there is anyhow an open point: which is the actual contribute of the coach in the game economy? And, socially talking, can a democratic society do without the function of a superior judgement? Until where can a democratic system work without a “coach”? This is a clear expression of the pedagogical antinomy between freedom and authority. As an antinomy, it remains irresolvable*.

* This paper is dedicated to the Italian Champion Fencing Team Épée, U. 14 - 2017: Chiara De Piccoli, Federica Casabona, Vera Perini, and to the coach Mauro Regano (Accademia Scherma Marchesa, Turin). The fencers’ touches and, above all, their “proof of interdependence” have inspired it.

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MANAGING UNIVERSITIES: FROM COLLEGIALLY TO SHARED GOVERNANCE

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ABSTRACT

This work is a introductory review on strategic management of Universities. University management is deeply connected with the ontology of the academic community and the university, unlike other institutions. It is important, but rarely mentioned, to link the ongoing debate in academic literature on the management of universities with current global and local changes through this point of view. Today, one of the most important agenda items of the academic community is how to balance the substantial features of University, and productivity expectations. In this work, the relationship between the principles of management and the collegiality is questioned and different approaches are addressed.

Key words: University, Shared Governance, Academician, Turkey

INTRODUCTION

Universities are historically considered as an integral whole with academics. This is due to the nature and the history of the concept of academic integrity practice. The first period of the university history the most important university tradition of self-government of the academic community based on autonomy offered by divine authority or ruler, consisting of free research and education. Universities, whose autonomy of narrowed in favor of political authorities from 19th Century with various macro factors, are today struggling to survive in a system where economic activity is stand out. In this general flow discussing autonomy or academic freedom of universities over authority and power seems not sufficient. The reasons of this is in the difficulty of drawing clear lines between the university administration and academic communities, thus this kind of distinction seems incompatible to university ontology. In this case, original management methods of the universities are discussed in light of current developments directing towards shared governance.

HISTORICAL DEVELOPMENT of UNIVERSITY GOVERNANCE

University governance historically indicates autonomy through some self-government bodies. University Senate and faculty committees that involves academics are defined as deliberative institutional bodies (Rüegg, 2004: 89). One of the important components of the university self-managing tradition, senate is composed of all graduates of universities such as Cambridge and Oxford in the Middle Ages. Subsequent to the senate and similar administrative body composed of faculty with centuries of fame for assistant professors and lecturers in the late 19th century, and in 1970 joined students and administrative staff. Thus, turns into a structure that the university's academic and research activities discussed and decisions taken broad by participation. in the 1800s legislating branch of the European University is a community of all tenured professors, named as *Konzil*, *Konsistorium* or *Senate*. This community is responsible for determining general rules of the university, the proposals to be appointed professor, and when not appointed by state like in Napoleonic era France, the election of the rector. The executive body consisting of academic representatives is named as *Senatsausschuss*, *Kleiner Senat*, *Conseil de l'Université* or *Consiglio Accademico*. These boards are criticized from time to time due to inertia and conservatism, but they play a very important symbolic role in the defense of the autonomy of university. Academics agree to participate and share their part of the responsibility of management via these boards. This concept of the university administration makes possible diffusion of the genuine autonomy renaissance after collapse of authoritarian regimes in the aftermath of the Second World War in Europe (Rüegg, 2004: 119-20). The critical role in the restoration of the university autonomy is dedicated to scholars and defined as collegiality which corresponds to the collegial university management model (Baldridge, 1977).

Collegiality of academic community make up the core and the basic component of the university from the first sample of higher education. This ontological foundations of the university is not limited to "institution" in rational sense. Concept of university or *Universitas* in old Latin is short form of *universitas magistrorum et scholarium* that means "community of masters and students". The concept of universities, which define the academic community as a priority, is a two-dimensional concept in which two basic phenomena are represented at the same time as the college of higher education and universities, starting from 1300 (Harper, 2010). The fact that universities are seen as a community of autonomous students and teachers for advanced education is a widespread

trend in Western historiography (Timur, 2000: 17). Because of this meaning that creates an impression that the institution and its community can not easily be separated from each other, the university, which is historically composed of a institution and mainly academicians, is a difficult entity to distinguish from each other on an ontological level. It also allows the term university to be interpreted as a wider concept that defines the institutional and private qualities of the academics community.

In European history, and especially before the Second World War, the functional role played by the nation states at universities is to serve the nation and the state more effectively. While autonomy is gradually limited in this period, the academic community's self-management tradition becomes a dynamic field of struggle. According to the Board (2004: 155), academic freedom refers to "the freedom of the faculty member to teach his field of expertise without any external control since the Middle Ages". The autonomy or "academic freedom" values of medieval universities involve autonomy of the academy in relation to the outside world, the ability to employ the student or teacher they desire, and their own rules. Over the centuries these privileges are progressively controlled by the secular authorities (Ridder-Symoens, 2002). As recent globalization and market demands in this context begin to take the place of the regulatory control function of the nation state, the tension between the functional aspirations and the intellectual interest of the academicians increases as the university and the academics reshape the social and political context. Once again, autonomy and academic freedom become important headlines that occupy the agenda.

The dual distinction of the etymological root of the concept is on the agenda throughout the history of the university, and nowadays the increasing tension in the face of the professionalism of the university administrations coincides with that trend. On the one hand, academics with freedom of inquiry and teaching, and the right to speak in their university governance, on the other hand, continue to create two main axes that shape the university, which emerges with the nineteenth-century nation states and which is evident in the light of global economic developments. There are free research and education activities of the academicians who are members of the university. However, it is also opposed to being managed as an institution that responds to redefined social and economic roles.

TRANSFORMATION of UNIVERSITY GOVERNANCE

The productivity-oriented reform tendency in public administration is also spreading to universities. In Europe, it is thought that universities, where autonomy is supported by the removal of ministries from jurisdiction, are more open to pressures to access resources through incentive mechanisms and reporting and control systems (Christensen, 2011). This transformation in public administration is mainly due to the control of financial resources (Paradeise, Reale, & Goastellec, 2009, p. 198). A significant impact of global change is that universities are reduced to specific functional areas rather than being directed in one direction, causing them to be managed as part of a company in their own microcosm. From this point of view, the nationwide strategic management of universities emerges through the withdrawal of the central government (Paradeise et al., 2009: 227), opening areas in which the operational performance of each university is to be managed in its functional area.

Birnbaum (2003) states that there are two types of governance structures in modern universities. These are the administrative structures that emerge from the legal authority and empower the administrative board and the administrators. The other is the governance structure stemming from competencies in professional fields and legitimizing the role of academicians. This situation has the responsibility of ensuring that the administrators guarantee the resources that the university must maintain. Under these developments, some models are proposed to distinguish between the university's strategic management and the work of scholars. Hines (2000) proposes a model that defines the roles of academics in governance as research, curriculum and counseling in their areas of expertise, and defines finance and external relations in the field of action. However, such a distinction derives from the academics' problem of finding resources that abstract research or education from financial sources and deeply influence the quality of activities in these fields. More importantly, the differentiation of roles and responsibilities between academics and administrators creates a deep tension. Because institutional decision-making processes in universities require business partnership and responsibility sharing among colleagues (Kezar & Eckel, 2004).

Autonomy is the only condition that should be viewed as "the intersection of knowledge, culture and society" rather than as an ideal institution devoted to the university by interpreting the academic subject as the freedom of research and teaching (Delanty, 2001: vii) (Readings, 1996), which allows for a shift in thinking about the problem (Morley, 2003: x), which does not adequately address the academic community's impact on the political context of the current changes in universities, as the university concept shifts farther than applying with a nostalgic romance. It is necessary to consider that this change influences the academic practices and the general public of the university, even if they are at different levels, rather than the modalities that distinguish the administration

from the strict lines with the academicians. Administrators who are responsible for the university's access to resources and academicians who focus on research and training are in the same ranks.

In order to overcome the tension between academic expertise and professional management at universities in the light of current developments, reform needs to be re-interpreted as a shared governance of the historical tradition (Shattock, 2000). Shared governance in the field of higher education is defined as "a self-governing social system in which responsibility for decision-making is shared among those affected by decisions" (Maloney, 2003, p.3). Participation of academicians in university management has become widespread over time, with the concept of shared governance used primarily in the United States. Two main principles of shared governance have been identified. These are important decisions to mobilize the capacities of institutional stakeholders and ensure their participation in the decision-making process. Secondly, in different situations, the measure of the right to speak should be determined by the level of responsibility of each actor for the issue being considered (AAHE, 2001). Important decisions about universities in the United States have long been a source of concern for university autonomous academics for eradicating erosion in favor of central autonomy (Moore, 1975).

Considering the characteristics of university and academic studies that can not be compared with working in other professional fields, it is not the central problem that relations of academicians, university administrators or higher level officials to the center of administrative power. This mechanical viewpoint does not distinguish the strategic management of universities from the strategic management in any institutional context. On the contrary, a university-specific management approach that focuses on community (or *Universitas*) and inter-human relations rather than structures and processes is possible (Kazari, 2004). Relevance should be made to enable an effective cooperation mechanism between the administrative and academic fields of expertise to ensure effective management in the university. The most important reasons for this are the necessity of funding the research and education with the needed funds and the special characteristics of the academic community. Because, unlike the management of any organization, it is not possible at university to apply the power of the primary question authority. The difficulty of the resultant estimator to be taken when managerial power is applied is the most important question. Unlike other organizations' employees, the academic community retains a certain degree of power to determine results in areas of specialization. According to Kaplan (2004), scholars generally do not resort to the potential to influence governance unless they are intervened in their areas of expertise, and it is difficult to determine the strength they have.

Countries' tertiary and research strategies constitute top-down influences shaped by the political and societal context that constitute broad macro-effects. In every country, this from up to down effect provides for change by shaping up and down the mechanism of higher education. But the traditionally upper and lower management style of academics is the driving force for micro institutional developments (Paradeise et al. 2009: 227). The non-university or in-university levels of administration that make up the university's strategic management resort to methods of working collaboratively with the academic community for the purposes of final analysis rather than manipulating the mechanics of activity or applied functional schedules (Shattock, 2000: 235-236).

In terms of universities, the strategic management problem should not be to make university administration more effective, but to protect real academic institutions in doing so. In this case, the answer in the management field naturally comes from the question: Shared governance is the prerequisite for the university (Birnbaum, 2004). Academic staff will be able to realize the presence of *universitas* in such a way that they are invited to take responsibility for the university's strategic goals and to reach them. But this realization does not arise only from the fact that academicians influence decisions. On the contrary, in the context of Turkey, where the majority of academicians are willing to do academic work in closed groups in Turkey (Demir, 2006, Günay, 2006; Günay et al., 2011; Şancar, 2003; 2016), inviting academics beyond the expertise of the scientific discipline, to the broader scope of the university. This invitation is historically a follow-up to the current developments in the social and economic system in education and research through the commonality of academicians who are the strongest foundations of the institution, and what to do in the face of these developments. In UNESCO (1997), the collegial association expresses the principles of academic freedom and shared responsibility, while participation in higher education decision-making processes will contribute to academic excellence and social development.

CONCLUSION

The discussion on shared governance in strategic administration or universities in the field of higher education should not be read as only a power struggle to reach more resources. As noted above, the university and academic community are, unlike any organization and employee, too complex to allow the linear implementation of administrative authority to achieve organizational goals. This complexity arises from the depth of expertise and from the nature of intellectual work as well as from the fact that the line between expertise and administration is not apparent due to the tradition of historical autonomy. It is not possible to think of a university where academics,

the ontological component of the university, have no say in administrative decisions. This implies the duty of the academics to carry the weight of the management responsibility. Secondly, in the face of macro political and social influences, university administrations can not be left with the task of obtaining the resources necessary to keep the university institution alive. In today's universities it is not possible to create a world limited by research and education activities and to move away from external factors. It is expected that the communication and interactions that will enable the university to work in harmony with the academic community and the future will be shaped by the richness. Although it is not the most effective method in this regard and occasionally has a tendency to be atoned, various mechanisms of participatory management can be seen as useful symbolic and functional means.

The academic staff can reach the ideal management structure of the institution, sharing the responsibilities of the university administration and opening the decision making mechanisms of the administrators really to the point of participation. From this point of view it is not the key point of management in terms of universities but responsibility. Participating management academics are encouraged to read current developments from a wider perspective and take responsibility for decisions on the future of the university; Management is an important concept that needs to be discussed as a concept that invites participation to support with the awareness that the university concept is synonymous with the academic community.

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MASTERS IN HYDRAULICS: SENSE OF HUMANISM IN CLASSROOMS BASED ON FREEDOM RESEARCH?

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ABSTRACT

Near of 50 students are allowed to get into the Masters in Hydraulics in Posgraduated of Engineering of the Engineering Faculty of Nacional Autonomus University of Mexico (UNAM), México and the curricula includes all kind of technical subjects; few professors include humanism elements in their class, the students, a lot of them civil engineers, mechanic engineers, learn how to avoid risks or manage water reservoirs or pipe systems, and the knowledge increases vertically respect to their experiences in pregraduate; but the sensibility about help people is an element that must be reinforced by means of some courses that professors can take in advance. The paper describes some experiences from students about their courses in Masters in Hydraulics and some possible useful courses a posgraduate professor can take are suggested in order to be able to include elements in their classes related with environmental love, save and protect lives, political decisions against society benefits, among others. All this elements can be inserted along the technical courses always emphasizing the importance of the Engineer as a promoter of social development.

INTRODUCTION

Academic freedom is a well known term at the UNAM, México “is based on freedom research and thought, admitting with that ideas plurality and around it tolerance and respect” (Gómez, 1996, p. 667); academic freedom is not arbitrariness and subjectivism (González, 2004, p.74) every class is given in different ways by each teacher theoretically, attending to curricula and study programs.

There are researches in some Universities of México which had identified percentages of the importance of social aspects in posgraduate education; for example in UJAT University, the engineering and biological areas, give more value to technical and cognitive competencies than those of social kind (Pérez, 2009 p.8). The UNAM as a vision essentially humanistic as radical commitment in form and realize the most appropriate human potentialities (González, 2004, p.74).

Sadler, 1906 enhances the values of humanistic studies during preparation of engineering students, just for the proper writing of technical documents the engineer requires English.

Particularly in Masters in Hydraulics a lot of difference in humanism elements can be found between on class and another, and this is the motive of this document, to enhance some of them, based on in postgraduated web site, classroom experiences from students and professors.

THE STUDY

In order to identify all possible humanism elements perceived in the Posgraduated of Engineering, UNAM, the web site was explored and then the experiences from some students about courses with high, medium and low humanism elements (in Hydraulics area), were collected.

Posgraduated in Engineering web site

The mission and vision of the postgraduate in Engineering is not given; only in menu introduction mentions that one of the purposes of the university is "to preserve as well as to increase knowledge as a community good and to train researchers capable of generating it and applying it through teaching as a fundamental training purpose , which under the criteria of creativity and relevance in the framework of higher education, involve in schools, faculties, centers and institutes directed to engineering and technology to develop functions, and generate responsibilities and attributions that overcome deficiencies in the scientific and technological system ". But what stands out later is that it is the public institutions that are promoting postgraduate courses in strategic areas to face the great national problems and give the figure that 25 percent of the students who study masters are in the university. And that is all, the rest of menus only provide information about enrollments, curricula, and administrative information and the names of tutors who provide academic support to students.

Course 1

Research Project I

Teacher's gender : Male

Age: 80 years old

Class Description

The main objective of the subject was to provide the student with the necessary grammatical tools to write properly. Due to the main purpose of the subject, the teacher considers it important to increase the general culture of the engineer, because a graduate gives us extra knowledge to that of the degree. For this reason, the class was divided into seven topics, ranging from the area of basic technical knowledge such as the scientific method and its description during a timeline, research, project implementation; to areas of the humanities, the last area being the most extensive, touching on themes from the industrial revolution.

Topic number four was writing and reading, in which subtopics related to the importance of reading as an introduction to the study of punctuation and spelling were seen, for this purpose, the teacher relied in a textbook (Maqueo, 2010), a book that we worked on throughout the semester and from each chapter of the book was evaluated with short exams at the beginning of each class.

Topic number five were visual elements, such as graphs, tables, figures, font size and structure of a scientific article for the purpose of an easy reading and understanding by the reader or readers; recommendations for professional exams and presentations were also seen. Finally within this class we also saw elements of history: ancient Greece, modern age, contemporary age, 19th Century, first and second world war.

In theme six universal literature was studied, while in the last classes, subjects related to the seven arts were taken.

Course 2

Irrigation and drainage

Teacher's gender: Male

Age: 68 years old

Class Description

The objective of the subject is to provide the student with sufficient tools for the design of preliminary irrigation and agricultural drainage. It focuses on the efficient use of water in agricultural areas, which also allows

irrigation and agricultural drainage hydraulics to be technically feasible, economical and safe.

Throughout the semester, soil water behavior was studied from elements of plant physiology, allowing the understanding of the relation between water - plant - soil and climate, so that later, to evaluate and calculate the water needs of the crops and to analyze the production depending on the crop. In the second part of the course, the updated costs are determined and the expected benefits are purchased, which determines the feasibility of the project. Also, study the different types of crops that exist according to the type of crop, climate, quantity of water, etc. And the design of preliminary drainage systems, both superficial and subsurface.

The content of the subject lent itself much to reflect the social part, since this knowledge is focused on a subject of great importance: agriculture, because what was taken up subjects of the area of humanities was to analyze the problems for which the field of our country is in crisis, which we were analyzing and making a list of problems that we were encountering. Despite this, the humanistic part was not taken up for the evaluation of the subject.

The subject was carried out with a textbook (Gracia Sánchez, 2005), which consists of a theoretical part and exercises solved by each chapter, so the evaluation consisted of various tasks and exams that evaluate the technical and The studies of both theory and exercises seen in class without embracing any humanistic part.

Course 3

Pressure Conduits

Teacher's gender: Male

Age: 62 years old

Class Description

The objective of the class was the analysis of transients along a pipeline in the facilities for transport and pumping to supply drinking water.

During the semester, topics were discussed from the study of the point of operation, also learned to determine the maximum and minimum pressures for each section of analysis of the hydraulic system in question, as well as the design of control works to dissipate the water hammer through the lines of conduction. Topics such as: characteristics of a pipeline, analysis of pumping equipment, hydraulic calculation from the choice of diameter and pumping equipment to the pipeline, system curves, choice of pump type, operation maneuvers were studied ; As well as the analysis of delivery levels, operating costs and plans, transient analysis, as well as the transient analysis methodology.

The evaluation was practically daily, through the advance of several projects that included the subjects described previously. Also, the final qualification consisted of the delivery of a final project, applying the knowledge acquired.

Course 4

Mathematical methods

Professors' gender: Male

Age: 40 and 62 years old, respectively

Class Description:

The main objective of the subject is to increase mathematical, logical and ability to solve problems. Mathematical topics were addressed, so the agenda was as follows: differential equations, solutions of differential equations and polynomial series, vector differential calculus, vector integration, complex variable functions and conformal transformation.

The topics described above were taken up in two parts throughout the semester. One of these parts was theoretical with exercises as examples and the other part of the class consisted of exercises, many of which were

solved in class.

“Dr A gave us the theoretical class, while Dr. B gave us the practical part, through the elaboration of exercises during the class and after the class, with support of videos and notes sent by email”.

It should be noted that the grade was divided, as was the two-part course, which consisted of short exams and long exams.

FINDINGS

Website

No humanistic elements are observed; everything is technical and concise. Does not seem to invite an engineer to take a master's degree.

Course 1

For this course it can be concluded that throughout the semester they were seen a high content of humanism topics and technical subjects, since they alternated these subjects. It is noticed the oldest teacher gives more humanism elements than the others in this small sample.

Course 2

The course has a lot of topics related to humanism and social problems, but a medium content of humanism topics were considered during the course.

Course 3

Nevertheless and although the content of the subject is to supply of drinking water to localities, companies or hydraulic works, the course did not pick up elements in the area of the humanities.

Course 4

Due to the scope of the subject, it was developed in a purely theoretical way, so that a lack of humanistic aspects is noticed from this course.

CONCLUSIONS

Taking into account the elements observed in the website and the experiences in the classroom in different postgraduate courses in civil engineering, in the particular case of hydraulic engineering, there is a shortage of humanistic elements introduced in most of the courses that are in that area; only in one of four analyzed subjects there was evidence of this humanistic insertion that must be provided to the master's student in civil engineering and it is noticed the oldest teacher gives more humanism elements than the others in this small sample. So it is strongly recommended a thorough review from the mission and vision that must be taken in a postgraduate as important of the UNAM in addition to the revision of the programs of the subjects that are given there, besides proposing some type of training of pedagogic type for the teachers in those levels of study of the postgraduate. Subjects such as Reading literary texts for all areas, Dilemmas at the beginning and end of life, Engineering history, Discursive strategies in the classroom, Crisis intervention and management of desensitization, Theoretical and didactic tools for environmental education, Professional ethics should be included for teachers' training purposes.

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MATEMARTIAMO: MATHS&ART COMPETITION

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The FDS Laboratory (Formation, Didactics and Experimental Teaching, Science Communication) promotes large-scale initiatives, as awards, games, television programs and conferences, for the dissemination and the "demystification" of the difficulties of mathematics.

In the last two years FDS proposed to the pupils of the last three years of the Italian high schools and to the students of Politecnico di Milano to test their artistic skills (Visual Arts, Literature, Photography, Fashion and Jewellery) in the contest MatemArtiAmo (Maths&Art). All artworks will publish on the Facebook FDS page and public voted them. The works that had better interpreted the theme of the relationship between math and arts were shown in exhibition at the Politecnico di Milano and the best were awarded.

MEASUREMENT OF THE HUMAN CAPITAL EFFICIENCY – AN INTERESTING TOPIC FOR DIPLOMA AND DOCTORAL THESES

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ABSTRACT

Human capital is one of the sources of economic growth. It is one of the enterprises inputs, too. People are carriers of new knowledge, ideas, thoughts, experiences and skills that contribute to their personal growth and also the growth of the performance and competitiveness of the entire organization. Human capital management is a process of the using effective use of human capital. There are several approaches known how to measure the value of human capital and assess its effectiveness, but unified methodology has not yet been adopted. The problem is the quantification of knowledge, abilities, skills, motivation, talent etc. The difficulty of determining the single universal methodology is due to the fact that every company is unique and has set specific requirements for the production inputs and processes. Therefore, there is the scope for problem solving within the diploma and doctoral theses at universities. The aim of our paper is to explain knowledge about human capital efficiency, metrics of human capital efficiency and to solve practical examples point out the possible implementation of knowledge in this area in diploma and doctoral theses at universities.

Key words: human capital, human capital efficiency, measuring

INTRODUCTION

Economic growth is one of the main objectives of the economic policies of current governments. This is achieved by extensive or intensive use of production factors. Extensive economic growth is the result of quantity increasing of used production factors. Basic factors of production are land, labour and capital (physical and human). The human capital includes the natural ability, innate and acquired skills, knowledge, experience, talent, inventiveness. The essence of creation, increasing the value and effectiveness of human capital, is spending money now but expected benefits will flow in future. Forms of increasing the value of human capital are expenditure oriented for example to health, safety, science, research and education. The views and reflections about the importance and position of human capital in the company were already established in the beginnings of economic theory, and in the work of Petty and Smith. The issues of human capital (HC) were discussed more deeply among the economists, the leaders of the Chicago School of economists, from the 60-ies of the 20th century, for example, Schultz, but also the monetarist Friedman. However, the theory of human capital was the most consistently worked up by Becker, who developed a theoretical basis for decision-making on investment in human capital in the book of Human Capital (1964). Since 1990s, Bontis, Davenport, Armstrong, etc. paid attention to human capital as well.

There are extensive and intensive growth sources. Human capital is an important source of extensive and intensive growth, too. Economic growth is closely linked to the speed with which world get ready to use new technologies, especially in the information and communication field. Human capital is relatively young production factor. Because it is closely related to production factors of labour and has features in common with the labour, analysis and research work it is often not explicitly mentioned. The new modern theories of economic growth (80 – 90 years of 20th century) had begun to take the human capital as one of the main factors of

economic growth. New growth theory is based on the assumption that the production function is not affected only by labour and capital, but also by education, improving the quality of labour and capital, better infrastructure, which are unaffected by exogenous but endogenous. This means that the growth of education and upgrading skills operate as a multiplier, which makes for faster economic growth (Kucharčíková, 2014).

Human capital represents one of the company inputs, too. It is involved in the creation of the market value of the company and also represents the most valuable source of company. Human capital has been currently seen as the property of the company, which is part of the intellectual capital and contributes to the creation of the market value of the company. Human capital is viewed as a set of congenital and acquired knowledge but also skills, abilities, talent, inventiveness. Human capital is therefore element of the knowledge management in global society (Cahyaningsih, Sensuse, Arymurti & Wibowo, 2017; Cahyaningsih, Sensuse, & Sari, 2016; Kozubíková, 2016). Increasing of human capital value is an important element of employee's motivation in enterprises (Myšková, Hitka, Lorincová & Balážová, 2016; Kampf, Hitka & Potkány, 2014).

MEASUREMENT OF HUMAN CAPITAL VALUE

Increasing competitiveness forces companies to combine and use resources effectively and is considered to be one of the major characteristics of the company. If human capital is considered to be one of the inputs and also participates in the formation of the market value of the company, it is important that managers put the emphasis on the measurement of the value of human capital. Without the measurement of human capital companies may not be sufficiently aware of their potential, or whether they invested in the development of their employees effectively or not. The measurement can be the starting point for the creation of strategies for the development of human resources and can help to monitor and evaluate the effectiveness of the use and investment in human capital. There are many approaches to measuring the value of human capital, but there has not yet been adopted a single methodology in this area. The starting point in the implementation of the system of measuring human capital is the fact that people and their development do not constitute costs for the company, but an investment in the future. Problems in calculating the efficiency of human capital is the quantification of knowledge, abilities, and skills (Kucharčíková, Koňušíková & Tokarčíková, 2015).

Bontis et al. (1999) suggested three models of human capital measurement, which are based on accounting:

- *Cost models* take into account the costs invested so far on acquisition and reproduction of human capital, including alternative costs.
- *Models of the value of human resources* combine non-financial metrics with financial and economic (monetary) value.
- *Cash models* find the expected estimates of future results of own human capital.

Anderson has created a tool for the evaluation of human capital, based on three key factors – compliance, cost, and value. Compliance ensures that the management of human resources is the accordance with the objectives of the company. Costs represent expenses invested in human resources and the value estimates the benefits of the costs incurred (Armstrong, 2007).

A mutual interplay and balance of factors such as the improvement of technique and technology, methods of organisation and management of production, improving the quality of human factor, creation of a favourable motivational atmosphere in the company etc. has an important role in labour productivity. The quality of human capital has currently become a decisive factor for the success of the organization. Human capital can be characterized by indicators, e.g. in the area of human resources development, satisfaction of key managers, attractiveness of the company for the good managers, or specialists, etc. In the longer term, the growth of labour productivity depends especially on the opportunity of employees to work independently (implementation), in teams, possibility of expression of creative thinking, climate of confidence or ability of superiors to solve problems incurred smoothly. The factors form social capital of the company, which together with the human become resources of competitive advantage of the company (investments plus social capital) (Mihok, Krausová & Humeňanský, 2004).

MEASUREMENT OF THE HUMAN CAPITAL EFFICIENCY

Performance, its measurement and management is a fundamental definition of enterprise success, because only enterprises which are able to achieve their objectives defined can be successful. Pressure to achieve high performance of enterprises continues to grow (Tokarčíková, Poniščiaková & Litvaj, 2014). The highest levels of management work towards profit maximization, trying to achieve the lowest possible costs and the highest possible revenues (Kampf, Lorincová, Hitka & Caha, 2016).

Efficiency is generally defined as the relationship between the outputs achieved and the inputs used. The efficiency of human capital can be calculated analogically as a percentage of the value of enterprise output and

the value of the input (the human capital). However, when choosing output and input, there must be chosen such variables, which relate to each other and are crucial to the administration of the enterprise performance.

The proposal of indicators, according to which it is possible to determine both the value and the effectiveness of HC were developed by Bontis and Fitz-enz in 2002. They distinguished the value of HC, effectiveness of HC, investments in HC and loss of HC in indicators. They identified specific indicators for each of the area that can be quantified in terms of the practice (Table 1).

Table 1: Areas of human capital measurement

AREA OF MEASUREMENT	INDICATORS
Effectiveness of HC	Sales per employee Cost per employee Profit per employee HC ROI
Value of HC	Remunerations/sales Remunerations/costs Average remuneration Remuneration of top managers Remuneration of line managers
Investment in HC	Development rate Investment in education Costs
Loss of HC	Voluntary departures of employees Involuntary departures of employees Total departure of employees

Source: Bontis, Fitz-enz, 2002

The authors of the study created a *conceptual model* for measuring the effectiveness of HCM on the basis of the 25 companies examined. The key ability of management is to continue investing in human capital, while trying to protect the organization from the use of resources in the field of human capital. Investment in human capital and the use of human capital resources include company's turnovers and expenses for training and development of employees. The result of the appreciation of the value of human capital is a positive impact of HCM on efficiency, which can be measured using the sales or profit per employee.

The structure of conceptual model includes four measurements – factor of sales, expenses, revenues and return on investment in human capital. Sales indicator is basic metric of *the effectiveness of human capital*. Creating value through human capital is a concept that predicts the effectiveness of human capital. *Creating value through human capital* includes the measurement of sales compensation (how much is invested in employees as a percentage of sales) and expenses (how much is invested as percentage of total operating expenses). The value of human capital can be measured using the average costs spent on employees when determining the relative position of the pay level in the organization within the sphere of activity. In particular, these average resources invested may be defined even for managers. *Investments in human capital* include development rate, investment in training and costs of training and courses (trainings). *The exhaustion of human capital* is a prerequisite for the negative impact on HCM. In particular, it represents the departure of employees from the company. The indicator can be a percentage of the individuals who have decided to leave the company on their own. Individual measurements of the value of human capital and its effectiveness are in a certain mutual correlation.

A variety of consulting and educational organizations have developed their own systems of indicators to measure the value of human capital or evaluate investment in human resources. These metrics, however, often do not take into account the difference between the value of human capital and the value of investments, which aim to increase the size of human capital.

One of the options how to evaluate the effectiveness of human capital is e.g. the calculation of the economic value added of human capital or just *the added value of human capital* (*Human Capital Value Added – HCVA*), it is given by the difference between the costs of the material and the costs of the work produced and the market price of products and services. (HR Agenda, 2012) HCVA creates a modified picture of the profitability of the company through each employee in organization and it can be calculated from the following equation:

$$HCVA = Sales - (operating costs - wage costs) / \emptyset \text{ number of employees}$$

However, profit before taxation does not have to be the right measure, because it includes items such as exchange losses, does not take account of inflation etc. Therefore, it is recommended to calculate HCVA using the following equation:

$$HCVA = (Operating profit + wage costs) / \emptyset \text{ number of employees}$$

Currently, there have been more and more consulting companies dealing with human resources, which monitor and evaluate a number of indicators in the field of human capital. These companies help managers to compare the effectiveness of human resource management with the competition. The disadvantage, however, is that when monitoring and evaluating the effectiveness of human capital, it is only based on so-called "hard" data, which is not sufficient for a comprehensive evaluation of the human capital. Evaluations should be enriched with so-called qualitative component of the human capital, which is more difficult to quantify, but, due to the specificity of HC, it is an essential part of it.

The methodology for the measurement of human capital also provides the *HR Benchmarking* study of PricewaterhouseCoopers (PWC). This study is carried out on a regular basis and allows participating companies not only to compare the level of human capital through the use of benchmarking, but also take measurements used and introduce own evaluation of the human capital. There are shown the selected indicators of the use of HC according to PWC in the following Table 2.

Table 2: Indicators of the use of HC according to PWC

Company results	Behaviour in organization
<ul style="list-style-type: none"> - turnover per employee - profit per employee - receipts per employee - labour productivity 	<ul style="list-style-type: none"> - fluctuation - absence - monitoring the motivation and satisfaction of employees - loyalty of employees towards the company
Remuneration and employee benefits	Education and development
<ul style="list-style-type: none"> - structure and competitiveness of the remuneration system - share of performance component of wage costs - rate of promotion - employee benefits 	<ul style="list-style-type: none"> - share of the cost of training on wage costs - number of hours of training per employee - cost of trainings - penetration of trainings - total cost for the development of HC - input trainings

Source: Human resource controlling, 2012

There are a number of consulting companies, which have extensive databases and monitor and evaluate a number of indicators in the field of human capital. Involvement, however, is worth the money and does not contain a thorough analysis aimed at identifying key indicators of human capital for a particular company, but only the evaluations based on the internal data provided and its comparison with other companies operating in the same industry (Kucharčíková & Ďurišová, 2014).

If a company wants to effectively and comprehensively manage its human capital, it is necessary to approach this process comprehensively, i.e. it should take into account and build on the strategies and long-term objectives of the company, respect the organizational structure. The management of the effectiveness of human capital, in addition to the measurement of the effectiveness of the use of human capital, includes in itself as well as the effectiveness of investment in human capital, and the starting point is the measurement of the value of human capital. Models for measuring the value of human capital are non-universal, offer only general guidance. The majority of companies consider guidance how to properly approach the value of human capital, measurement of its effectiveness and effectiveness of the investment for the company know-how.

However, for example, by Šikýř and Bušina (2014) the concept of human resource management in construction companies is strategic and systematic which fact is natural given the high number of employees in various professions who perform various works. Applied human resource management practices show both significant merits and certain deficiencies although it is difficult to prove the existence of an unambiguous relation between efficiency of human resource management and success of companies. This relation is determined by many political, economic, legal, social, technical or natural effects that have no relation to efficiency of human resource management or performance of human resources.

For measure the effectiveness of HC is therefore important to consider the type of industry and the environment in which concrete company operates. It is in the conditions of specific enterprises that appropriate prerequisites are created for the design of specific metrics for detecting, monitoring and comparing the efficiency of human capital utilization that are realized in the diploma and doctoral theses of our students. In following text we show some examples.

INDICATORS OF HUMAN CAPITAL EFFICIENCY IN THE FAST FOOD COMPANY

The effective use of human capital is one of the most important indicators, by means of which the fast food company has a space to grow and gain a competitive advantage in the oversaturated market. It is possible to

choose several indicators for an analysis of the effectiveness of using HC, for example, fluctuation rate, absence rate and specific indicator – crew labour.

Crew labour

Crew labour (CL) is an indicator of the effectiveness, which was introduced by McDonald's, it is expressed in percentage. It is percentage of wages of the total volume of turnover. Indicator is characterised by the following facts:

- it is monitored every day, throughout the day,
- it is evaluated on an ongoing basis, the current is possible to detect at any time during the day,
- shift manager monitors its amount and his duty is to arrange shift so that it reaches the desired average amount at the end of the day,
- company management requires management to make the average amount of this indicator was 10% at the end of the day,
- the value of CL is affected by the amount of sales and composition of human capital,
- the composition of human capital significantly affects the value and the development of CL value, because employees, who possess a lot of knowledge and experience, contribute to the reduction of the value of CL and it so that manager needs a smaller amount of them in shift in order to save the cost of wages,
- people, together with their human capital are a valuable source of effectiveness and possibilities of managers and executive of restaurant to effectively lead and manage the company and at the same time use available human capital effectively.

Indicator of employee fluctuation

Fluctuation is called phenomenon, when an employee ends employment for various reasons. The reasons are usually personal, organizational, family, poor workplace relationships, conflicts among employees, biased management etc. It is important for the company to find out the reasons for the departure of employees and try to remove as much as possible. Employees, who have the experience and skills that make up their human capital, contribute to the effective management and use of human capital. Due to the nature of the work it is difficult to specify a reasonable rate of fluctuation. 8% is an acceptable level of fluctuation. We have used the following equation for the analysis and calculation of the fluctuation rate:

$$\text{fluctuation rate} = \frac{\text{number of employees excused during the month}}{\text{average number of employees in a given month}}$$

If the rate of fluctuation is very high, it is difficult to build human capital and subsequently use it effectively. Management of the company should focus on improving working conditions for employees and try to keep them as long as possible. The employees have developed their experience and skills over the time and thus contribute to the effective use of their human capital, which is constantly developing.

Absence

The absence is a negative phenomenon in the company and has a negative effect on the results of the management. If employees do not go to shifts or are constantly late, management should take all possible both formal and informal warnings. Management and shift management play an important role in these situations. Management must take steps that will encourage employees feel the need to go to shifts and not be late in any case. Every employee must know what sanctions the management will apply in the case of repeated absences, or unannounced delays. In the absence of an employee, shift manager must register the absence and resolve, or inform the management that it will deal with it. If the absences are constantly repeated, the employee will have to leave the company.

The reasons for the increased absences in the company are as follows:

- overwork of employees due to lack of labour force,
- employees are unsatisfied with the working environment, or work they perform,
- conflicts in the workplace, no good human relationships among employees,
- burnout of employees due to the constant work on one job position,
- personal problems of employees (disease of children, older members of the family, etc.),
- in the case of volunteers, the reasons are the school obligations.

The increased values of the absence show that the employees are not loyal to the company and do not realize the importance of their work and their own human capital for the functioning of any shift, but also the entire restaurant. The knowledge and skills of employees that comprise their human capital are necessary to achieve the required economic results the owners and managers of the restaurant have defined. Therefore, it is necessary to motivate employees not to be absent in the work, but go to work in each shift and always on time.

SYNTHETIC INDICATOR OF THE EFFECTIVE USE OF HC

There are several factors affecting the effectiveness of the use of human capital, however, the employees themselves can affect to a large extent how management will organise and make use of their capital effectively. A single and comprehensive picture of how to use human capital effectively in the company provides an indicator of the use of HC, which we propose to the special conditions of the fast food company. It is the synthetic indicator, which is composed of the above mentioned indicators of fluctuation rate, absence rate and crew labour, which largely affect the functioning of the company and everyday work and work shifts.

$$\text{synthetic indicator of the effective use of HC} = \frac{CL + \text{fluctuation rate} + \text{absence rate}}{\text{number of employees}}$$

All partial indicators are dynamic and are constantly changing. Their sum has a positive or negative impact on the performance and economic results of the company. Then, their sum is divided by the average monthly number of employees. The number of employees in the company plays an important role, because the dynamics of the environment causes a constantly changing number of employees.

Indicator > 1

- if the indicator of the use of HC is a number bigger than 1, it is an alarming number for the company, because the sum of the negative affecting indicators is bigger than the average number of employees.
- this situation causes the overwork of employees, negative economic results, dissatisfaction of employees, frustration of management, frustration of shift managers for whom it is difficult or sometimes impossible to arrange the effective functioning of shift.

Indicator ≤ 1

- ideal situation occurs if the result of indicator is smaller or equal to 1. The smaller the number, the more pleasant and healthier atmosphere in the company. The employees are satisfied, they realize the importance of their work and the importance of their arrivals to shifts, managers are able to effectively lead and manage shift, what reflects in the indicator of CL.

After a careful analysis of internal environment and inserting "synthetic indicator of the effective use of human capital" into the formula, personnel manager can find that the effectiveness of the use of human capital will gradually decreases or increases. Then he can take corrective action.

The reasons why the effectiveness of the use of human capital in concrete fast food company is reducing is several. After the analysis and monitoring of the internal environment, it turned out that the managers do not have enough knowledge and skills in management and shift management. This finding is crucial, because the right decisions of managers are necessary for the effective use of the potential of the employees, their knowledge and skills forming their human capital. The manager is a contact person between management and employees, and therefore, he must approach his work responsibly. An internal environment survey showed that the management is not motivated to make above average performance and does not have sufficient knowledge and skills that are necessary for the required performance.

Another reason, which has been detected from a thorough analysis of the internal environment, is the lack of interest and the absence of employees in the organisation of work. Employees often have the feeling of inferiority; managers do not care about their opinion and sometimes promote the directive method of shift management. Employees would be motivated, if they are given space to demonstrate their knowledge and skills, show the entire human capital they have, thus contribute to better results and get a sense of the needs and self-realization.

CONCLUSION

If companies want to become a successful, it is essential that they begin consider human capital as an asset, or company wealth. It is also important to invest in human capital, not as cost of company, but as an expenses bringing benefits in the future. Measuring the value of human capital, measurement and management of its effective use is a basic idea on which companies should build their competitiveness. However, HC metrics must necessarily be based and also follow key indicators of company performance. These activities take human resources managers a lot of professional knowledge, experience and creativity. It follows that the metrics of HC effectiveness are different, for example, in a commercial organization and different in a transport, built or fast food companies. This is new and very interest topic for solving problems in diploma or doctoral theses.

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MEASURES IN FORMING A HARMONIOUS FAMILY BASED ON THE PRACTICE OF NOBLE VALUES AMONG THE PARTICIPANTS OF *BICARA SAKINAH* (TALK ON HARMONY) AT *PUSAT ISLAM* (ISLAMIC CENTRE), KUALA LUMPUR

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ABSTRACT

The family institution is the earliest institution responsible in shaping the personality and character of each family member. Correspondingly, noble values are important aspects in the formation of a harmonious family. However, today these noble values are less practiced within the families, causing for the emergence of various family conflicts. Hence, the practice of positive values could influence and encourage mankind in leading a better life, as demanded by Islam. Among the noble values that are able to create an atmosphere of harmony in the family are mutual respect, mutual help, being affectionate and loving, being responsible, and also being tolerant and trustworthy. This article aims to discuss the measures in creating a harmonious family based on the practice of noble values as taught by Islam. The design of this study is quantitative, in the form of a survey. This study used the questionnaire instrument which were distributed to 171 respondents who participated in the *Bicara Sakinah* (Talk on Harmony) program, organized by the Malaysian Consultative Council of Muslim Women (*Majlis Perundangan Wanita Islam Malaysia (MPWIM)*), Islamic Da'wah Foundation Malaysia (*Yayasan Dakwah Islam Malaysia (YADIM)*) at the Islamic Centre (*Pusat Islam*), Kuala Lumpur. Research data were analyzed descriptively using the frequency, percentage and mean score using the Statistical Package for Social Science (SPSS) computer software version 23. The findings show that the measures in forming a harmonious family based on the noble values from the aspect of religious demands is at a moderate level (mean=3.76), from the aspect of communication (mean=4.33), value of responsibility (mean=4.54), and the value of affection (mean=4.33). Overall, the findings indicate that most respondents have agreed and adopted the measures in creating a harmonious family based on the noble values of family life. Noble values that are applied in family life could become a fortress of strength in producing good and useful generation. Therefore, each individual in the family needs to strive and help each other in developing a harmonious family which is based on the noble values as molded by Islam, based on the teachings of the Quran and Sunnah.

Keywords: Noble Values, Measures, Family, Sakinah (Harmonious)

INTRODUCTION

The family is the children's first institution when they were born, hence the family needs to provide a suitable and conducive environment for the optimum development of the children (Nur Zahidah Jaapar et al 2011:2). In the context of a harmonious family, noble character is very important in human life because it gives a huge influence and impact on a Muslim person's behavior and actions. According to Zaitunah Subhan (2001), a harmonious family is a family that is built based on a legitimate marriage, is able to meet the physical and spiritual needs of its members, is able to create an atmosphere of mutual love and affection (*mawaddah wa rahmah*), and is also harmonious and

balanced. Therefore, family life according to the teachings of Islam is directed towards the practice of noble values as recommended by the religion because it leads to everlasting happiness. Peacefulness in a Muslim family guarantees the creation of quality children, who will then become the country's pillar in the future (Noor Azila 2007:33). According to al-Farabi, as cited by Zahidah Jaapar et al (2011:26), in relation to creating a happy and peaceful life, one needs to practice the values of humanity, as well as good behavior because all those practices play a role in determining a person's happiness in this world and the hereafter. On the other hand, noble values in the context of western life are relevant metaphorical and philosophical thoughts on the questions of life, human behavior, and civilization in human history.

The family institution also functions as a community agent in fostering noble values and social ethics in preparing an individual to become a useful and quality person (Fadzilah Kamsah 2004:151). Apart from that, noble values are capable of influencing the psychological development of the individuals, families as well as the communities (Fatimah Mohamed 2007:63). This is further supported by Ayob Jantan (2004:52), who stated that noble values are universal values, and that they cross all faiths, cultures and nationalities. Noble values that are practiced also have positive impact on an individual, and become a solid shield in a person's self-esteem to become more authoritative (Ibrahim Noor 2005:70). In the context of Islam, noble values are universal values that emphasize on commendable manners, civility, and decency of an individual within the framework of the person's relationship with God, other human beings and nature (Shuraimi Abdullah 2008). The Prophet Muhammad SAW said:

"Fear Allah wherever you may be. Accompany bad deeds with good deeds, then you shall be able to eliminate them, and mix around with other people with good manners".

(The Book of Arbain, Chapter 18, at-Tirmidzi no 1987)

The development of noble values in today's families is increasingly lost due to the family members' attitude of selfishness which leads to fights and arguments and lack of respect for each other. As a result of this situation, noble values need to be strengthened and practiced by family members in their lives (Adawiyah Ismail & Syarah Tawil: 2016). As such, the stability of the family unit is highly dependent on the family values that underlie the growth and development of the individuals in the family. This is because, as mentioned by Abd Rahim Abd Rashid (2006:6), noble values that are inculcated in the family life can prevent various bad and negative influences from affecting the family institution. According to Sufean Hussein (1989), noble values can be applied accordingly through speech, gestures, comprehension, assessment, role models, and content. Each individual in the family needs to play a role and act in accordance with her or his function and position according to the family structure in order to form a harmonious family based on noble values (Adawiyah Ismail 2016). Hence, human development that is founded on qualities that are characterized by noble values has the potential in producing high quality and good generation that is capable of creating a positive impact, as well as helping in the establishment of a harmonious family.

METHODOLOGY

The design of this study is a procedure for setting the collected data based on specific and systematic planning to establish a network of relationships between the variables involved in a certain study (Kerlinger:1986). The design of this study is in the form of a quantitative survey. The data analysis method used in this study is descriptive analysis. According to Chua (2006), descriptive statistics is a mathematical technique used in processing, arranging, analyzing, and summarizing quantitative data. Data obtained from individuals are combined to create a general conclusion. The sample consisted of the participants of the '*Bicara Sakinah*' (Talk on Harmony) program among husbands and wives at the *Kompleks Pusat Islam* (Islamic Center Complex) in Kuala Lumpur, organized by the Malaysia Consultative Council of Muslim Women (*Majlis Perundingan Wanita Islam (MPWIM)*), the Islamic Da'wah Foundation Malaysia (*Yayasan Da'wah Islam Malaysia (YADIM)*). A total of 171 participants, who are married men and women undergoing family life, have been chosen as the respondents for this study. The survey method was chosen because according to Fullan (1991), it is able to reflect the actual research situation since it needs to adhere to the survey processes and procedures in measuring the views, attitude, and behavior of the respondents. A questionnaire was developed on the measures in forming a harmonious family based on the practice of noble values. The data obtained from the questionnaire were then analyzed using the Statistical Package for Social Science (SPSS) version 23 computer software.

RESEARCH FINDINGS / RESULTS AND DISCUSSION

In this study, the researchers gathered background information about the respondents pertaining to their age, gender, education, occupation, marital status, and duration of their marriage. The respondents' background information is as follows:

Table 1: Respondents' Background

	Item	Number	Percentage
Gender	Male	41	24%
	Female	130	76%
Age	21-30	38	22.2%
	31-40	77	45%
	41-50	19	11.1%
	51-60	32	18.7%
	61 and above	5	2.9%
Education	SPM (MCE)	80	46.8%
	STPM (MHSC)	17	9.9%
	Diploma	26	15.2%
	Bachelor's Degree	33	19.3%
	Masters Degree	15	8.8%
Marital Status	Married	151	88.3%
	Widowed	20	11.7%
Duration of marriage	1-10	110	64.3%
	11-20	37	21.6%
	21-30	14	8.2%
	31 years and above	10	5.8%
Total		171 people	100%

Source: 2016 Questionnaire

Based on Table 1, it can be seen that majority of the respondents are female at 76%, while male respondents make up the remaining 24%. This shows that women are more interested in participating in family-based programs compared to their male counterparts. As for the respondents' age group, majority of them are between the ages of 31 to 40 years old (45%), followed by those between 21 to 30 years old (22.2%), between 51 to 60 years old (18.7%), between 41 to 50 years old (11.1%), and finally those who are 61 years and above (2.9%). Next is their level of education where the highest number of respondents (46.8%) hold the *Sijil Pelajaran Malaysia (SPM)* (Malaysia Certificate of Examination (MCE)) qualification. At 19.3%, Bachelor's Degree holders make up the second highest number of respondents, followed by Diploma holders (15.2%), *Sijil Tinggi Peperiksaan Malaysia (STPM)* (Malaysia Higher School Certificate (MHSC)) certificate holders at (9.9%), and finally Masters Degree holders (8.8%). The data shows that the respondents' education level is moderate. Their marital status shows that majority (88.3%) are already married, while the other 11.7% are widowed. As for the duration of marriage, 64.3% of the respondents have been married between 1 to 10 years. This is followed by 11 to 20 years of marriage (21.6%), 21 to 30 years (8.2%), and finally more than 31 years (5.8%). This shows that majority of the respondents have been married between 1 to 10 years.

Table 2: Measures in Developing a Harmonious Family Based on the Practice of Noble Values (Religious Demands)

Item	SD	D	NS	A	SA	Mean
I got married to obey Allah's commandments	2 (1.2%)	-	1 (0.6%)	50 (29.25)	118 (69%)	4.64
I make supplications to Allah so that I am given assistance in my family life	1 (0.6%)	36 (21.1%)	1 (0.6%)	-	133 (77.8%)	4.77
I would urge my family	1	-	1	44	125	4.73

members to perform things that are commanded by Allah	(0.6%)		(0.6%)	(25.7%)	(73.1%)	
I would prevent my family members from committing things that are forbidden by Allah	1 (0.6%)	-	2 (1.2%)	49 (28.7%)	119 (69.6%)	4.68
Overall mean						3.76

Source: 2016 Questionnaire

Based on Table 2, the item with the highest mean score for fulfilling religious demands by the respondents, in their effort to create a harmonious family, is the item “I make supplications to Allah so that I am given assistance in my family life” with a mean of 4.77. This shows that majority of the respondents make supplications to Allah as their practice in family life. Supplicating serves as a person’s internal drive, strength, faith, hope, and blessings in whatever deeds that are done (Ismail Kamus, 2010). This is followed by the item “I would urge my family members to perform things that are commanded by Allah” (mean=4.73). Reminding each other and to call upon family members to do good deeds are important so that they do not continue to make mistakes and to live in vice. Next, 69.6% of the respondents strongly agreed with the item “I would prevent my family members from committing things that are forbidden by Allah”, with a mean score of 4.68. In family life, the head of the family plays an important role and responsibility in leading the family members so that they are spared from committing things that are forbidden by the religion. Among the things forbidden by the religion are slandering, lying, pitting, gossiping, and so on. The item “I got married to obey Allah’s commandments” scored a mean of 4.64, with 69% of the respondents who strongly agreed. Getting married is a *sunna* (something that was performed by the Prophet) of the Prophet Muhammad SAW, and is a religious demand in order to fulfill the instinct of a human being. A person who has fulfilled the demands of the religion, thus also fulfills his physical and spiritual demands without it affecting his image and honor (Jainal Sakiban 2012:19). Overall, the mean score of the respondents on their religious demands is at a high level of 3.76. These findings are in line with the demands of Islam which calls upon its followers to practice religious values in leading their married life. Apart from that, families that are formed and nurtured to perform the commandments of Allah the Almighty will produce harmonious families and a good generation.

Table 3: Measures in Developing a Harmonious Family Based on the Practice of Noble Values (Communication)

Item	SD	D	NS	A	SA	Mean
I use kind words to my family members	1 (0.6%)	-	2 (1.2%)	76 (44.4%)	91 (53.2%)	4.51
I speak the truth to my family members under any circumstances	1 (0.6%)	3 (1.8%)	14 (8.2%)	88 (51.5%)	65 (38%)	4.24
I am honest with my spouse in all matters	1 (0.6%)	4 (2.4%)	12 (7%)	90 (52.6%)	64 (37.4%)	4.23
Overall mean						4.33

Source: 2016 Questionnaire

Based on Table 3, the results of the survey show that the highest mean score value in the category of the respondents’ communication in creating a harmonious family is the item “I use kind words to my family members” (mean=4.51). A good family will use positive words when communicating with each other since it is the morality and mannerism that are highly demanded in the religion. This is followed by the item “I speak the truth to my family members” with a mean score of 4.24. In family life, telling the truth or being honest is something that needs to be practiced while communicating with each other in order to avoid misunderstandings and suspicions from happening. Next is the item “I am honest with my spouse in all matters” (mean=4.23). Being honest by not hiding any faults or wrongdoings helps to cultivate the atmosphere of openness between couples or among the family members. The findings show that the respondents’ value of honesty in communicating is high. Honesty, whether towards the spouse or the children, is very important in the establishment of a harmonious family. This positive communication is the manner and morals that are highly demanded by the religion so that family members do not misunderstand and have

suspensions towards each other. According to Iran Herman (2003), good communication in the family will help its members to establish effective relationships with each other since the attitude of being concerned and caring, open, having mutual respect, and the willingness to listen to other people will exist through communication.

Table 4: Measures in Developing a Harmonious Family Based on the Practice of Noble Values
(Responsibility Values)

Item	SD	D	NS	A	SA	Mean
I make sure that my family members are in a safe condition	1 (0.6%)	-	2 (1.2%)	52 (30.4%)	116 (67.8%)	4.66
I make sure that the basic amenities for my family members are sufficient	1 (0.6%)	1 (0.6%)	1 (0.6%)	75 (43.9%)	93 (54.4%)	4.50
I work tirelessly to increase my family's income	2 (1.2%)	2 (1.2%)	5 (2.9%)	76 (44.4%)	86 (50.3%)	4.41
I seek for lawful sustenance for the sake of my family's happiness	1 (0.6%)	-	2 (1.2%)	38 (22.2%)	130 (76%)	4.73
I would accompany my spouse when he/she is seeking treatment at the health center	1 (0.6%)	3 (1.8%)	2 (1.2%)	83 (48.5%)	82 (48%)	4.41
Overall mean						4.54

Source: 2016 Questionnaire

Table 4 shows the mean scores of the respondents in terms of the responsibility values they practice in establishing a harmonious family. The highest mean score is for the item "I seek for lawful sustenance for the sake of my family's happiness" (mean=4.73). This is in line with the Islamic ruling where to seek for lawful sustenance is mandatory for every Muslim. Providing sustenance from lawful sources for the family will produce good and useful generation. This is followed by the item "I make sure that my family members are in a safe condition" (mean=4.66). This indicates that the respondents prioritize the safety of their family members as a responsibility that needs attention. As for the item "I make sure that the basic amenities for my family members are sufficient", the mean score is 4.50. In this context, having the attitude of being responsible in providing the basic amenities for the family members is important since it is a need to facilitate their daily life activities. Two items which have the lowest mean score are "I work tirelessly to increase my family's income" and "I would accompany my spouse when he/she is seeking treatment at the health center" with a mean score of 4.41 each. Based on the item "to increase the family's income", life would be more balanced if the family has a source of income that is able to support its everyday life. Apart from that, it can also prevent the onset of family financial difficulties which could cause other problems if they are ignored. Meanwhile, accompanying a person's spouse to the health center shows an individual's concern for and awareness of his or her spouse's health conditions. Indirectly, this helps married couples to strengthen the bond of love and affection for each other. The results of this study found that majority of the respondents practice responsibility values in the family for the benefit and happiness of the household. Each family member has his or her own roles that need to be performed, and it becomes a responsibility that needs to be shared together, especially by the head of the household. The functionality of good responsibility values in the family will contribute towards the strength of the family institution. According to Adawiyah Ismail (2016), family members who are devout in carrying out their responsibilities will be able to create peace and tranquility in their family life.

Table 5: Measures in Developing a Harmonious Family Based on the Practice of Noble Values
(Affectionate Values)

Item	SD	D	NS	A	SA	Mean
I would provide sufficient attention to my family members	1 (0.6%)	-	3 (1.8%)	65 (38%)	102 (59.6%)	4.56
I would always express my love and affection to my spouse	2 (1.2%)	1 (0.6%)	8 (4.7%)	68 (39.8%)	92 (53.8%)	4.44

I would always utter romantic words to my spouse	2 (1.2%)	3 (1.8%)	24 (14%)	78 (45.6%)	64 (37.4%)	4.16
I would give special gifts to my spouse during our wedding anniversary	3 (1.8%)	4 (2.3%)	21 (12.3%)	76 (44.4%)	67 (39.2%)	4.16
I would hold discussions with the whole family because it is able to strengthen family ties	1 (0.6%)	1 (0.6%)	9 (5.3%)	91 (53.2%)	69 (40.4%)	4.32
Overall mean						4.33

Source: 2016 Questionnaire

Table 5 shows the percentage and mean scores for the respondents' answers towards the value of affection in creating a harmonious family. The highest mean score obtained is for the item "I would provide sufficient attention to my family members" (mean=4.56). The attitude of being caring and concerned for the family members will create an atmosphere of love and affection, and will also foster closer relationship with each other. This is followed by the item "I would always express my love and affection for my spouse" (mean=4.44). This is because gentle treatment and hospitality showed by the couple will create a warm, harmonious and peaceful atmosphere in the household. According to Noor Azilawati (2007), affectionate service or treatment by a couple is an important factor in creating a cheerful and happy atmosphere. The next item is "I would hold discussions with the whole family because it is able to strengthen family ties" with a mean score of 4.32. Having discussions can create positive communication, and would indirectly strengthen and foster closer ties of affection among the family members. There are two items with the same mean score, which are "I would always utter romantic words to my spouse" and "I would give special gifts to my spouse during our wedding anniversary" with a mean score of 4.16. Based on the mean scores, all of the items show that the value of affection is at a high level. Islam is a religion which strongly emphasizes on the importance of the value of love and affection in the family system. Love and affection are the foundation of happiness and peacefulness in the family life. Abdullah Nasih Ulwan (1987:512) explained that love is tenderness, sensitivity and fineness of the heart that creates compassion for others, feels the pain, and experiences their grief. The value of love and affection showered by both parents would strongly influence the behavior of their children. Friendly relationship and the feeling of love and affection that are abundant in the family are able to assist the mental, physical, and spiritual development of the family members. (Tengku Intan Zarina Tengku Puji 1998:31). Therefore, the value of love and affection needs to be reinforced in order to strengthen the ties among family members.

CONCLUSION

Based on the findings of the research and the above discussion, it can be concluded that the respondents emphasize on and apply noble values in their family lives. In relation to that, in the effort of establishing a harmonious family based on the practice of noble values, each family member needs to play a role, especially for the father as the head of the family who will be leading and shaping the lives of his family members. A harmonious family is the ideal family that is demanded by Islam, in line with the teachings of the Quran and al-Sunnah. It is a family that is laden with harmony, mutual respect, and helping each other, as well as benefiting other people. These benefits are not only felt by the immediate family members, but also by the surrounding community (Evi Sofia, Wawan G.A 2006:75). It is obvious here that the harmony of the household depends on the foundation of a good family life which is built using positive values taught by Islam. The family institution needs to be strengthened with noble values that are in accordance with the religion in order to produce individuals in the family who are responsible and able to fend off negative influences brought about by the rapid pace of development. The fact is, the effort of shaping the character of the individuals in the family should not be shouldered by the parents alone, but also calls for all parties to work together in performing their respective roles. Ultimately, this will be able to create a happy and peaceful life, as well as receiving the blessings from Allah the Almighty.

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MEASURING ROBUSTNESS OF THAI ATHLETES USING TRAIT ROBUSTNESS OF SELF-CONFIDENCE INVENTORY (TROSCI)

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ABSTRACT

Trait Robustness of Self-Confidence (TROSC) associates closely with strong willingness of athletes. This research examines the Thai version of TROSCI (T-TROSCI) validity and reliability with Thai youth athletes. Subjects consisted of 320 athletes who participated in the 38th Rajabhat University Northeast Games and employed by multi-stage sampling. The original version of TROSCI was taken into the back translation technique for identifying the T-TROSCI content validity and then a questionnaire was applied to 50 Thai National youth athletes so to examine measure reliability before collecting the next 320 samples. Then, confirmatory factor analysis (CFA) was analyzed in order to support its measure construct validity. Also, structural equation modeling (SEM) testing considered convergent validity by testing T-TROSCI and Thai Mental Toughness (T-MT), and examining concurrent criterion-related validity via sport success as criterion variable. T-TROSCI are highly valid in terms of content, , construct (Chi-square =20.46, df=13, p=0.0843, CFI=.98, RMSEA=0.042, SRMR=0.037), convergent (Chi-square =1,435.11, df=807, p=0.000, CFI=.97, RMSEA=0.049, SRMR=0.050) and concurrent criterion-related validity (Chi-square =52.10, df=38, p=0.063, CFI=.97, RMSEA=0.034, SRMR=0.050), and reliability ($r=.72$).

Keywords: Trait Robustness, Self-Confidence, Thai Athletes

INTRODUCTION

It is common among athletes, coaches and sports operators must have the confidence in themselves, self-confidence is a key factor to make the sport a success. There are several studies that show that self-confidence is one of the most important factors that affect the expression of intensity athletic performance of athletes (Craft, Magyar, Becker, & Feltz, 2003; Moritz, Feltz, Fahrback, & Mack, 2000; Woodman & Hardy, 2003), despite considerable research effort was to try to find ways to develop confidence. This is an important relationship between expressive behavior of the athletes themselves (Bandura, 1997) The ability of the athletes will be very important to the athletes' confidence in their findings that the strong sense of confidence. It will be linked to the adherence to the spirit of the athletes to be strong as well (Bull, Shambrook, James, & Brooks, 2005; Jones, Hanton, & Connaughton, 2002) Moreover, Bull et al. (2005). reported about the flexibility of self-confidence. And a strong sense of confidence, which is important to keep the athletes prepared physically and keep focused on their own, which is a key aspect of strengthening the mind in the future, confidence in self. It is important that the background of solving problems. Which according to the results of the study showed that self-confidence is a key feature of professional athletes (Galli & Vealey, 2008; Jones, Hanton, Connaughton, 2007) Moreover, Bandura (1997) suggested the belief in themselves, which is a unique feature. that comes from self-confidence and flexibility to solve the immediate problems of athletes addition, Bandura also provides insights on the belief that diversity in performance in three levels, with a focus on capacity development, including primary level. and the general level of strength, which is the highest level of efficiency in their ability to demonstrate that athletes are believed he could do it as part of a general belief in the efficacy of their own to show the level. A person with a belief in the efficacy or to transcend the situation and the final is the strength of its performance in which the expression of faith in their ability to confront the obstacles identified by the experience. Additionally, Bandura (1997) has also discussed the performance of the weak sentiment. This could be a result of the unsuccessful experience in the competition, in contrast, people who have faith in the potential of his stand. He has perseverance Try to do things that are difficult or obstacles. Finally successfully The basic concept in the study of Bandura for measuring performance in the beginning. The questionnaire in the belief that their ability to do so. There are 10 levels This level, which will lead to the level of their performance until a measurement of the accuracy of its performance in addition Bandura also developed a level of trust with the measure 100. 10 levels divided by the level of detail deeper. The scores range between 0 (no can do) the level is 50 (there is sure to be moderate) to guarantee the 100 (that can do absolutely), which translated means self-confidence of voters. well done all of you. I believe that confidence in their performance is something that can be improved by using a phenomenon or situation and different.

In addition, Lee & Bobko (1994) have demonstrated the greatest impact from the use of Bandura measure of confidence from strong early stage in a different dimension. This was a strong performance. It looks similar to its ability to maintain confidence in themselves despite the unsuccessful experience, it will look similar to the following features are. The behavior remains the same even time will elapse (Fleeson 2007) One of them is a form of self-confidence associated with the self-confidence that it is a form of confidence sport which Vealey (1986). This model explains forecasting features. (Character) Confidence Sports and adaptation goals. (Eg, skills and goals) that are associated with it are convinced Sports in turn influence athletic skills, confidence in their own ability to affect several sports. As a result, the athlete was positive emotions and create conditions to relax under pressure. And in this state, the athletes will have confidence in the result of the match. Even if it does not follow that matter. In addition, confidence in their willingness to contribute to an athlete and concentrated on the job to do. Resulting nervousness about other less confidence in themselves, which have an impact on the target and lead to success. It can be seen that the athlete's self-confidence. The goal is challenging, and as an athlete with low self confidence. It is an easy target This makes those athletes did not show their full potential.

In addition, confidence in their own athletes have also resulted in increased effort in training or competition. It also affects the strategy of the sport. Because athletes are to take risks. Play a lot more confidence in themselves and have a positive effect on the treatment Momentum in athletics. Which is the main factor for the success or defeat in a competitive game. The self-confidence, the athletes have to endure the problems and are trying to turn the situation well and it can be seen that different. Born of self-confidence. Expectations are high for the success in the sport. As well as research overview of self-confidence with the direction the competitiveness of Vealey, Hayashi, Garner, & Giacobbi (1998) found that self-confidence is important to have an effect on the stunt. Sports The level of self-confidence is an indicator of its ability to succeed in sports, which Bandura (1986) has explained more about the confidence in self that influences 1) the selection behavior (Choice. Behavior) is a person to do things one depends on the efficacy of self that has the ability to do two things it or not) affects the effort.(Persistence) and endeavor to work (Effort Expenditure) of individuals with highly specialized confidence. Will result in the existence of the events that have recently encountered an obstacle or an unpleasant experience 3) the thought patterns (Thought Patterns) and emotional reactions (Emotional Reaction) is a person who is confident the highly-be. People who have tried behavior arises from the action. Although some will fail, he will not give up. And not claimed as a matter of fate. The emotional reaction is the ability to manipulate the environment in the future. Which affect emotional responses. The individuals with high self-confidence only be proud when their stunt well. Do not feel ashamed when mistakes are happy to do. And no regrets when results do not go as expected. And motivate yourself to try harder obstacles encountered addition, Weinberg & Gould (2007) has described the self-confidence can be a success (Performance Accomplishments) to behave confidently (Acting Confidently) a. Think carefully (Thinking Confidently) to visualize (Imagery) strengthening physical (Physical Conditioning) and preparation. (Preparation) Also, how to build self-confidence is also dependent on social structures and culture. The study of the concept of Vealey (1986) did not consider the strength of conviction but recent studies in quantitative Galli and Vealey (2008), which had discovered the nature of the skills of flexibility. (The part that caused the problem solving) flexibility in the sport as defined by the Galli and Vealey help achieve more clarity about the confidence of Bandura in the strong performance of the past. I was still aware of the issue of rehabilitation of athletes to return to normalcy after the disappointment in the results (Clough, Earle, & Sewell, 2002; Gould, Hodge, Peterson, & Petlichkoff, 1987; Jones. et al., 2002) strengthened the character of the self-confidence of the athletes will strengthen higher skills and more, it would create a level of self-confidence even further (Bandura, 1997).

This article will present a series of studies to develop accurate measurement of the trait robustness of self-confidence of the athletes attending sporting Rajabhat University. The Northeast at 38 for basic information important in the development of self-confidence in sports. This will have a profound effect on the development of professional athletes to be successful in the next competition.

OBJECTIVE

To test and quality tools for the measurement trait robustness of self-confidence in athletes Thailand, which consists of qualitative aspects content validity, structural validity, convergent validity, and concurrent criterion related validity.

METHODOLOGY

Sample

The sample used in this study is the athletes Thailand. Participating university athletics in competitive was 38th Rajabhat University Northeast Games at the University of Rajabhat Mahasarakham .Between 20 -26 December 2014, the size of the sample as a condition of the test, the relationship linear structure, the size of the sample, the minimum is 20 times the questions in the questionnaire (Tabachnick & Fidell, 1996), so samples. This research was 320 people randomly selected by multistage (Multistage Random Sampling) to obtain samples from a variety of sports. And covered by gender, age and hometown of the athlete. This is a good representation of the population of Thailand athletes.

Tools used in research

1. The tools used in this research is to measure the trait robustness of self-confidence in athletes Thailand (Trait Robustness of Self-Confidence Inventory: TROSCI) of Stuart Beattie, Lew Hardy, Jennifer Savage, Tim Woodman, & Nichola Callow (2011), which the researchers interpret and verify the validity of the content validity query by a qualified specialist doctorate in sports psychology. And Sports Science Both in Thailand and overseas by way of Back Translation have questions measure trait robustness of self-confidence in young athletes Thailand 8 Article 8 elements that represent trait robustness of self-confidence. Thailand in young athletes The scale of this research is a self report. The rating scale assesses the 9th rank (rank 1 is not true for me is true for me, and ranked 9th). table 1

2. The development of a trait robustness of self-confidence in this research was developed by back translation the nature of the trait robustness of self-confidence in Thailand's athletes. Join sporting university. The Northeast at 38 20-26 December 2014, 320 people (160 male, and 160 female) with the experts in psychology, sports psychology, sports Doctoral degrees in 2 patients and professionals. The English have a PhD in English of two people by a specialist foreigners in English, with a Ph.D. in English number one, to analyze and review the terms of the measure is trait robustness of self-confidence. It shows the quality of the content validity of the questionnaire in table 1.

Table 1: The Trait Robustness of Self-Confidence Inventory (TROSCI)

		Strongly Disagree				Neutral		Strongly Agree		
		1	2	3	4	5	6	7	8	9
1	A bad result in competition has a very negative effect on my self-confidence.	1	2	3	4	5	6	7	8	9
2	My self-confidence goes up and down a lot.	1	2	3	4	5	6	7	8	9
3	Negative feedback from others does not affect my level of self-confidence.	1	2	3	4	5	6	7	8	9
4	If I perform poorly, my confidence is not badly affected.	1	2	3	4	5	6	7	8	9
5	My self-confidence is stable; it does not vary very much at all.	1	2	3	4	5	6	7	8	9
6	My self-confidence is not greatly affected by the outcome of competition.	1	2	3	4	5	6	7	8	9
7	If I make a mistake it has quite a large detrimental effect on my self-confidence.	1	2	3	4	5	6	7	8	9
8	My self-confidence remains stable regardless of fluctuations in fitness level.	1	2	3	4	5	6	7	8	9

Data collection

The data collected in this study collected data manually Rajabhat University. The Northeast was 38 at Rajabhat Mahasarakham University. Between 20-26 December 2014, through coordinated by athletic trainers or managers. Then the athletes answered questionnaires during the busy athlete from competition. And select subjects with ease. And willing to provide information. The researcher explained the purpose of research. How to answer a measure trait robustness of self-confidence. And provide samples to sign the measure before answering the question, the researchers examined the question of the integrity of the sample. If found incomplete, it will be asked again to confirm the answer. To get the most complete, accurate information.

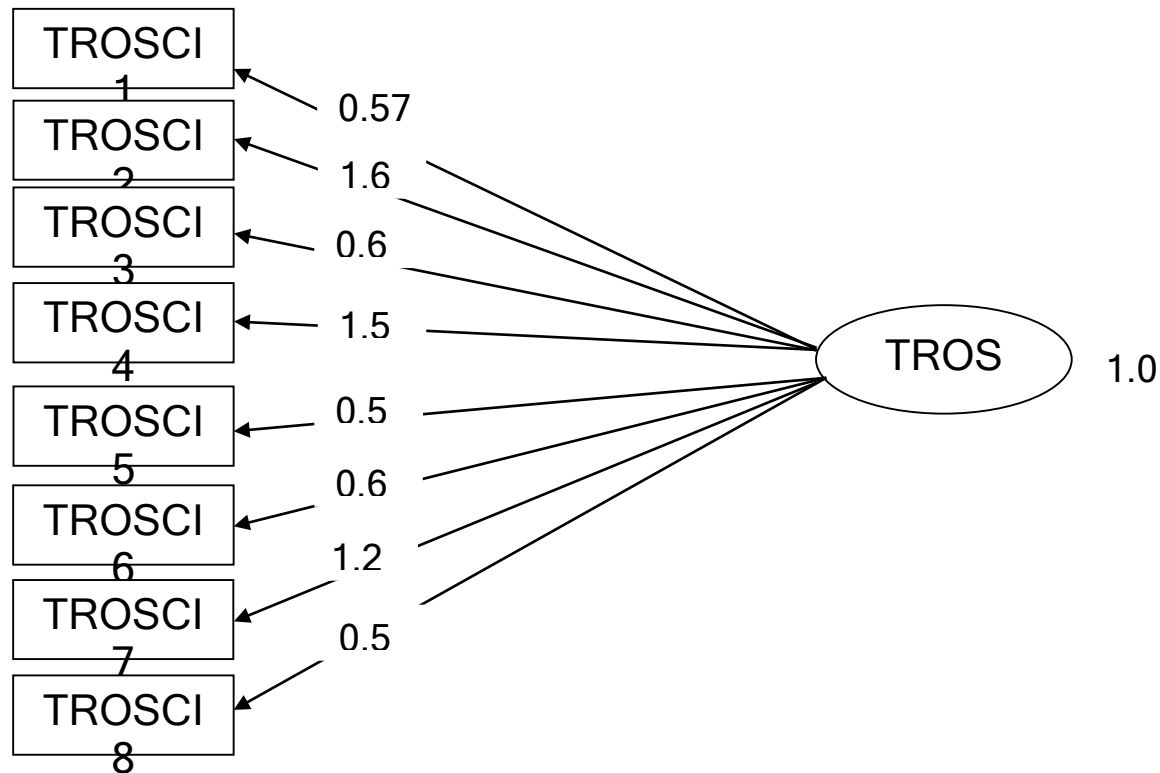
Data analysis

This research analyzed with descriptive statistics. And test the validity of a measure trait robustness of self-confidence (Trait Robustness of Self-Confidence Inventory: TROSCI) by confirmatory factor analysis (First-Order Confirmatory Factor Analysis: 1st CFA) of athletes. Thailand. The statistics used in determining the appropriateness of the

information is harmonized index (Fit Indices), which include Chi-Square, CFI, TLI and RMSEA and the weight of the composition. (Standardized Factor Loading)

RESULTS

Test models of the trait robustness of self-confidence (TROSCI) from the model and found that the harmonized index of model assumptions that: Chi-square = 20.46 df = 13, $p = 0.0843$, RMSEA = 0.042, CFI = .98, with the model in figure 1.



Chi-square = 20.46 df = 13, $p = 0.0843$, RMSEA = 0.042, CFI = 0.98

Figure 1. Factor Loading and Error Terms for the 1st CFA of TROSCI

DISCUSSION

Summary of the research results

1. Overview of samples from athletes Thailand. The sample in this study, a total of 320 people, 160 male athletes and 160 female athletes were classified by age level found in athletes younger than or equal 18 years, a majority (50.7 per cent) of people aged 19 and over (49.4 percent), almost half the level of higher education in years one and two (62.2 percent). The second is the level of higher education in year three (24.1 percent) and education level of higher education in four years (6.9 percent), respectively, also showed that the samples play team sports, mostly. (87.2 percent)

2. Analysis of the content validity of the test as a trait robustness of self-confidence. The development of a trait robustness of self-confidence. In this study found. As a measure of quality of content validity. The researcher has developed a reverse back translation as a measure trait robustness of self-confidence. English version. The research, a measure of Stuart Beattie, Lew Hardy, Jennifer Savage, Tim Woodman, & Nichola Callow (2011) by the number two sports psychology experts who have PhDs. Translated from English into Thailand and professionals in English Doctoral degrees are 2 translation from Thailand back to English again later, the researchers brought the measure trait robustness of self-confidence to foreign experts, the English number one who has a PhD in order to determine

compliance-oriented content. Then test the construct validity for the measurement of the trait robustness of self-confidence. Results from the analysis showed that the harmonized index of analyzing the validity of a measure trait robustness of self-confidence. Has the right (Chi-square = 20.46, df = 13, $p = 0.0843$, CFI = 0.98, RMSEA = 0.042, SRMR = 0.037), which showed that. A measure strengthened the character of an athlete's self-confidence in Thailand as a measure of the construct validity. Including analysis for quality assurance. By calculating the Cronbach alpha coefficient are equal 0.72 for the show that was designed to measure the trait robustness of self-confidence. Have confidence in the good.

3. Analysis of convergent validity. A measure trait robustness of self-confidence which has a similar theory for the measurement of psychological strength (Choosakul & Julwanichpong, 2010). The results showed that the harmonized index of analysis, validity as a measure of the trait robustness of self-confidence and a psychological measure the strength of the athletes Thailand. A reasonable fee (Chi-square = 1,435.11, df = 807, $p = 0.000$, CFI = 0.97, RMSEA = 0.049, SRMR = 0.050), which suggests that the two measures are closely related issue is the evidence indicates that there is validity.

4. Analysis of the structural measures trait robustness of self-confidence on the success of athletes, sports Thailand. One key objective of this research is to determine the concurrent criterion-related validity for the measurement of the trait robustness of self-confidence. In this study the accuracy of such determinations by defining and developing variable success as a criterion variable that correlated with the strength of character, self-confidence for the athletes Thailand. The variable is the result of a strong trait of self-confidence. This means that Sports success is the criteria used to judge the validity of a measure strengthened the character of self-confidence. The results showed that the test has validity conditions can be measured by the trait robustness of self-confidence. The actual theory Athletes who are mental toughness higher. It would be more likely to have higher sporting achievements. Athletes who are mental toughness lower.

Adjustment of model assumptions by allowing deviation of observed variables some relationship to each other. Due to the nature of the variables used to measure the same way. Analysis result It appears that the model adjusted in harmony with good information. The harmonized index of model assumptions are as follows.(Chi-square = 52.10, df = 38, $p = 0.063$, CFI = .97, RMSEA = 0.034, SRMR = 0.050) and standard variable coefficient influenced by the strong character of confidence in their own sporting success. = 0.193 confirms the validity of the test scenarios strengthened by the appearance of self-confidence. Contribute to the success of athletes, sports Thailand.

The study was reported and confirmed the validity of the test situation as a trait robustness of self-confidence. Which is measured by the trait robustness of self-confidence. The testing and verification of such quality. The reason that this study has used a variant sporting success criteria to compare and test a strong correlation with the trait of self-confidence. This is consistent with the paper, which proposed that. The success of the athletes have come from a strong psychological component (Loehr, 1986), especially in the development of athletes into the Champions (Norris, 1999), including the recognition of coaches feel that. Strength of mind is vital to progress towards the achievements of the athletes.(Gould, Hodge, Peterson, & Petlichkoff (1987) For this reason the researchers chose a variable sporting success in testing the validity of the test situation as a trait robustness of self-confidence.

The results of this study the trait robustness of self-confidence in their quality in terms of confidence. The construct validity and the convergent validity and examining concurrent criterion-related validity forecasts predict success in the sport of athletics, athletes participating in competitive Rajabhat University. A group of Northeast 38th between 20-26 December 2014 at the Mahasarakham University.

Limitations of this study is just a small sample, while only experimental group, which will further develop and expand the scale trait robustness of self-confidence to take repeated measurements and predict athletes the national team next.

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MEDIA CONSUMPTION AND YOUNG ITALIANS' ATTITUDE TOWARDS IMMIGRATION

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ABSTRACT

In today's society web, social media, and new technologies play a fundamental role in many areas of human life. The steady and strong growth of these new tools and instruments, allow many scholars and experts to study various new phenomena connected with these instruments' evolution. When 2.0 revolution began, many of them believed in its positive power. However, after more than a decade, it is possible to say that the analytical approach to this evolution allow to understand not only potentials but also the limits of this peculiar conjunction. This paper particularly focused on a specific area of melting between technologies and the development and understanding of everyday knowledge. Media habits are changing and television, radio and newspapers are not anymore the holders of the truth. The Internet, the possibility of being always connected and the social networking practices, allow people to have access to more information in less time, but without the guarantee of sources authority. Nevertheless, many studies underline that the more people are young the less they are willing to stay informed through *traditional* informational channels. For this reason, this study wants to understand in which way the new media habits of young Italian people influence their perception of reality. The study will analyse which kind of relationship exists between the overexposure to social media news, produced or shared within the subjects' social media echo-chambers, and the social representation of reality. To answer this question, a sample of 192 young italians will be analysed in a quantitative and qualitative way. Their media habits will be reconstruct using questionnaires. These will be also useful to understand in which way and how much their selective exposure influences them in the perception of the social reality. To realize this, the study focused on a strong topic within the Italian environment: the perception of *migration flows* within the country. This theme allow to compare the idea that youngsters construct about the reality through their social networks with statistical precise data extract by national organizations and research centers. The study will be a strong starting point in understanding youngsters dynamics of building their knowledge environment and will help in comprehend how they are affected by the social media echo-chambers phenomenon.

1. INTRODUCTION

Over the last decade, there has been a fast-paced and constant evolution of media and their related technologies (Di Fraia, 2012). The figures of this evolution are all the more evident in the ubiquitous (mobile) connectivity [routines](#), which represent online interactions more and more characterized by wide overlapping margins in relation to the offline social circle of users. Online services, the web and social media continue to evolve side by side, as well as in an intersected way, with the development of people's sociality, habits and needs. The propagation of the adoption and *domestication* practices of these technologies in people's daily lives, although it did not occur in a uniform way among the population, led the scholars to talk about a real paradigm shift in the forms and patterns of human communication (Di Fraia, 2011) with significant implications on power relations associated with media usage. New relational processes, based on increasingly reticulated and peer-to-peer systems, spread over thus reformulating the "one to many" hierarchical model of mass media communication, in which large public or private organizations (newspapers, TV, radio, etc.) provided informative/seductive content via differentiated distribution systems for each specific medium. Castells (2009) refers of "mass self-communication era" to indicate the dual status of the individual – both producer and consumer of content - made possible by the diffusion of the so-called social media. Mass-based self-communication is a form of communication characterized by the possibility that network technologies and social media offer to practically

everyone to generate content potentially capable of reaching out to a global audience. In contemporary society, interpersonal communication, mass communication, and mass self-communication, however, do not tend to replace each other, but rather they integrate and complement each other in a complex process of survival, hybridization and media developments, together with the social practices of appropriation and usage of the same. The scenario characterizing journalism/news-making is also that of an *hybrid media system* (Chadwick, 2011) where online and traditional media outlets contribute to constant news flow production (Skogerbø and Krumsvik, 2014), alongside a form of participatory production and distribution of news, made by a creative (Castells, 2009) and engaged audience. This phenomenon, called *citizen journalism*, has not only changed the way people get informed, yet it has also deeply influenced the production and distribution chain of the news-making system. Individuals, therefore, seem to be facilitated in their ability to gather information, find in-depth news on the most diverse topics on the one hand, and - on the other hand - to also make and disseminate news on various media, particularly social media. However, the proliferation of information sources and the increasingly faster production of news/content raise some important issues, such as the verification of the reliability and authority of the authors.

This paper describes a study aimed at analyzing whether and how certain media usage practices can lead to the construction of different perceptions in relation to some phenomena of social reality. In particular, the study enquires how the evolution in the way young people get informed, can lead to different attitudes towards immigration, a phenomenon regularly discussed and covered by both the mainstream and the online media in Italy. The work aims to understand what kind of relationship exists between different media usage types and (over)exposure to the news – made possible by the web, particularly social media – and the perception (in cognitive and evaluative terms) of the presence of immigrants in Italy.

To answer these questions, an empirical research was conducted using a qualitative and quantitative approach. In this paper we will focus only on the quantitative part, which consists of a survey conducted on 200 subjects aged between 20 and 25 years (while the results of qualitative research are currently under development).

The first part of the paper outlines the background of this research, which develops itself starting from some "classic communication" theories (Cultivation Theory, Agenda Setting, Uses and Gratifications) and moving onto their most recent elaborations, related to the concepts of *Misinformation*, *Filter Bubbles* (Parisier, 2011), and *Echo Chambers* (Flaxman, Goel, Rao, 2016), which are applied mainly to online information. The second part describes the study project, which focuses on the media consumption of the young Italians and their attitudes towards the migration phenomenon. The paper then closes explaining and discussing the main key findings of the empirical research.

2. THE THEORETICAL FRAMEWORK

The background, within which this research has been conceived, is composed of several elements, in particular from the *Theory of Cultivation* (Gerbner, 1980) and the *Agenda Setting* (Shaw, 1979; McCombs, Shaw, 1972; 1993). Both theoretical approaches are meant for the analysis and understanding of mass media-related phenomena, yet not the new media characterizing the Information Age (Castells, 2010). However, these theories are "fluid" and therefore can be also applied, with due diligence, in the new media environment (Morgan, Shanahan, Signorielli, 2015). Cultivation theory considers audiences as a set of people who have a relative ability to choose the media messages they are subjected to. For this reason, the theory gives great importance to the exposure time to the media and also considers the environmental and social elements in which the audience is set: "*people are born into a symbolic environment with television as its mainstream*". An important element of the cultivation theory, and connected with the goals of this study, is that it does not focus on the immediate effects of messages and media exposure, but rather on the long-term effects, representations of the real world as well as the complex consequences coming from an immersive media environment. With reference to television, one of the hypotheses of this theory concerns the construction of distorted visions of reality on the basis of exposure to more or to less media: if a person spends most of his/her time consuming media content, regardless of format or type of program watched, he/she will still have little time to use for getting informed through other means of communication. This may lead to seeing and interpreting the world in a restricted and limited way as to the media universe created by the television.

Comparing official statistics with what perceived by research participants, Gerbner and colleagues (1980) define the so-called "Mean World Syndrome", which describes a phenomenon whereby people heavily exposed to violence on television are more fearful of being attacked or becoming victims of brutality compared to others, thus having an exaggerated vision of phenomena such as those of danger, violence, and victimization.

In order to adapt the theory of cultivation in the contemporary environment, however, it is important to look dynamically and longitudinally at the effects that media exposure may generate. Prior to the development and the propagation of digital media, content and stories were identifiable and broadcasted by a limited number of media, although that cannot be said for contemporary media practices. Some researchers have shown different interpretations of social phenomena whenever they relate to narrated and constructed stories through a wider number of media and through fragmentary channels (Morgan, Shanahan, Signorielli, 2015). Although this content mostly relate to personal narratives (Facebook posts, tweets, etc.), rather than public narratives or fictional material, nevertheless they are part of the stories that shape our vision of the world as a whole. Even proto-stories and fragmentary news may become an active part in building the collective imagination.

Another point of reference for this work is that of the Agenda Setting (Shaw, 1979; McCombs & Shaw, 1993), in relation to the phenomenon of immigration, which is one of the mostly discussed and heavily covered topics *nowadays* on the Italian media agenda. According to this approach, it can be said that the more certain topics are in the media spotlight, the more they become important to citizens and vice versa. The media make news about what appears to be of interest to the viewers, according to precise *criteria of newsworthiness*. Although also in this case the situation has changed since digital media have arrived, it is equally true that media continue to give greater or lesser relevance to certain issues, which become, therefore, the items of fundamental importance to the people who recognise them as the most urgent to deal with.

What is actually changing in the new media environment, relates to the processes and the logics that make specific news and topics emerge and become relevant compared to others. Recent works have developed some elements which link to the two theories above mentioned - including the overabundance of communication, the difficulty in monitoring the authority of the sources, the scarcity of time both in terms of getting informed and reducing the attention span - leading to a superficial approach to news.

Furthermore, the role of the journalists and of the news agencies appears to be no longer sufficient to fulfil the role of *professional gatekeepers*. While online newspapers represent the extension of mass media (Missaglia, 2016), the online arena has become extremely wide and rich thanks to user-generated content; this new scenario offers people increased possibilities and options for gathering, verifying, and amplifying one's personal knowledge (Bright, 2014), while search engines and aggregators assume the role of *gatekeeping* tools (Hindman, 2009). It is, however, wise to wonder whether the evolution of the news channels, the transformation of journalism into *citizen journalism* (Altheide, 2013), as well as the need for different news outlets to produce content at an ever-increasing rate, have actually increased people's chances to get informed and consume in-depth news, and whether and how people have actually started building more complete and complex information diets.

This scenario would in fact require a more active audience/usership, not only in terms of selecting and using specific media to meet certain needs (information, relation, entertainment, etc.): on the one hand the connected audiences (according to the theoretical strand of *uses and gratification*, Katz, Blumler, Gurevitch, 1974) are oriented towards a purpose they seek to achieve through the active and dynamic use of media; on the other hand, the logics behind production, output and reception of news are increasingly machinic/algorithmic and linked to the ability of profiling users to whom content and online messages are addressed.

Furthermore, it has to be taken into account that, although the propagation of the Internet has enabled individuals to have easier access to more news, at the same time people have the tendency to choose to get informed via sources that simply confirm their opinions. Experiments focusing on the construction of political opinion have in fact demonstrated this phenomenon (eg Garrett, 2009; Iyengar and Hahn 2009), which is, by no means, new. Many sociological and psychological theories have defined, though in different ways, phenomena of this nature.

One of the interpretations, in this case taken from psychology, given to this phenomenon can be traced back to the *Theory of Cognitive Dissension* (Festinger, 1973). It originates from an axiom according to which man tends, by nature, to remain coherent with himself in his way of thinking and acting. However, it is almost impossible for a human being to live fully coherently. For this reason, whenever a deviation from coherence in thoughts or actions is perceived, one will perceive what is called *dissonance*. This causes a feeling of discomfort in the human being who will therefore try to *rationalize* and *normalize* the situation, bringing it to a balanced situation.

Similarly, sociological approaches have dealt with the topic of interpretation of reality and the construction of meaning, introducing concepts such as that of *suspending doubt* (Schutz, 1962). Rather than constantly questioning events, actors tend to give sense to everyday reality according to interpretative schemes already acquired through individual experience and socialization processes. This necessity, defined by Schutz as “*epoché of the natural attitude*” derives, according to contemporary psychology, from the principles of “cognitive economy” that regulate the functioning of the human mind. Within the interpretative resources provided by *common-sense* (Jedlowski, 2005), for example, many objects in the outside world appear to actors to be “*normal, known, and taken for granted*” (Schutz, 1962, Berger & Luckman, 1967) and don’t need further information processing actions to be understood with a great cognitive benefit.

On a more general note, the study of cognitive processes has largely shown how the human mind is more likely to reconfirm any existing knowledge of reality rather than acquiring new patterns that might question the visions of the world already absorbed by the individual.

Psychology refers to these phenomena through different interpretative models, including that of “*confirmation bias*”, and the theory of the *backfire effect*. Confirmation bias is the mechanism, widely demonstrated at experimental level, through which people tend to search for, select and interpret information by paying more attention and giving greater credibility to those confirming their beliefs or hypotheses, while they tend to ignore or give lesser importance to information that contradicts them. A phenomenon that works in such a way to become more relevant as the topics give rise to strong emotions or touch upon deeply-rooted beliefs in the subject White et al., 1993)

According to the *backfire effect* theory, the human brain is also led to deceive itself to maintain a state of calmness and stalemate. If a piece of news or information clashes against one’s set of beliefs, this can cause a number of reactions and, in any case, the more the subject of debate is related to emotional topics - to which the person is particularly attached – the less will one be inclined to change point of view (Kaplan, Gimbel, Harris, 2016). Nowadays, such mechanisms are joined by the mechanisms that underpin the functioning of search engines, social media and news aggregators.

Therefore, if theoretical and empirical (sociological and psychological) elaborations have demonstrated how the human brain tends to seek coherence and consuetude - rather than dissonance - with the development of *machine-learning* technologies (Hannak et al., 2013; Agichtein, Brill, and Dumais, 2006; Das et al., 2007) algorithmic models can be considered as a true technological outgrowth that overlaps with the cognitive economy mechanisms above described.

In fact, the risk is that the algorithms regulating the news flow to which citizens have access, are so customized to the point of becoming so-called *filter bubbles* (Parisier, 2011; Pfeffer et al., 2016). That is, information bubbles within which only certain topics or opinions can surface and acquire relevance. Connections between people function as a first-level filter, since they are mainly built by homophile. People with similar profiles, tastes and interests will be more inclined to make ties and connect with each other. The mechanisms of interpretation of the interests by social networks work as a second-level filter. Algorithms that regulate the news flow of social networks know the user's preferences information-wise. For example, if a person is interested in political news, the algorithm will likely show him/her similar news in the future. Inside these information bubbles, generated through aggregation (especially online) of people who tend to connect with their own kind (thus creating *sympathy groups*, Zhou et al., 2005), ideas that reinforce previous knowledge and conceptions are generated and developed, therefore increasing the risk of ideological segregation and polarization. In fact, *Lack of diversity* is what characterizes *filter bubbles*.

Echo Chambers (Sustein, 2009) are strictly related to this concept. They are communicative environments within which the exchanged and exposed points of view are extremely conforming. It is acknowledged that the users themselves prefer to select content, which is related and similar to their thinking, anytime they have the option to choose. (Garrett, 2009; Iyengar and Hahn, 2009; Munson and Resnick, 2010).

In recent years, the issue of so-called *misinformation* has also emerged. A broad and generic term indicating a phenomenon according to which unverified news and information are considered to be true. The *misinformation* phenomenon travels in parallel with that of *fake news* and the *conspiracy theories*. All these phenomena are not born with the arrival of the web and social networks. An example is given by news of a conspiratorial nature that started to circulate on the spread of HIV (Bogart LM, Thorburn S, 2005, Kalichman SC, 2009, Bates, 1990, Cooper, 1990). In this case a fallacious piece of information had begun to spread around thus forming a strong *collective credulity*. In such cases, scientifically-based news are actually misled by other types of interpretation where the fear of hypothetical conspiracies causes scientific evidence to be replaced by beliefs (Mocanu et al., 2014, Sunstein CR, Vermeule A, 2009).

3. EMPIRICAL RESEARCH METHODOLOGY AND REFERENCE SAMPLE

As previously introduced, in contemporary society the information and communication technologies have changed and so has the way of adopting and using them. While up to 20 years ago it was possible to reconstruct the composition of people's media consumption - as they were marked by precise timelines - today media pervasiveness means that they are omnipresent in people's lives and their usage appears to be continuous, making it complex to outline moments when individuals are not exposed to some media stimulus. With due consideration to these changes, this study will try to define how people's mix of media exposure and diet can influence the perception of specific and measurable social phenomena.

A qualitative-quantitative research model was built in order to answer the questions posed by the study. In this article we will focus only on the quantitative phase, consisting of a *survey* conducted on 200 subjects aged between 20 and 25 years old. The tool used was a questionnaire composed by 20 closed questions, which served primarily to reconstruct the *media practices* of the participants, and secondly to investigate their *attitudes*, by taking into consideration their cognitive and evaluation components towards the phenomenon of *immigration*.

3.1 YOUNG ITALIANS: CHARACTERISTICS OF SAMPLE

Several researches have studied the relationship between the younger sections of the population and digital media (Lee, 2016; Corecom Research, 2016; Ockoljic et al., 2012), investigating their information practices, particularly with regards to political and social issues (Poindexter, 2012; Lenhart, Amanda, et al., 2010; Casero-Ripollés, 2012; Lee, 2016; Holman, 2009).

The fragment of young Italians, object of this study, falls into that segment called Millennials, which includes the very first generations for which technology has become an integral and essential part of everyday life. Scholars have also defined these subjects as "digital natives" (Prensky, 2001). Millennials are characterized by having a strong mistrust towards organisations (Lee, 2016) and the media (Cillizza, 2015), which they believe to be extremely controlled by political powers in terms of news-making processes and, consequently, consider them not reliable. Most of them admit that they are getting informed through Facebook on a regular basis, while 68 percent state to rely on social media to get most of the information and news (Millennials and News, 2013) they need.

As reported by a Media Insight Project research (2015), the majority of young Italians, between the age of 18 and 35 years, are not interested in constantly searching for news although they get in contact with it nevertheless. What characterizes their media consumption is mainly social networks, which are usually enquired via mobile devices in "always-on" usage mode. A practice of consumption that could lead to a vision of the world shaped primarily by news that reach users through the algorithmic logic of the social web. By putting in relation the issues mentioned in the first paragraph of this work (*filter bubbles*, *echo-chambers*, *misinformation*) with the media consumption habits of young people, it is possible to question how far their media diet and the mix of news, with which young people come into contact, may lead to an image of reality partially or heavily distorted, as mostly constructed by opinions and news from non-authoritative and unofficial sources. A research by Stanford University (2016), developed on a sample of 7,804 young people (from middle school to university), has shown, for example, how confidence with digital media does not imply automatic recognition of more or less reliable news, or the ability to distinguish news from advertising content.

For this reason our study aims to understand, among other goals, how young Italians perceive a complex phenomenon such as immigration, based on their media diets. Specifically, it seeks to comprehend whether as the number and variety of media sources increases, the possibility of having a more positive and realistic vision of reality, on specific social phenomena, increases as well and becomes less affected by *filter* or *echo* effects.

By moving onto the research specifics, the sample of young people participating in the research has been built with a criterion of rational choice (*theoretical sampling*) for a total of 200 responding subjects with an average age of 22 years old.

A total of 192 completed questionnaires were considered valid, while the reference sample was composed by 47% male and 53% female; -

52% of the respondents indicated to be university students, of whom 35% represented by full time students and 17% by student-workers; the average age of this part of the sample is 20.5 years. The remaining 48% of the sample is composed of young workers or full-time interns, with an average age of 23 years.

4. MAIN RESULTS OF THE STUDY

The quantitative data analysis aimed at exploring different types of media consumption as well as questioning how the profiles associated with different uses of media in general, and social media in particular, lead to building attitudes and perceptions of phenomena, specifically that of immigration. The following paragraph will first describe the media consumption habits of the youth sample in terms of quantity (how many channels are used, what are the favorite media, how many subscriptions to social networks, etc.) and usage quality (purpose of use, types of news accessed, approach to content production/sharing). Secondly, a *clustering* of profiles will be illustrated with regards to the propensity to information, to media usage, and media content, analyzing its relationship towards the construction of attitudes related to the issue of immigration and the perception of the dimensions of the migratory phenomenon.

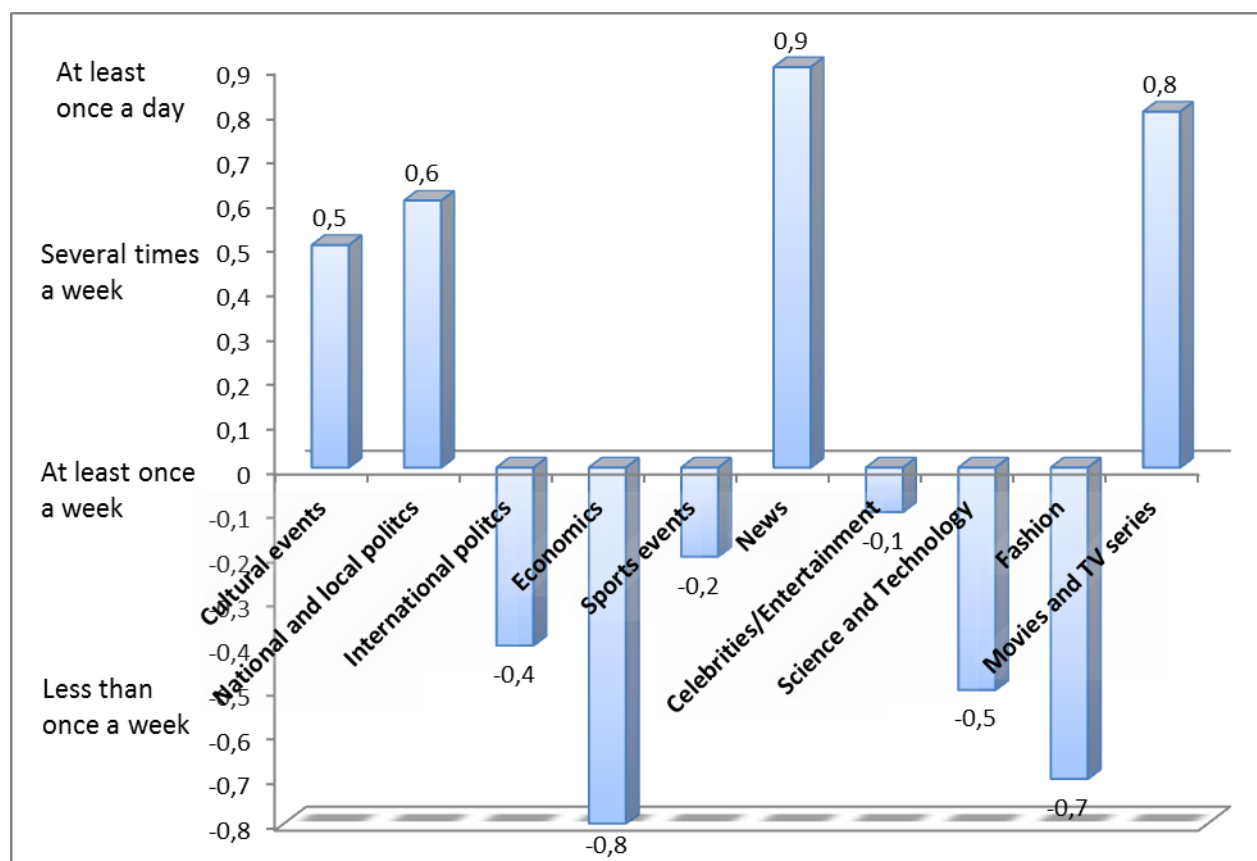
4.1 MEDIA CONSUMPTION OF YOUNG ITALIANS

Young Italians' so-called media diet has been investigated, on the one hand in the attempt to trying to understand which media were mostly used in the daily lives of the subjects, and on the other by putting these data in relation to the type of content of interest and concern to them (following *Uses and Gratifications* logic, to understand which media can respond to specific people's needs/purposes).

Understanding *how* and *in which way* different media are used has been considered of maximum interest.

An additive scale (additive scale with items related to the various possible topics of information, with ordinal modes ranging from "multiple times a day" to "never"; therefore, the variables were considered as quasi-cardinal, with score range 7) ^{le+} was built in order to measure the frequency of use of the media and the type of content consumed more frequently.

Regardless of the topic of interest, the majority of the sample searches for information "at least once a week" (range 7 pts, 3 pts av., Std 1.6). As shown in the chart below, the themes most likely to be inquired ("at least once a day") are those related to (national and local) news, movies and TV series, (national and local) politics and events (concerts, exhibitions, etc.).



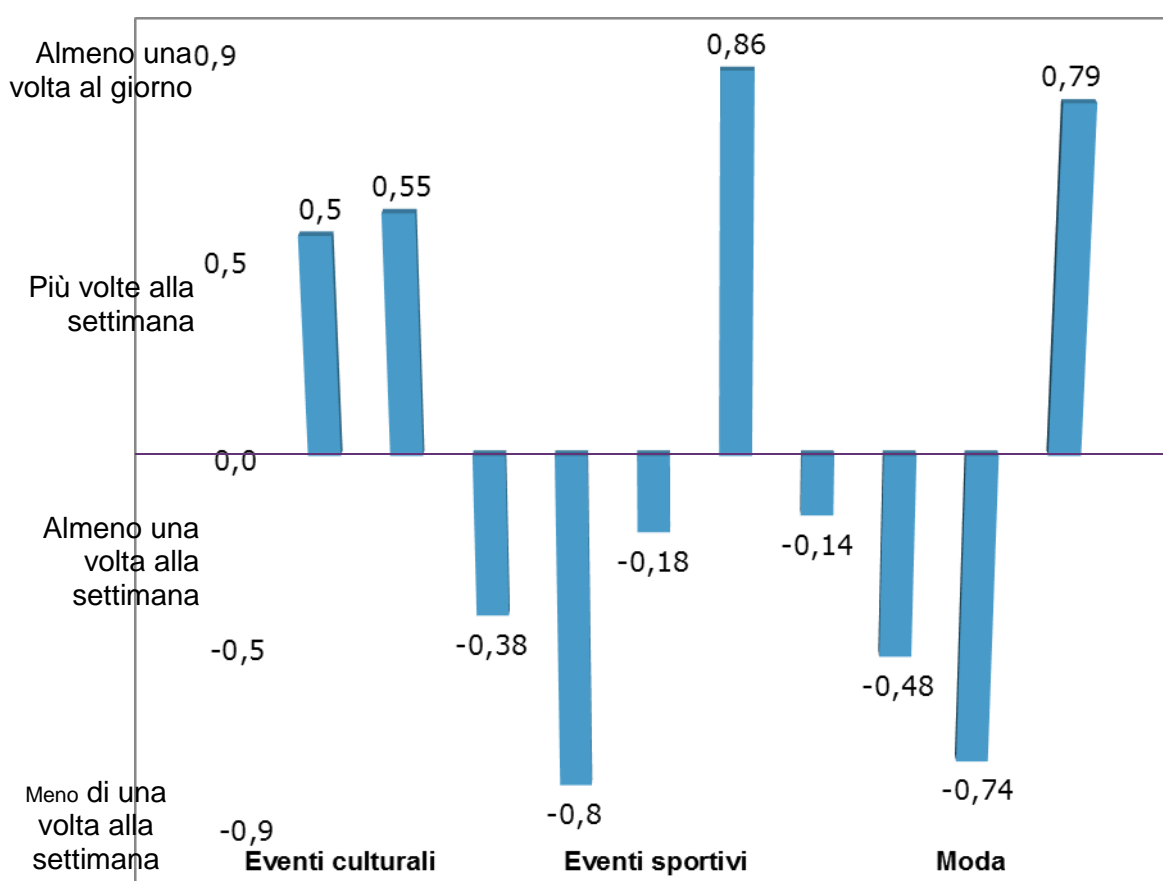


Fig. 1 Higher vs. lower frequency of information research with reference to the different topics

This data is interesting because, on the one hand, the practices of fruition reflect the same logic than the news life cycle of the related media channel, and on the other hand it emerges that young people demonstrate to have basically a similar interest both in news and entertainment content. The differences between students/student-workers and workers in relation to the propensity to information on the different topics were not statistically significant.

The term "media diet" is used to define a modality of media consumption consisting of different ingredients and dosages: the young Italians' section of the population (and the Italian population in general) is characterized by a fruition mode where different *devices* and content are used with diverse frequency and purposes, therefore reflecting the evolution of the media system in which hybridization and multimedia/multichannel represent the digital landscape of today.

The results obtained show in fact that *mainstream* media (TV and Radio) have a preponderant role in news-related media consumption. 53.4 percent of respondents claim to use those media to get informed. Online channels, though present, are the main information media for just about 30 percent of the sample, a lower percentage than expected from a group composed only by young people. Facebook is considered the most useful for this purpose - as 22 percent of the respondents declared - followed by online news outlets used by about 6 percent. Other social media are not mentioned among the "most used media" by the respondents.

The study, therefore, outlines an *hyper connected* use of media by young people, mirroring the increase in content supply and the ever-greater overlap between digital platforms: young Italians, in relation to the broad and varied media system, build their own media *ego system* for entertainment and information content consumption purposes. The results of media use by young people in the sample are aligned with what other researches, conducted by national institutes and observatories, have found out with regards to the Italian population in general and young people in particular. National statistics sources show that Italians still satisfy their information needs via the television, especially through news programmers and 24hr news channels. One fourth of the population (24.7%. Percentages of users who have indicated the type of medium used to acquire information "in the last week" according the *Thirteenth Report on Communication*. Censis 2016) declares to use

the radio news programmers regularly, although there is a significant share of people using Facebook (35.5%) and searching for information and news on the web (19.4%). The latter are, if observing a cluster of people under 30, together with YouTube channels, those that show the highest usage practices among the information tools used.

Based on the use of media for information purposes declared by our respondents, a statistical indicator was built to delineate different subject profiles² (The indicator has been created on the basis of a weighting of position indexes that considered the first, the second and the third average with reference to the media used to inquire²). The typologies built were those of:

1) *radio-television type*: corresponding to 61 percent of the sample. Those are individuals who indicate radio and TV as the main means used to get informed. However, they are also open to using social media to acquire information. More than 40 percent of this group use more than two social media to get informed. They are also open in terms of topics of interest, ranging from news to pure entertainment.

2) *paper type*: representing only 7 percent of the sample. They indicate print media as the main channel for information and result to have a lukewarm use of social media for information purposes (around 50 percent indicates to use one social media for this purpose). Their interest in news shows a propensity for factual reporting and the economic-political and scientific themes.

3) *Digital*: representing 32 percent of the sample. They claim to get informed mostly through digital channels and are mainly interested in entertainment topics.

Up to now the study has focused mainly on the use of media for information purposes; from this point onwards we will put the attention especially on digital channels and different usage practices.

Firstly, it is interesting to understand the intensity of use of social media (SM) from the number of subscriptions to social channels. By using the answers to this question, three groups were built: the first one, the *soft connected* one, represents 11 percent of the sample, and claims to have only one profile open on a single social media; the second group, that of *medium connected* is composed of people who have subscribed to two social media and represents the wider part of the sample (49%); thirdly, the *heavy connected* group, which comprises 40 percent of the sample, consists of young people who declare to be subscribed to more than two SMs. Among the types of occupation of those part of the sample and the number of social channels to which they are subscribed, there was a statistically significant relationship (*sig.<0.05*): students seem to be more present on social networks (with three or more profiles) while workers are less present (with one or two social media). The SM to which respondents claim to be active and with only one profile are mostly Facebook (used by 96 percent of the sample) and Instagram (used by 79 percent of the sample), while Twitter attests to a rate of adoption of 29 percent on the total number of respondents.

The results demonstrated to be consistent with those obtained from a recent survey by the "Osservatorio Giovani" (Toniolo Institute, 2017) on "Propagation, use, and dangers of social networks", conducted on a sample of 2,182 representative subjects of young Italians in the 20-34 years old group³. Almost all of them state to be on one social media (93%), and within them: 90.3% has an account on Facebook, followed by Instagram with 56.6%, and Twitter with about 40 percent. This use of social media does not mean, however, that their use is unconditional and uncritical. Although the results reveal a certain knowledge level of the pitfalls and risks, the respondents are not always fully aware of the media's scope and potential implications.

The present study has revealed that the bigger the number of SM used by the respondents is, the higher is their propensity to enquire them to get informed. The social media reported to be used for information purposes were Facebook (about 90 percent of the subjects) and YouTube (45 percent). Social networks, however, seem to be generally used mainly to obtain information on cultural events, music, fashion, and events (ie *leisure* content). The most popular Facebook pages/profiles are those related to: *celebrities* (singers, groups, actors, 75% of

cases), people of culture (writers, movie directors, etc. 61%), and pages linked to local and national newspapers (39%).

The research also analyzed the different types of content that the subjects indicated to publish on their Facebook profiles (the main social media used). This has highlighted three different typologies: those who claim to create mainly personal (multimedia) content (personal posts and photos, posts re-sharing activities from other social profiles of their own or of friends). They have been defined *personal users* (26 percent of the sample). People who have indicated to share mainly information-related content (news-related, scientific, and in-depth news) have been defined as *infusers* (14%). Those who publish content mainly related to leisure (entertainment news, music videos, movie images, quizzes, games, sports, events: 29%) have been called *leis-users*. Lastly, there is a substantial number of subjects (32%) who share on their social profiles content from a wide variety of genre without manifesting a specific predominance (*a bit of everything*), whom have been defined as *mixed users*.

Also, these results have shown to be consistent with those of the aforementioned research by Osservatorio Giovani (Toniolo Institute, 2017). With respect to the activities carried out in the past week, those related to the publication of content are mainly: commenting on posts by their own contacts (49.1 %), publish material on their own profile (40.7%), share news (35.4%), post their own photos or videos on other people's pages (32.6%). Worth mentioning also: —"Read/find work-related offers" (28.3%) and "Visiting accounts of public figures"(26.6%).

Overall, therefore, the active presence of young Italian people on social media is evident and it is carried out by activities such as interaction with others as well as sharing of content and opinions - especially in relation to personal material or entertainment content.

In the following paragraph we will use the various data, so far illustrated, as elements that form the overall picture of media consumption and usage practices of media (particularly the web) by young people in Italy.

4.2 ATTITUDES CONCERNING THE PHENOMENON OF IMMIGRATION

The results described have allowed to reconstruct the various ingredients that characterize the media diets of the sample. These components were used as descriptive variables through which a cluster analysis was conducted (The cluster analysis - non-hierarchical, K-Means Clustering method - was constructed on the basis of a set of variables that resulted to be significant for group formation. The clusters are therefore adequately diverse and disjointed in terms of Euclidean mean in respect to the centroid)⁴.

The statistical analysis has allowed to divide the subjects into four distinct clusters and to study the perception and attitude of the young people from the different groups towards the phenomenon of immigration, especially from a cognitive and evaluative point of view.

The variables considered were: the profiles related to the media used to get information (*radio-television, digital, paper*); the average index of access to information; the number of social media used to inquire; the type of presence on social media (*light, medium, heavy connected*) and the type of content shared online.

The resulted four groups were studied in the first place in association with the cognitive dimension of the migratory phenomenon perception, and secondly with the attitudes expressed by the respondents in relation to evaluative aspects of this topic. Both are considered as dependent variables of the research.

Immigration represents a regular topic in the *agendas* of most Italian media, as well as playing an important role in terms of content distributed on social networks. Immigration is a particularly complex phenomenon, which, of course, we will be unable to deepen in this circumstance. Nevertheless, we will be providing some quantitative data as a reference in order to compare the perceptions of the sampled group with official data.

In January 2017, ~~Istat's~~ research on national population by the Italian National Statistical Institute (Istat) (2017) reported that 60,589,445 persons were residing in Italy, of whom more than 5 million of foreign nationality, accounting to 8.3 percent of residents nationwide. In 2016, the foreign population increased by 20,875 units.

In the ~~Istat~~ database it is also recorded that in 2016 the number of immigrants with residence permit totaled 3,931,133, mostly from Eastern Europe (Albania, Ukraine, Moldova), China, India, Pakistan and Africa (Morocco, Egypt, Senegal) - Istat Data Warehouse (<http://stra-dati.istat.it/Index.aspx>).

With regards to refugee arrivals and asylum seekers, 123,600 people were estimated in 2016, mostly North Africans (more than 75 percent), but also from the Middle East and Eastern Europe (according to data on Asylum seekers of the Italian Ministry of Interior - <http://www.interno.gov.it>).

To probe whether the respondents' knowledge of the actual numerical dimension of the migratory phenomenon nears the above-mentioned statistics, it was asked to indicate the ~~share~~ percentage of the foreign population in Italy in the current year and the estimated number of migrants in 2016 (The questions asked were: "*The foreign population present in Italy today accounts for:*" and "*In Italy in 2016 how many migrants have arrived:*". For each of these, sub-class numerical responses were posed, allowing respondents to identify the proportion of the migratory phenomenon in absolute terms and in percentage value, considered to correspond to the real one)⁵.

We then analyzed whether there were significant differences in the responses provided by subjects belonging to the four different clusters in order to verify the existence of any potential relation between their media diet and their knowledge/perceptions with regards to the presence of immigrants.

By analyzing the data it has emerged that:

- The response option that has obtained the highest percentages actually refers, for all groups, to a substantially correct estimate of the figure for the quota of immigrants on Italian territory ("*between 5% and 10% of the population*" – "*from 3 to 6 million people*"). However, it is worth mentioning that the first and fourth groups tend to overestimate the number of the foreign population in Italy, whereas the second and third groups tend to underestimate it. These differences were statistically significant (Pearson Chi-square <0.5 (0.122)⁶.
- The perception of the sample with regards to the number of immigrants landing on Italian coasts correspond to the actual number of arrivals only in 25 percent of the total (on average among the four clusters of subjects). The first and third groups indicated a lower number, while the second and the fourth ones gave a higher figure than the real number of migrants arrived. However, these differences were not statistically significant (Pearson Chi-square > 0.5 (0.632)

In order to analyze the most evaluative dimension of the respondents' attitude with regards to the phenomenon of immigration, an attitude scale was created from which a specific index was generated (This refers to a normalized index that has emerged, for each individual case, as a score obtained through a scale designed to assess the attitude towards the issue of immigration. The reliability of the scale (consisting of 10 items) was evaluated with Alpha of Cronbach, which was 0.843)^{7,8}.

The differences within the results collected from the various groups have demonstrated to be statistically significant (*Pears Corr Sig 0.05*) and the attitude index was: neutral for the first group (0.016), positive for the second group (0.26), slightly negative for the third group (-0.12) and negative for the fourth (-0.27).

We can therefore summarize the various results outlined by recomposing the elements that have enabled to build *clusters* of subjects (based on the peculiarities of their media consumption), and by linking them to the collected data with respect to perception and attitude towards the topic of immigration. Below is the list of *clusters* obtained, named after a summary label, and a related brief description:

- Group 1: the *Disinterested*. They constitute a cluster of 56 subjects who declare to be less informed (compared to other clusters) and predominantly online. The composition of their media consumption is not very varied and their attitudes toward the migratory phenomenon are mostly neutral.
- Group 2: they can be defined as *Integrated* in the sense that they use the different media in a more integrated and complete way. The group is composed of 68 young individuals and is mainly formed by *radio-televisions* who are also on social media for information purposes. They have a totally positive attitude towards immigrants and tend to perceive a higher share of migrant arrivals than the "real" figure.
- Group 3: they are defined *Critics* and represent the smallest group (32 subjects) with a mixed media consumption, including printed newspaper. Compared to the other groups, they get informed more plus they also share news-related type of content. They have a slightly negative attitude towards the migratory phenomenon.
- Group 4: this group's members are defined *Misinformed* and are those (36) who do not actively look for news, but rather they come into contact with it. They use social media mainly for personal use and as a diary, therefore presumably even the news that reach them have a high emotional impact. Their negative attitude towards the migratory phenomenon and their idea of a larger numerical presence of migrant arrivals on national territory may directly depend on this.

5. CONCLUSIONS

This paper describes an empirical research aimed at analyzing the existence of a relationship between the media diet - of a sample of young Italians - and their perceptions and attitudes towards the migratory phenomenon. As far as media diets are concerned, reference was made to the different media usage practices (both *digital* and *non-digital*) for different purposes: informative, recreational, relational, cultural, etc. The perception and attitudes towards immigration (a particularly frequently discussed topic on the national media agenda in recent years) have been reconstructed with questions about the dimension of the phenomenon, both in terms of the percentage of immigrants in Italy and of the total number of arrivals. By linking to some "classic" theories on the effects of the media (*particularly the Cultivation theory, Agenda setting, Uses and gratification*), supplemented with more recent reflections on the phenomena described as *Filter Bubbles* and *Echo-chambers*, the main purpose of this work was to verify the hypothesis that a more varied and differentiated media diet tends to be associated with a more "correct" and less stereotypically negative view of the migratory phenomenon.

The cluster analysis conducted on the results obtained through a structured questionnaire, submitted to a sample of young Italians, has allowed us to create four different groups of individuals, differing by type of media diet and by media usage scope (informative, entertainment, etc.).

Overall, the young respondents, given on average they have higher level of schooling and better knowledge of media use – both of the informative type and non-informative – compared to those of the Italian population, demonstrated to be generally informed on the percentage impact of the migratory phenomenon, which they estimate in a substantially correct way (about 8 percent of the population). A research published in 2016 on a representative sample of the entire population showed, however, that the Italians tend to quantify to 26 percent (!) the percentage of foreigners living in our country (Pagnoncelli, 2016).

The differences in the perception and attitudes of the four groups with respect to the migration phenomenon seem to confirm that respondents who claim to have a less diverse media diet, predominantly made of a poorly selective exposure to social media (*Disinterested* and *Misinformed* groups), tend to overestimate the presence of immigrants in Italy in a statistically significant way compared to the other two groups. Again, confirming a positive association with a poorly aware and less critical use of social media comes by observing the attitudes towards the migration phenomenon recorded in the *Misinformed* cluster, which classified as the most negative out of all four groups. The results gathered on the integrated cluster confirm the same direction. Although being strong users of traditional media (TV and radio), the *Integrated* are well-informed and have less prejudicial negative attitudes towards the phenomenon. Less important were the results of the *Critics*, both from a statistical point of view and in terms of difficulty of interpretation.

We believe that the in-depth analysis and the interpretation of qualitative interviews, currently ongoing on the same segment of young people, will further contribute to reach a better understanding of the cognitive representations underlying the results obtained on the latter sub-group, as well as it will overall sustain the hypotheses that have supported the entire research.

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MEDYA-DİN İLETİŞİM YÖNETİMİ

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ÖZET

Medya, hayatın her alanına nüfuz ederek, insanların algılama kalıplarını, gündelik yaşam şekillerini, toplumsal, siyasal, ekonomik ve dini eylemlerini, hareket tarzlarını belirleyen bir güç haline gelmeye başlamış ve son zamanlarda toplumda, hiçbir sosyal kurum medyadan daha etkili olamamıştır. Bunun yanı sıra din engin duygularla hissedilen, insanın bütün benliğinin yüce, kutsal bir varlıkla dolduğu, evrensel ahlaki değerleri olan, bireye kazandırmış olduğu bu hissi duygularla tam bir teslim olma duygusunu beraberinde getirmektedir. Aslında medyanın, geleneğin kalıplarını ve mitleri kullanarak ürettiği bu kültürü popüler kültür olarak da değerlendirebiliriz. İşte günümüzde sürekli medyanın bombardımanında olan insana zihinlerini felç eden bu gücü veren ve gün geçtikçe daha fazla, toplumsal mücadelelerin ve araştırmaların ilgi odağı haline gelebilmektedir. “Kitle iletişim araçlarının öneminin artmasına bağlı olarak 1960’lı yıllardan itibaren dini alanda da önemli değişiklikler meydana gelmiştir. Küresel anlamda ortaya çıkan bu yeni gelişmelerden biri de, elektronik kilise ya da daha genel anlamda elektronik din kavramlarıyla ifade edilmektedir. Bu terim dini inançları kitle iletişim araçları yoluyla, özellikle radyo, televizyon ve internet aracılığı ile geniş halk kitlelerine anlatılması ve dini mesajların verilmesini ifade etmektedir. Bu kapsamda dinin elektronik bir nitelik kazanması, aslında, sekülerleşmenin dini yok edemeyeceğini, dinin ortaya çıkan yeni ve modern durumlarda da bir şekilde kendine yer edineceğini gösteren çok önemli bir göstere olarak değerlendirilebilir”

GİRİŞ

Medya

Günümüzde Medya; gazete, dergi, radyo, televizyon, internet, sosyal ağlar gibi kitle iletişim araçlarının tümünü kapsayan genel bir terim olarak kullanılmaktadır. Gelişim süreci içerisinde kitle iletişim araçları öncelikle haber alma gereksinimine dayalı olarak ortaya çıkmış olduğundan medyanın da genel olarak bu yönde şekillendiğinden söz etmek mümkündür. Bugün için de medyanın yine haber verme/haber alma ekseninde geliştiği söylenebilirse de artık medya bir bilgi alışverişi ve eğlence alanı olma özelliğini de kazanmıştır. Medyanın bu araçsal özelliğinin yanı sıra bir sektör olarak da kendine has bir varlık teşkil ettiğini belirtmek gerekir. Günümüz koşullarında medya özellikle reklam kanalıyla beslenen, kitleleri kanalize etme ve harekete geçirme açısından eşsiz bir olanağa sahip, milyarlarca dolarlık bir sektör haline gelmiştir.

Dünya çapında ortaklıkları kontrol eden yüz milyarlarca dolarlık dev şirketlerden yerel gazete ve dergi kuruluşlarına kadar ticari her türlü kitle iletişim aracı işletim faaliyeti bu sektör içerisinde yer almakta ve bu sektör her geçen gün büyümektedir. Doğal olarak bu sektör kendi ekonomisini yaratmakta ve bir medya piyasası oluşturmaktadır. Bu gün için medya sadece düşünsel bir faaliyetin çok ötesinde önemli bir ekonomik alana hükmeden etkin bir sektörel faaliyeti de kapsamaktadır. Daha basit bir ifade ile medya genel olarak iletişim araçlarını ifade etmenin yanında başlı başına ekonomik fonksiyon icra eden bir sektörün de adıdır.

Bugün için artık medya kavramının içerisine toplumda iletişim araçlarını kullanma becerisine sahip herkes girebilmektedir. Gerçekten bu gün için medya sektörünün içerisinde yer almayan ve bu işte profesyonel olmayan normal vatandaşlar da çok basit bir şekilde internet siteleri açabilmekte, kendi sosyal ağlarını kurmakta internette yayın yapan radyolar ve web tv’ler oluşturabilmekte ve böylece kitle iletişiminde dâhil olabilmekle birlikte her birey kendi medyasını yaratabilir hale gelmektedir. Bunun en doğal sonucu olarak da medya sektörünün alanı her geçen gün genişlemektedir.

Din

Dinin Tanrı ya da bir kısım doğaüstü manevi güçlerle ilişkili olduğunu vurgulayan tanımlar, dinin teolojik tanımları olarak adlandırılabilir. Ferguson'un bu tip örnekleri şunlardır:

Din Tanrı'ya inanmadır

Bu tanım Ferguson tarafından “din nedir” sorusuna sağduyulu bir yaklaşım gösteren bir okul çocuğuna atfedilir. On üçüncü yüzyıl teologu St. Thomas Aquinas (1225-1274), dinin Tanrı'yla uygun bir ilişkiye işaret ettiğini ilan ettiğinde, yukarıdaki tanıma oldukça benzer bir şey söylemiştir

Din, Tanrı'nın insan ruhunda yaşamasıdır

Bu tanım, on dokuzuncu yüzyıl teologlarından biri olan W. Newton Clark'dan gelir. Tanrı'nın ve ruhun gerçekliklerini ve dinin var olması için zorunlu olan bu iki gerçekliğe olan imanı vurgular.

Din, hem korkutucu hem de cezbedici olan bir gizemdir

Bu ifade, dinin özünü, gizemi ve gücünden dolayı insanları cezbedtiğini iddia ettiği ‘kutsal düşüncesinde’ bulan yirminci yüzyıl Alman felsefeci Rudolf Otto'dan gelir. Bu, ‘kutsal bir varlığın’ var oluşunu iddia anlamında teolojik bir tanım olarak kabul edilmeyi gerektirmese de, o dini beşerin dışındaki manevi bir alana (yani, Tanrı, ruhlar, korkutucu bir gizem gibi) uygun olarak tanımladığından bu başlık altında tasnif edilebilir.

Yukarıdaki bu dört örnek, dinin teolojik tanımlarını şu şekilde özetlemede bize yardım ederler. Teolojik bir tanım, bir şeyin din olabilmesinde, genel olarak bir Yüce Varlık şeklinde kişiselleştirilen ancak zaman zaman güçlü manevi varlıklar vasıtasıyla yayılan bir varlık olarak tasavvur edilen ya da gayri şahsi, gizemli, doğaüstü bir güç olduğu kabul edilen bir güce inancı merkezi ölçü haline getirir.

Medya ve Din İlişkisi

Kavramsal ve kuramsal olarak ele aldığımızda din ve medya terimleri benzerlikler içermektedir. Dini inanç, insanın kutsal varlığa, yaratıcıya inanması ile başlar. Artık inanan insan, bu aşkın ve kutsal varlığın kuludur. Böylece din, Tanrı ile kul arasında gerçekleşen iletişimin kulun yaşamındaki tezahürü olmaktadır.

Medya kavramını da genel olarak kitle iletişim aracı olarak tanımlayabileceğimize daha önce değinmiştik. Yani medya kurumu da aynı din kurumu gibi insanların davranışlarını belirleme iddiasındadır. Daha genel bir tanımıyla din, insanlara bir yaşam tarzı sunan, onları belli bir dünya görüşü içerisinde toplayan kurum, bir değer biçme ve yaşama tarzı; yaratıcıya isteyerek bağlanma, birtakım şeyleri duyma, onlara inanma ve onlara uygun hayat sürme ve iradi faaliyette bulunma olgusudur. Aşkın varlıkla, ona inanan insan arasındaki ilişkiden doğan tecrübenin kişi hayatındaki tezahürleri olarak ifade edilebilir. (Aslantürk ve Amman, 2000:280).

Dünyaya geldiği andan itibaren çevreyle iletişim içerisine giren birey farkında olmadan çevresini etkilemeye, değiştirmeye, yine bilinçli ya da bilinçsizce etkilenmeye, çevresine uyarlanmaya ya da çevresini kendi kurallarına uydurmaya çaba göstermektedir. Bireyselleşme sürecinde oluşan kimlik, iletişim, alışkanlık ve çabalarıyla ortaya konulmaktadır (Yüksel, 2001:1-4). Birey bu sosyalleşme süreci içerisinde kitle iletişim araçlarının sunduğu olanaklardan mümkün olduğunca faydalanmaya çalışmaktadır. Bilindiği gibi kitle iletişim araçları bilgi oluşturmada ve bilgi aktarımında, yine kültür oluşturma ve kültürel aktarımlarda içinde bulunduğu sosyal şartlardan da etkilenerek, bireyin yaşadığı dini sosyal çevrede etkin olan normları ve toplumsal değerleri de yakından etkilemekte çoğu zaman ise bu dini norm ve değerler teknolojik faaliyetlerin etkisiyle de değişime uğrama yönünden payını almaktadır..

Günümüzde her birey birçok kitlenin aynı zamanda bir parçası olup özdeşleşme sonucu çok yanlı bir bağlamlar içerisine girebilmektedir. Ben idealini pek değişik modellere göre kuran birey mensup olduğu ırk, meslek, dinsel cemaat ruhu, vatandaşlık ruhu vb. gibi birden çok kitle ruhunda pay sahibi olabilmektedir (Freud, 2000:87).

Kitle iletişim alanında birçok teknolojik yeniliklerden en önemlisi olan televizyon toplum üzerinde önemli etkiye sahiptir. Dini inançları yaymak üzere elektronik medyadan yararlanılmıştır. Bu konuda elektronik kilise kavramı geliştirilmiştir (Roberts, 1990:324)

Bugün elektronik medyanın gelişmesiyle birlikte kamusal alan sınırları aşmış, öte yandan bir yere, mekâna, aidiyet hissini de zayıflatmıştır. Tartışma zeminlerinin çoğalması ve farklılaşması, bilginin, görüşlerin akışlarını kolaylaştırmakla birlikte, kamusal alanın birleştirici, topalayıcı niteliğini geri plana itmiştir.

Kutsal söylem ve dini inançlarla dünyevi menfaatler arasında ilişki kuran medya, televizyon ve radyonun özelleşmesi Türkiye'deki tartışma ortamlarını çeşitlendirmiş ve hareketlendirmiştir. Konunun uzmanı olsun veya olmasın hemen hemen tüm kanallarda ve hatta “sabah kuşakları” adı altında düzenlenen ve ağırlıklı olarak

magazinel boyutta içeriklere sahip olan yayınlarda dahi dini konular tartışılır ve herkes neredeyse kendi fetvasını verir hale gelmiştir (Göle, 2000:10-17).

Dini ürünler, filmler, müzik ve gazeteler gibi kültürel eleştiri araçlarından, dini kıyafet ve moda gösterileri gibi alternatif tüketim stratejilerine ve şehirde yaşamının dini biçimlerine, yani alkollü içki satmayan ve ibadet saatlerine özen gösteren otel ve restoranların himaye edilmesine kadar uzanmıştır (Göle, 2000:34).

Ülkemizde son yıllarda yayınlanan bazı yarışma programları özel hayatın mahremiyeti konusundaki toplumsal değer yargılarını değişime zorlamakta ve bireylerin toplumsal değerler konusunda çatışmalar yaşamasına neden olabilmektedir. Toplumsal hayatta din, görülen ahlaksızlıkları ve suçu denetleyip engelleyecek önemli faktörler arasında yer alır. Suçun, sadece suç değil, ayrıca günah olarak telkin edilmesi, onun işlenmesi karşısında en azından caydırıcı sebep olacaktır.

Medya ve Kitle İletişimin Dini Forma Uyarlanması

Modern teknolojinin en önemli ürünlerinden olan kitle iletişim araçları, özellikle görsellik alanında daha etkin olan televizyon, gösterişin ve bu arada dini gösterişin inşa olunmasında daha işlevsel olabilmektedir. Bu bağlamda medya, bireyin tabi davranışlarından sıyrılarak daha yapay, daha sıradan, gösterişçi davranışlar sergileyebilmesine ve dindarlık alanında ikiyüzlülük yapılabilmesine sebebiyet verebilmektedir.

Televizyon yayıncılığı üzerindeki devlet tekelinin kalkması ve özel televizyon kanallarının yayınlanmasıyla din Türk televizyonlarında her an görünür hale gelmiş, bunun yanı sıra dini temelli radyo ve televizyonlar da yayın yapmaya başlamıştır. Çatışmacı bir biçimde de olsa, bugün dini ve modern kesimlerin, söylemlerinin, yaşam biçimlerinin birbirleriyle aynı olmaya başladığı, birbirlerinden etkilendikleri ve böylelikle değişime uğradıkları gözlemlenmektedir. Birey din, vicdan, aile ve cemaat dünyalarından çıkıp, eğitim, piyasa ekonomisi, iletişim, tüketim ve sivil topluma doğru açıldıkça modern toplumun gereksinimleri ışığında kendi yasakçı sınırlarını aşmak zorunda kalmakta aynı zamanda bu alanları değişime de uğratabilmektedir.

Dini yaşam tarzının farklılığını ortaya koyan kitle iletişim araçları değişik şekillerde yorumlanabilen bir ahlak anlayışının gündelik yaşama yansıdığı bir alan olarak da özel bir konuma sahip olabilmektedir. Kitle iletişim araçlarının yaygınlaşması ve öneminin artmasının sonucu olarak, radyo ve televizyonlarda belli saatlerde yapılan yayınları izleme şeklinde kendini gösteren yeni bir dindarlık türü olarak ortaya çıkan “prime time dindarlığı” ise yılın kutsal sayılan belli gün ve gecelerinde yapılan dini törenlere katılma, Türkiye’de de popüler olan bu uygulamalar bazı kanallarda günlük, haftalık olarak yapılmakta ise de daha ziyade ramazan ayında yoğunlaşmaktadır.

Özellikle özel televizyon kanalları ‘prime time’ olarak kabul edilen iftar ve sahur saatlerinde daha çok seyirci çekebilmek için tanınmış bilim adamları ile konuşmalar yapmak, şöhret olmuş şarkıcı ve türkücülere ezan ve mevlit okutmak için kendi aralarında da büyük rekabet yaşamakta, (Kirman, 2004: 182) bireyleri ekran dindarları haline getirebilmektedirler.

Dini radyoların ve daha sonrada dini televizyonların ortaya çıkışı laik bir ülkede bir takım sıkıntıları ve tartışmaları da beraberinde getirmiş, laikler dini radyoların anti-laik propaganda yapmalarına karşı çıkarken, dini kesimden gelen eleştiriler ise teknolojinin nereye kadar içerikten bağımsız olacağını söylüyorlardı. Onlara göre Müslümanların, başkaları tarafından üretilmiş şeyleri değişik formlar içerisinde, yani dini bir örtüyle paketlenmiş bir halde tükettiklerini, oysa asıl sorgulanması gerekenin tüketimin kendisi olduğunu savunuyorlardı (Azak, 2000: 97). Daha sonraları ise bu görüşlerin değişmiş olduğu izlenimleri yine bu araçlarda verilmektedir. Kimi zaman dini olan ve olmayan, bu araçlarda farklı bir şekilde tanımlanabiliyor; örneğin kadınların spiker olarak çalışabileceklerine dair bir fetva, dini radyolara bu konuda bir meşruiyet zemini sağlayabiliyordu. Bu seferde bu radyolardan birinde program sunan kadın spikerlerin davranış ve sunuş biçimleri, o radyonun ne kadar dini olduğunun göstergesi sayılabiliyordu (Azak, 2000:104).

Bir başka durumda dini radyo veya televizyon yetkililerinin ve çalışanlarının çoğu, program yaptıkları araçları “dini radyo yahut televizyon” olarak adlandırılmasına karşı çıkarak, toplumun her kesimine açık olduklarını belirtiyorlar ama yine de yalnızca müzik yayını yapan ya da daha çok magazin programları ve ünlülerin hayatlarına yer veren diğer kitle iletişim araçlarından farklılıklarını vurgulamak amacıyla, kendi radyo ya da televizyonlarını “kültürel araçlar” olarak nitelendiriyor, bazıları ise kanallarını “toplumun manevi ve ahlaki değerlere saygı duyan” kanallar olarak tanımlayabiliyorlardı (Azak, 2000:97).

Yine insanların çoğunun zamanlarını kitle iletişim araçlarıyla geçirmeleri yapılan programların adeta modern insanın duası yerine gelebilmekte, modern insan için medyayı izlemek aynı zamanda bir eğlence unsuru

olmaktadır. Dini sahada dua, fani dünyadan ayrılıp ruhani dünyaya geçici bir transfer olarak fonksiyon üstlenirken, eğlence de doğal ortamdan ayrılıp başkalarının yapay ortamına girmeye çalışmak, ya da girer gibi fonksiyon icra etmektedir. Medya özellikle televizyon çoğu zaman muhafazakâr kesimleri egemen olmaya toplumu yönlendirmeye çalışmakta ve genellikle de başarılı olmaktadır (Keith, 1990: 325).

Yazılı ve görsel medyada yer alan; dini içerikli yazılar, televizyonda drama ve diziler, dini içerikli yayınlar özellikle 11 Eylül sonrasında kitle iletişim araçlarındaki Müslüman ve İslam imajı, televizyonda dini programlar ve hemen hemen her programda uzman olan ve olmayan kişiler tarafından tartışmaya açılan dini konular vb. Bu bağlamda yine dini hassasiyeti olan gazeteler, televizyondaki dini içerikli programlara bu sayfalarda daha fazla yer ayırırken, magazin, yarışma, eğlence türü programların tanıtımlarına olabildiğince az yer vermeye çalışmaktadırlar.

Kitle iletişim araçlarına genel olarak baktığımızda, her bir medya kuruluşunun kendi ideolojik perspektifinden olaylara baktığı ve bu bakış açısıyla olayları anlamlandırdığını ve bütün bu süreçleri kendilerince yönlendirmeye çalıştıklarını söyleyebiliriz. İnsanlar özellikle çaresiz kaldıkları zaman, dine sığınarak kendilerini daha güvende hissetmektedirler. Dua ederek, namaz kılarak, tespih çekerek yani dini ritüelleri yerine getirerek kendilerinin emniyette olduğuna inanmaktadırlar. Böyle durumlarda meydana önemli fonksiyon ve etkileri bulunmaktadır. Bireyler ruhlarındaki boşluğu dizilerle, astrolojiyle, metafizik olaylarla kapatmaya çalışmakta, önceden bu boşluklar farklı şekillerde doldurulurken, bu boşlukların bugün diziler, dramalar vb. programlarla doldurulmaya başlamıştır. İnsanlar da sorularına metafizik olaylara inanarak bir şekilde yanıt bulmaya, çözüm üretmeye çalışmaktadır.

Türkiye’de eğitim seviyesinin oldukça düşük olduğu kesimlerde bu tür programlara rağbetin oldukça etkili olduğu bilinmektedir. Eğitim düzeyi düşük olan bireylere bilimsel düşünmek zor gelirken, yaşanan problemleri doğüstü olaylarla açıklanması, bu yollarla çözenin insanları rahatlatıyor olması nedeniyle bu programları oldukça popüler hale getirmektedir. Ortaçağ dogmalarını anımsatarak, bu tür programları- içselleştiren bir kişi, haksızlığa uğradığında mücadele etmek ve bu haksızlıktan kurtulmak yerine (nasıl olsa cezasını bulacak) tepkisiz kalabilmektedir. Örneğin bu programlarda bir insanın aynı anda birden farklı mekânlarda olabildiği konusu sıkça işlenerek, kişilere insanüstü güçler atfedilmekte, oysa Allah, elçileri olan peygamberleri bile bu tür sınırsız güçlerle donatmadığı dini literatürde yerini almaktadır.

Bu tarz programlar insanları gerçek yaşamlardan uzaklaştırarak, çok nadir olabilecek olayların programlarda sanki her zaman olabileceği gibi sunulması, insanların gerçek hayatlarında pasif düşünmelerinde etkili olabilmektedir. Çünkü anlatılan olaylarda irade ve akıl arka plana itilirken, izleyenler bu tarz olayların etkisinde bazen kısa, bazen de uzun vade de etkisinde kalabilmektedirler. Bu yüzden bu tür programların senaryolarının çok iyi gözden geçirilmesi ve danışmanlarının olması lüzumlu olmakla birlikte, özellikle de çocukların bu tarz programları izlemesini sakıncalı görülmektedir. Gerçek dünyada olduğu gibi siber dünyada da din ve inanç konusunun önemli bir yer tuttuğu, tarama motorları yoluyla kolayca elde edilebilen istatistiklerden anlaşılmaktadır.” (Vardı, 2003:97; Acun, <http://yunus.hacettepe.edu.tr>).

Her geçen gün kullanımı artan bu yeni medya-iletişim aracı, din alanında, dini otorite, dini çatışma ve dini tecrübe gibi meselelerin yanı sıra başka dinden olanları çekme amacı da taşımaktadır. Ayrıca, internet teknolojisi sayesinde daha önce ulaşılamayan ve “uzak” oldukları düşünülen bölgelere rahatça ulaşılabilmesiyle de dünya genelinde daha çoğulcu bir görüşün yayılması ve diğer dinler hakkında daha fazla bilgi edinilmesi gündeme gelmiştir. Artık bazı dünya dinlerinin belirli coğrafyalarla sınırlı kalması da artık mümkün değildir (Yel,<http://www.koprudergisi.com>).

İletişim

İletişim en genel anlamda insanın kendisini başkalarına anlatabilmesi ve başkalarını anlayabilmesidir. İletişim bir paylaşımdır, insanın, duygularını, düşüncelerini, bilgi ve becerilerini başkalarıyla paylaşabilmesi ve anlatabilmesi iletişim yolu ile olur. İletişim, insanların bir arada yaşamasının ve sosyal bir varlık olmasının gereğidir. Bireylerin birbirleriyle ilişkilerinin niteliği ve gücü iletişim yeterliği ve iletişim kurmadaki başarısı ile doğrudan ilişkilidir. Günümüzde, insanlar arasında sağlıklı bir iletişim kurulamamış olması, pek çok sorunun temel nedeni olarak görülmekte, sorunlara çözüm önerileri geliştirilirken, iletişimin gerekliliği üzerinde önemle durulmaktadır. Günlük yaşamda hemen hepimiz anlaşılmadığımız ya da yanlış anlaşıldığımızdan yakınıp duruyor, birbirimizi anlamakta güçlük çektiğimizi sıkça dile getiriyoruz. İşte bütün bunlar gerçekte birbirimizle iletişim kurmakta yeterince başarılı olmadığımızı ortaya koymaktadır.

İletişimin Öğeleri

İletişim bir süreçtir. Bu sürecin işleyişinde rol alan 5 temel öge vardır.

Kaynak: İletmek ya da paylaşmak istediği bir görüşü, duygu ve düşüncesi olan kişidir. Kaynak, iletişim sürecini başlatandır. Onun, iletişim konusundaki yeterliği iletişim sürecinde önemli bir rol oynar, ileteceği mesaja ve alıcıya, en uygun sembol ve kanalı seçebilmesi, o mesajın iletilmesi için elverişli zaman ve mekânı belirleyebilmesi, mesajın iletilmesinden sonra alacağı dönütleri doğru olarak değerlendirebilmesi kaynağın iletişim yeterliği ile doğrudan ilişkilidir.

Mesaj: Kaynak tarafından paylaşılacak istenilen duygu ve düşüncelerin, çeşitli semboller kullanılarak iletilebilir duruma getirilmiş şeklidir. Bu bir söz, bir resim, bir mimik veya jest olabilir. Kaynağın duygu ve düşüncesi ancak kodlandığında mesaj anlamı taşır, iletilecek mesajın kanala ve alıcıya uygun olması, açık anlaşılır, doğru ve inandırıcı olması iletişimin niteliği açısından önemlidir.

Kanal: İletilmek istenilen mesajı, alıcıya ulaştıracak araç, yöntem ve tekniklerin tümüdür. Genelde iletişimde kanal denildiğinde akla 5 duyu organı gelir. Mesaj alıcıya, duyu organlarından bir ya da birkaçı aracılığıyla ulaşır, iletişimde yazılı, sözlü ya da sözsüz iletişim tekniklerinin tümünden kanal olarak yararlanılabildiği gibi, yazı, ses ve görüntü ileten araçlar da iletişim kanalı olarak kullanılmaktadır.

Alıcı: Mesajın ulaşması istenilen kişi ya da kişiler iletişim sürecinde alıcı olarak tanımlanır. Mesajın doğru olarak alınıp yorumlanması ve karşıt mesajın hazırlanarak sağlıklı bir biçimde iletilmesi, alıcının da belli yeterliklere sahip olmasını gerektirir. Kaynakla alıcının yaşantılarının benzerliği ve ortaklığı mesajın doğru ve çabuk algılanarak yorumlanması açısından çok önemlidir. Bu durum iletişimde ortak yaşantı alanı olarak ifade edilir. Bu alan ne kadar genişse iletişim de o ölçüde sağlıklı olur.

Dönüt (Aydınlatıcı Yankı): Bu öge, iletişim sürecinin tamamlanması ve iletişimin sürekliliği açısından değerlidir. En genel anlamda dönüt, kaynağın iletildiği mesaja karşı alıcının tepkisi yani karşıt mesajdır. Bu mesaj, kimi zaman kaynağın seçtiği sembol ve kanallar kullanılarak iletilir. Kimi zaman da daha farklı bir yol izlenebilir. Örneğin kaynağın sözcüklerine, alıcı bir gülümseme ile karşılık verebilir.

İletişim ve Din

Frankfurt Okulu'na bağlı yaşayan ünlü filozof Jürgen Habermas dünya çapında tartışılan çok ayrıntılı bir iletişim teorisi geliştirdi. Habermas'ın özellikle dine olan bakış açısını da dikkate alarak entelektüel hayatı iki bölümde incelenebilir. Dine mesafeli, hatta kayıtsız olduğu dönem; kendisinin hâlâ dine uzak olduğunu ifade etmekle birlikte dinin iletişim için vazgeçilmez olduğunu ileri sürmeye başladığı dönem.

Erken dönem yazılarında Habermas dinle iletişimin bağdaşamaz şeyler olduğunu ileri sürüyordu. Habermas kutsalın yerine iletişimi ikame ediyor, kutsalı dilselleştiriyordu. Ona göre metafizik-dini dünya görüşü sosyal rasyonelleşme sürecinde modern toplumda 'modası geçmiş' şeyden başka bir şey değildi. Hatta dini kardeşlik ahlakı, temeli olan kurtuluş dininden bağımsızlaşmış ve şimdi iletişim ahlakına dönüşmüştü.

Allah'tan İnsana Sözlü İletişim

Allah ile insan arasındaki mahiyet farkı iki farklı varlık düzlemini meydana getirmiştir. Allah-insan iletişimi, aşkın olanla, insan arasında gerçekleşmektedir. Kaynak ve hedef arasında ontolojik açıdan denge ve eşitlik bulunmamaktadır. Zira maddi varlık alanında (insan-insan), konuşan ve dinleyen aynı düzeyde ontolojik eşitliğe sahip varlıklardır. Fakat Allah'tan insana doğru iletişimde, bu ana kural bozulur. Çünkü Allah ile insan arasındaki iletişim yatay değil, dikey düzlemde gerçekleşir. Allah-insan iletişiminin temel kavramlarından olan inzâl ve tenzîl fiilleri, Kurân-ı Kerim'de vahiy anlamında kullanılan kelimelerin en yaygın olanıdır. Aralarında farklar bulunsun da, yüksekte düşüşü ve aşağıya iniş gibi eylemleri ifade etmesi sebebiyle 'bir şeyi indirmek' anlamı ortak anlam alanıdır. Bu yolla dini ahlak seküler bir forma dönüşerek korunuyordu. Ahlaki normlar ve hukukun elde edilmesinde kutsalın otoritesi toplumsal tartışmayla ve konsensüsle ikame ediliyordu. Netice olarak metafizik-dini düşünce ve pratik mazide kalan birer fenomendi. Bu yolla din kendisinin bilgi, ifade ve eylem içeriğini kaybetmiş; ve tüm boyutlarıyla iletişim ahlakı tarafından yutulmuştu.

Allah'tan İnsana Sözsüz İletişim

Kur'an'da Allah, insanla iletişim kurarken, onun uzak ve yakın çevresini oluşturan bitkilerden, çiçeklerden, ağaçlardan, dağlardan, hayvanlardan, sema ve yıldızlardan örnekler vermektedir. Birçok âyette, insanın dikkati doğaya ve çevreye yönlendirilerek, aktif ve dinamik bir iletişim ortamı kurulması amaçlanmıştır. Bunlar bütün evrende bulunduğu gibi insanın kendi bünyesinde de bulunmaktadır. Kur'an bu gerçeği şöyle ifade etmektedir: Biz âyetlerimizi hem âfak'ta (insanın dışında), hem de enfüste (kendi nefislerinde) onlara göstereceğiz. Böylece Kur'an'ın gerçek/hak olduğunu anlayacaklardır.

Bundan maksat, insanı tefekküre yönelterek, Allah'ın yüceliğini kavramasına yardımcı olmaktır. Bu çerçevede bütün kâinât, Allah'ı anlatan bir kitap gibidir; her şey ona işaret etmektedir. Buna göre göklerin ve yerin yaratılması, gece ve gündüzün ardarda gelişi, toprağı diriltmek üzere yağmurun indirilişi, canlıların var edilmesi, bulutların boyun eğmiş bir şekilde havada yüzmeleri, arının insanlar için bal yapması, hayvanların çeşit çeşit yaratılması, hayvanlar tarafından insanlara süt hazırlanması birer işarettir.

İnsandan Allah'a Yönelik İletişim

Allah, insanı yarattıktan sonra onu kendi haline bırakmamıştır. Bu sebepten insana sözsüz âyet olan kâinatı (kevnî), kendi varlığının açık belgeleri olarak sunmayı yeterli görmeyerek ona sözlü mesajını (vahyi) da göndermiştir. İnsanın gerek sözel âyetlere gerekse kevnî âyetlere karşı tavrı ve cevabı yaratan ile olan ilişkisinin temelini oluşturmaktadır. Kur'an'a göre bu mesajlara iki cevaptan biri verilebilir ki; kabul imanı, red inkârı gerektirir. Allah'ın bilinmesi, mevcudiyetinin ve uluhiyyetinin tanınması demektir ve imanı gerektirir. Bu nedenle iman; Allah'ın varlığını ve uluhiyyetini bilmek, tanımaktır. Böylece iman, yaratmanın gayesinin hem özü, hem de çerçevesidir. Yalnız iman, sadece bir bilme, bir zihni hal değil, bununla beraber bir yaşayış halidir. Yaşayışa ve davranışa dönüşmüş iman, Allah'a karşı saygı ve sevgi olarak gerçekleşir. İmanla birlikte insan, Allah ile iletişimin ilk basamağını gerçekleştirirken, inkârla da bütün bağlarını koparmaktadır. Garaudy'e göre "İslâm'ın en can alıcı konusu, bütün tezahürlerinde, Müslüman kalbinin, insanın Allah'a yükselişi ve Allah'ın insana tenezzül buyuruşudur. Kendi kendinin içinde, her insan Allah'ı bulabilir. İşte mümin bir yandan güzel amelleriyle aşkın olan Allah'a kalben yükselmeye çalışırken, bir yandan aynı Allah'ı içkin yanıyla derin bir şekilde hissedebilmektedir. Ne insanı ilah'laştırmak, ne de Allah'ı insanlaştırmak durumuna düşmeksizin, her varlık kendi varlık alanında kalmak şartıyla birbiriyle irtibat halinde olabilmektedir.

MEDYA DİN VE İLETİŞİM YÖNETİMİ

Kitle iletişim araçlarının yaygınlaşması insanların günlük hayatına, her şeyden ve her zamandan daha fazla nüfuz etmesi, beraberinde iletişimin önemini artırmıştır.

Kitap, dergi, gazete gibi basım teknolojilerine ya da radyo ve televizyon gibi elektromanyetik teknolojik medya aygıtları üzerine kurulu araçlara dayalı kitle iletişimi, geçtiğimiz yüzyılın sonlarında İnternet'in keşfi ile yeni ve farklı bir boyut kazanmıştır:

İnternet verilerin , (metin, ses, görüntü, hareketli görüntü) ve bunların kombinasyonlarının etkileşimli bir ortamda yayım ve erişimine imkân vermektedir. Dahası, medya ya dayalı iletişim diğer klasik yöntemlere kıyasla çok daha hızlı ve ekonomik biçimde ve mekândan bağımsız olarak gerçekleştirilmektedir. Bu özellikleri internetin bütün diğer iletişim, basım ve dağıtım teknolojilerini bünyesinde bütünleştirecek biçimde gelişmesine yol açmıştır.

Yüzlerce farklı din/inanç grubu artık klasik iletişim araçları yerine kendi iletişim yönetimleri ve propagandaları için medya ve interneti öncelemektedirler. Bu gruplar hem inançlarını yaymak hem de mensupları arasında iletişim ve dayanışmayı güçlendirmek amacıyla Web siteleri, sosyal medya hesapları vb. şeyler kurmuşlardır. İslam özelinde konuyu ele aldığımızda medyada yer alan bilgiler aşağıdaki başlıklar altında toplanabilir: İslam'ı Anlamak ve İslam'ın Temelleri; Temel İslami Kaynaklar: Kuran ve Hadis Külliyyatı; İslam ve Bilim; İslam Hukuku; Hicri Takvim ve Takvim Dönüştürme; Hac ve Umre Seyahati; İslam Tarihi; Tasavvuf ve Tarikatlar; Şii İslam; Karşılaştırmalı olarak İslam, Hristiyanlık ve Yahudilik; İslam Hakkında Bilimsel Yayınlar ve Araştırma Merkezleri; İslam Hakkında Haber Grupları, Forumlar ve Tartışma Listeleri.

Medya ile iletişim ve etkileşim halinde olma gereksinimi hayatın her alanına nüfuz ederek, her yeri kaplayan, insanların algılama kalıplarını, gündelik yaşam şekillerini, toplumsal, siyasal, ekonomik ve dini eylemlerini, hareket tarzlarını belirleyen bir güç haline gelmiştir. Son zamanlarda toplumda, hiçbir sosyal kurum kitle iletişim araçları ve medyadan daha etkili olamamıştır.

Yabancı Savaşçılar Örneği

Medya Din ve İletişim Yönetimi Bağlamında ele aldığımız yabancı savaşçılar konusu önemli bir örnek teşkil etmektedir. Binlerce km uzaklardan dini duygularla (cihad fikri ile) , iletişim araçları ve medyanın etkisiyle savaşıma giden binlerce insan iletişimin medya ve din ile birleştiğinde nasıl bir itici güç ve propaganda unsuru olduğuna çarpıcı bir örnek olarak verebiliriz.

Avrupalı yabancı savaşçılar batılı devletlerde doğup büyüyen, bu devletlerde eğitim alan ve sonra Suriye/İrak gibi farklı coğrafyalara savaşmak için giden savaşçılar olarak kısaca tanımlayabiliriz. Farklı kaynaklar

Suriye'deki iç savaşa 80'den fazla ülkeden katılan toplam savaşçı sayısının 50.000 ile 80.000 arasında olduğunu tahmin etmektedir. Bu ülkelerin büyük çoğunluğu ise Avrupa ülkeleridir.

Motivasyonlar Açısından Din Medya ve İletişim

Ortadoğu'da ve özellikle Irak ve Suriye özelindeki örgütlerin karakteristik yapılarına baktığımızda dini söylemleri, kitle iletişimi ve medya olgusunu ciddi bir propaganda aracı olarak kullandıklarını görüyoruz. Örgütler birçok dilde yayın yapan haber siteleriyle, sosyal medya hesaplarıyla kendi haberlerini dünyaya yaymaktadır. Video paylaşım sitelerinden yayınladıkları savaşa dair görseller, çatışma görüntüleri, ses kayıtları ciddi ve profesyonel bir iletişim yönetiminin ve propagandanın göstergesi haline gelmiş durumda. Bu örgütlere katılan özellikle yabancı savaşçıların Twitter, Instagram, Ask.fm ve Facebook gibi sosyal paylaşım sitelerini etkin kullanmaları onları propaganda savaşında kullanılan etkin iletişim araçları haline getirmiş durumda.

Kitle iletişim araçları ve sosyal medya da paylaşılan dini söylemler ve görseller bu örgütlerin yabancı savaşçı devşirmesinde en önemli etkenlerden biridir. Bu tür örgütler dini propaganda ve iletişim yöntemi olarak, klasik dini meşruiyet söylemini kullanıp bununla interneti birleştirerek, mazlum Müslümanlara yardım etmek düşüncesiyle de “zalim yöneticilere” karşı dinin emri cihat vazifesini ön plana çıkarmak gibi temel bir söylem ve propaganda geliştirmektedirler.

İslami Evlilik Siteleri Örneği

Kendilerini dindar olarak tanımlayan ve kendileri gibi düşünen insanların, eş bulmak için başvurduğu islami evlilik sitelerinin misyonu ise eş arayan kullanıcılarını iletişime geçirme, etkileşimin sağlanması ve nihayetinde evlendirmeyi amaçlamaktadır.

İslami bir evlilik sitesi olan “gönülden sevenler” henüz açılış sayfasında kimliğini “İslami evlilik sitesi” olarak açıklamakta ve varlık nedeni ile meşruiyetini; “Türk halkını internetteki ahlaksız sitelerden ve aldatıcı arkadaşlık sitelerinden kurtarmak amacı ile açtığımız ilk evlilik sitemiz Gönülden Sevenler. Com ile Türkiye’de ki yüzlerce insanı yuva sahibi yaptık. Misyonumuzu ve ciddiyetimizi yitirmeden Türk halkını hasretini çektiği yuvaya bir adım daha yaklaştırmak için çok daha güçlü geliyoruz” açıklamasına dayandırmasıdır.

İslami evlilik siteleri içinden bakıldığında bir diğer egemen söylemin ise, İslami kesim için özel bir duyarlılığın geliştirildiği “ayet” / “hadis” / “kıyas ve fıkıh” örneklerinin de etkileme ve bir iletişim yöntemi olarak yaygın kullanıldığı gözlemlenir. Sitelerin açılış sayfasında dikkat çeken bir diğer unsur ise, internet sitesi üzerinden evlendirilen çiftlerin sayılarını vermektir. Örneğin, habibim ol 245, gönülden sevenler ise 322 üyesini evlendirmiştir.

Ancak verilen bütün bu sayıların doğru olduğunu kanıtlayabilecek bir veri yer almamaktadır. Sitelerin bir diğer ortak özelliğini ise yalnızca evlilik amacı ile üyeliklerin kabul edilmesi, flört – tanışma – arkadaşlık amacıyla olan kesimlerin ise üyeliklerinin yasaklanmasıdır. Bununla birlikte, İslami evlilik sitelerinde “evlilik” bir bakıma dinin emri olarak kabul edilmekte, evlenen çiftlerin ise “başarılı” olduğu belirtilmektedir.

İslami evlilik sitelerinin hemen açılış sayfalarından itibaren, İslami yaşam pratiklerinin ve söylemlerinin örneklerini gözlemlemek olasıdır. O kadar ki, sitelerin hemen açılışında “imanlı eş arayanlar için İslami evlilik sitesi”, “Saadete Giden Yol – Düzeyli İslami Evlilik Sitesi”, “İmanlı Kalpler için Evlilik” sloganları ve çoğu örneğinde de gözlemlendiği gibi sloganların yanı sıra türbanlı mankenlerin kullanılması oldukça yaygındır. Konumuzu da yakından ilgilendiren burada dikkatimizi çeken en önemli unsur bu tip internet siteleri aracılığı ile evlenmek isteyenlerin büyük çoğunluğu kendilerini dindar olarak tanımlamakta ve iletişim kanalı olarak medyayı, islami evlilik sitelerini tercih etmiş olmalarıdır.

İletişimin Medya Üzerinden Sanallaşması ve Sanal İbadet Örneği

İletişim teknolojilerinin gelişimi insanların dini alışkanlıklarını ve ibadet ritüellerini de etkilemiş, sanal kilise, sanal ibadet gibi kavramlar hayatımıza girmeye başlamıştır. Küresel anlamda ortaya çıkan bu kavramlar elektronik kilise veya daha genel anlamda elektronik din olarak da ifade edilmektedir.

Bu terim dini inançları kitle iletişim araçları yoluyla, özellikle radyo, televizyon ve internet aracılığı ile geniş halk kitlelerine anlatılması ve dini mesajların verilmesini ifade etmektedir. Bu kapsamda dinin elektronik bir nitelik kazanması, aslında, sekülerleşmenin dini yok edemeyeceğini, dinin ortaya çıkan yeni ve modern durumlarda da bir şekilde kendine yer edineceğini gösteren çok önemli bir gösterge olarak değerlendirilebilir”

ABC News'un haberine göre bugün 'sanal ibadet' için bilgisayar karşısına geçen Amerikalıların sayısı 25 milyonu bulmuş durumda.

Tanrıya internet üzerinden dua etmek isteyen bu sitelerde neler var? Wuzup.com'a girerek, insanların gönderdiği kışkırtıcı mejasları okuyabilir, hollywood.com'a uğrayarak haftanın filmlerini ruhani açıdan inceleyen değerlendirmelere göz atabilir, islamcity.com'da Mekke'ye giderek 'sanal hacı' olabilir hatta Budist inançlara yer veren beliefnet.com da online meditasyon yapabilirsiniz. Yaklaşık 25 milyon Amerikalı bu ve bunun gibi binlerce siteye girerek, internet üzerinde İncil okuyor, dini tartışmalara katılıyor, ibadet ediyor ve dini keşfediyor. Ann Taylor da bunlardan biri. Hristiyan sitesi olan 'ibelieve.com'a ilk girdiği sıralarda depresif bir ruh hali içinde bulunduğunu söyleyen Taylor, sitede manevi cesaret ve çok sayıda Hristiyan arkadaş bulduğunu söylüyor. Duygularını "İki yıl önce Tanrı internet üzerinden konuşacak deseler, mümkün değil cevabını verirdim" şeklinde ifade eden Taylor'ın sözleri, online ibadet peşinde koşanların bu işe kendilerini ne kadar kaptırdıkları açıkça ortaya koyuyor.

Bu sitelere giren insanlar birbirlerinin özel dertlerini dinliyor ve dua ederek, umutlarını paylaşıyor. Sanal Kilise kitabının yazarı Tom Beadoin, dinin internete yönelmesinin ateşli bir savunucusu. İnternetin dini keşfetmek açısından yeni ufuklar açtığına inanan Beadoin, "İnternet insanların dini öncüler olmasına olanak sağlayacak yeni sınırlar ortaya çıkarıyor" diyor. Buradan çıkarılabilecek sonuç insanların kitle iletişim teknolojileri ve medya vasıtası ile dini öğretileri hatta ritüelleri yerine getirmede farklılaşan iletişim yöntemi ve metotlarıdır.

Kiliselerin Sanallaşmaya Bakış Açısı

İnternet üzerinden yapılan online ibadete karşı çıkanlar da var. Bu tür bir dini iletişimin gerçek din olarak sayılmayacağını belirten karşıt görüş sahipleri, "Tanımadığınız hasta bir insan için internetten dua etmek, hasta yatan komşunuza bir tas sıcak çorba götürmekten daha anlamlı değil" diyor. İnternette birbiri ardına sanal ibadethaneler açılırken, çok sayıda klise ve sinagog da interneti varolan ilişkileri güçlendirmek için kullanıyor. Bazıları ayin ve ibadetleri canlı olarak yayınlarken, Florida'daki Baptist kilisesi gibi kimi yerlerin de sürekli dua eden online papazları var.. Canlı yayınlar sayesinde 'kilisenin hiç kapanmadığına' dikkat çeken papazlar, Kapıyı kilitlemek için kimsenin burada olmasına gerek yok" görüşündeler

SONUÇ

Gerçek dünyada olduğu gibi siber dünyada da din ve inanç konusunun önemli bir yer tuttuğu, tarama motorları yoluyla kolayca elde edilebilen istatistiklerden anlaşılmaktadır. Özellikle Web teknolojisinin sağladığı, görsel ve etkileşimli ortam, dini tebliğ, din eğitimi ve dini gruplar arasında iletişim ve diyalog açısından uygun bir ortam yaratmıştır. Çok çeşitli dillerde yayınlanan sitelerde, İslam bütün yönleriyle tanıtılmakta, Kuran ve Hadis külliyatı gibi temel kaynakları çok boyutlu inceleme imkânı sunulmakta, İslam'ın bugünkü meseleleri ile ilgili yüzlerce değişik forumda, uluslararası çapta hem Müslümanların kendi içinde hem de farklı inançlara mensup kişiler arasında canlı tartışmalar gerçekleştirilmektedir bu iletişimin ve etkileşimin münazara ortamına dönüşmesi son derece önemlidir.

Web yayıncılığının iletişim aracı olarak çok kolay olması yalan, yanlış ve denetimsiz pek çok bilginin İnternet'te yer alması sonucunu da beraberinde getirmektedir. Bu noktada İlahiyatçı bilim adamlarına büyük görev düşmektedir: Dini alandaki, özellikle İslam'la ilgili web siteleri sürekli gözden geçirilerek, değerlendirme raporları hazırlanmalı ve bunlar da yine İnternet'te (ve diğer medyada) yayınlanmalıdır. İnternet'in diğer medya türlerine kıyasla belirgin özelliği etkileşimli/katılımlı (interactive) olmasıdır ve donanım ve yazılım teknolojilerindeki ilerlemelerle bu özellik giderek daha güçlenmektedir. Özellikle, "virtual reality" ya da "sanal gerçeklik" tekniklerinin İnternet üzerinden de uygulanabilir hale gelmesinin yarattığı yeni imkânlardan faydalanılmalıdır.

Geleneksel kitle iletişim araçları ve özellikle yeni medya, istemli ya da istemsiz, etkileşim içinde olduğu her bireyin düşüncelerine, inançlarına, davranışlarına kısacası hayatına nüfuz etmektedir. Günlük konuşmalardan, akademik araştırmalara kadar etkisini hissettiren medyanın, dinle ilişkisi hakkında söylenebilecekler ise iki alanın sınırsızlığına koşut geniş bir tartışma alanını oluşturmaktadır. Özellikle yeni neslin elde ettiği bilgilerin büyük kısmının medya kaynaklı olduğu düşünüldüğünde, sağlıklı din ve medya ilişkisinin sağlanmasının gerekliliği daha net görülmektedir. Medya, dini bilgi için sadece bir tehdit oluşturmaz, aynı zamanda medyanın, dini bilginin yayılması için sınırsız bir iletişim fırsatı da sunabileceği açıktır. Medyada yer alan din temsillerinin ve dine ilişkin bilgilerin doğru verilmesinin sağlanabilmesi için konu ile ilgili uzmanların istihdam edilmesi gereklidir. Medyanın dini olguları doğru algılayabilmesi için dini oluşum ve organizasyonlar iletişim süreçlerini doğru bir şekilde yönetebilmelidir.

Akademi, diyanet, medya, yayın ve denetim kuruluşları gibi paydaşların sorunların çözümü konusunda irade ortaya koyması, ortak akıl yürütebilecek yapıların ortaya çıkarılması önem arz etmektedir. Medya, din konularında karşıt görüşleri bir araya getirerek tarafları düzeysiz biçimde tartıştırmaktan vazgeçmelidir. Zira bu tartışmalar sorununun çözümünden çok sorunu derinleştirmektedir.

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MENTAL HEALTH AND MARITAL VIOLENCE

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ABSTRACT

Marital violence is considered a public health problem, with great family, social and labour impact. Objectives: to characterize the mental health of victims of marital violence. Methodology: a cross-sectional and descriptive study was carried out. The sample was chosen through a non-probabilistic sample obtained by convenience and was made up of 37 victims of marital violence. In order to reach the desired goal, a research protocol was applied, consisting of a sociodemographic questionnaire and the Mental Health Inventory (MHI). The results show that the victims of marital violence are female, between 20 and 69 years old and unemployed, though they are not financially dependent of the aggressor. They exhibit high levels of anxiety, depressive traits, difficulties in emotional and behavioural control and weak positive affects.

Keywords: marital violence; victims; mental health; public health

INTRODUCTION

Violence has been considered a public health problem for over a decade by the World Health Organization (WHO). Among several factors, it emphasizes the intentionality and type of action directed at the victim, as well as the type of consequences generated by the practice of violence (bodily injury, psychological suffering, death, among others), (WHO, 2002, cit. by Berger, 2003). Njaine (2004) argues that violence is rooted in personal and institutional relations, and is seen, on the one hand, by limiting and violating the rights of others and, on the other hand, by the resistance of the oppressed. In the 1960s and 1970s, feminist movements pointed to domestic violence as a social problem, a phenomenon whose real extent remains unknown (Pais, 2010). Marital violence occurs within a relationship when one of the parties uses force or constraint to promote or perpetuate the domination of the other party. In this phenomenon there is an asymmetrical relationship, that is, different positions and powers between the couple (heterosexual or homosexual), in which the aggressor is normally male and the victim female. Violence is often practiced in the couple's home, making this public health problem less visible. Thus, it is crucial to make clear the repercussions that marital violence has on the victims (Nunes, 2003; Alves, 2005). Several researches analyse the costs (economic, psychological, medical and social) of violence, noting that children who are victims of abuse in adulthood are now part of the mental health system. Most of the studies carried out in the field of psychopathology in a relational dimension have verified that the dysfunction of the organization of the family structure, the processes of interaction and communication or even the experiential context of the families, are the foundation of the occurrence of psychiatric disorders (Díez, 2010). The existence of elements that lead to mental illness does not necessarily imply the existence of disease, since mental health is related to the interrelation of several factors. In other words, different people may or may not develop a pathology in relation to certain risk factors (Moreira and Melo, 2005). Domestic violence encompasses all behaviours/omissions aimed at repeatedly and intensely delivering physical, sexual, mental, economic harm, or

even homicide, directly or indirectly to an individual living in the same household or, if not living in the same household, as the perpetrator being a spouse/ex-spouse, or a marital partner/ex-partner. This problem affects women, men, children, young people, the elderly, the disabled and dependents (Matos, 2002). The personality is related to different desires, feelings, and how to express such feelings/emotions. People differ from one another by self-concept, by their perspectives on the world and the future (Gleitman, Fridlund, & Reisberg, 2009). Personality is what makes the individual unique, having identified five dimensions that distinguish individuality - Big Five Model (Dias, 2004; Hansenne, 2003). There is no profile outlined for the victims, only some typical features are observed, namely, being ashamed, silent, unable to react, conformed, passive, emotionally dependent and depressed (Alves, 2005). Nowadays, according to Machado (2010), much research has been carried out to deepen scientific knowledge in the scope of some types of violence still little-known, such as: violence in youth intimacy; sexual abuse among young people; stalking; trafficking human beings and their sexual exploitation; institutional abuse; state abuse; police control/violence against particular communities; among others. Violence is a global social phenomenon that encompasses different social classes, cultures, gender relations, races, and ethnicities (Bezerra, 2006). Interpersonal relationships are situations where violence may occur, characterizing interpersonal violence. Among the various types of interpersonal violence, we highlight domestic violence. This phenomenon did not appear in today's days, it is happening worldwide and has similar characteristics in several countries with different cultures. Marital violence is a circular system, considering that marital violence crosses a cycle composed of three phases: after a long period of courtship there is the phase of tension accumulation, which can last for a few weeks or even a few years. During this phase, minor assaults (physical or verbal) or threats made by the aggressor start to appear. This person resorts to violence to resolve his/her day-to-day tension. So, the victim is in danger since he/she is accused of being the reason for the onset of such tension and a small excuse is enough to release this tension against the victim. This process is also facilitated by the abuser's excessive consumption of alcohol or drugs. In turn, the victim seeks to use strategies to calm him/her or to minimize the situation, which may in some way reinforce the victim's belief that he/she can control the aggressor's violence, causing some impact on the escalation of the violence. The strategies commonly used by the victim are: to deny the seriousness of the situation, to blame himself/herself for what happened or to attribute external causes to the aggressor's behaviour (Walker, 2000; APAV, 2010). The next phase is called the violent attack phase, in which the victim is physically and psychologically attacked by his/her partner, defending himself/herself passively until the aggressor stops. However, despite the victim being seriously injured, the medical assistance he/she may need is not always made possible by the aggressor. The tension between the couple becomes unbearable and intervention is inevitable. The victim sometimes precipitates the inevitable explosion in order to control where and when the aggression occurs, allowing him/her to take better precautions so as to minimize injury and pain. Over time, the victim can learn to predict at what point in the cycle the period of inevitability lies. Once that point has been reached, there is no escape unless the aggressor decides so. This phase is characterized by the uncontrollable discharge of tensions built during the first phase and only ends when the aggressor stops assaulting, thus leading to a reduction of tension. From this moment on, the victim tries to break the cycle of violence and acts towards eliminating it. Subsequently, the aggressor seeks forgiveness of the victim, which in turn leads to the third phase, the honeymoon phase (Ibidem). At this stage, the aggressor promises to the victim that the violence is over, acting lovingly to him/her, and even offers him/her gifts, apologizes and makes declarations of love. He/she who practices violence comes to believe that he/she will never be violent again. The victim wants to believe in the aggressor, at least at the beginning of the relationship, renewing the possibility of change by the violent partner. This phase provides positive reinforcement for the victim, so as to remain in the relationship (Ibidem). Over time, however, the cycle of violence tends to repeat itself and violence tends to increase. Given the increase in the repetition of acts of violence, the honeymoon phase tends to be shorter and shorter. Despite the repetitive nature of this cycle, the victim is not aware of his/her predictability and is involved in a mixture of fear, guilt and hope, and hardly ever decides to break up, promoting and maintaining his/her sense of incapacity. This cycle lasts and occurs successively, most often extinguishing the phase of increase of tension and the phase of appeasement or honeymoon, only making room for the phase of violent attack, and can even reach Homicide (Ibidem). Faced with this problem, we set some objectives for this research.

THE STUDY

To characterize the victims of marital violence and describe the mental health of victims of marital violence. The study population was the victims of marital violence of both genders and aged 18 years or over. The sample was selected through a kind of non-probabilistic sampling obtained for convenience, since only the victims of marital violence who were available or who volunteered to participate in the study were included (Carmo and Ferreira, 1998).

The instruments applied to the victims of marital violence were the following: a sociodemographic questionnaire prepared by the researcher and the Mental Health Inventory of Pais-Ribeiro (2001); the analysis of the

psychometric qualities performed by the author of the scale indicates that it has good psychometric qualities, namely a Cronbach's Alpha of 0.80 and statistically significant correlations with respect to the comparison measures, thus patenting identical characteristics of the Portuguese version to the original version.

Following the objectives outlined for the present research, the instruments referred to 37 victims of marital violence were applied. They were all female, that is, they correspond to 100% of the sample, with no male subject. It was verified that the age of the victims of marital violence of the present research varies between the 20 and the 69 years, being the average of 38 years, with a standard deviation of 11,6. It was verified that 16 victims of marital violence are married (43.2%); with an equally strong index of representation, the victims in a non-marital partnership with 37.8% (14 victims); followed by divorced victims (5 individuals - 13.5%); and, finally, victims who are legally separated (2 women - 5.4%), that is, the lowest marital status.

FINDINGS

In our study, 54.1% of the victims were not financially dependent of the aggressor and the type of violence most practiced against the victims (94.6%) is psychological violence. Physical violence follows with 81.1% of the sample (30 individuals). With a high representation index, the two types of violence previously mentioned (physical and psychological violence) are associated, since 28 individuals (75.7%) responded positively. Sexual violence, and psychological and sexual violence, were identified by 24.3% of the sample in which 75.7% reported that they were not victims of sexual violence or psychological and sexual violence simultaneously. With a lower level of expression is physical and sexual violence, as well as physical, psychological and sexual violence, both with 7 victims (18.9%). With regard to the physical violence against the victims, it is verified that of the 30 victims of this type of violence, the highest level of representation is the use of physical force with 27 individuals (90%); followed is aggression with furniture utensils or kitchen utensils being represented by 9 victims (30%); then there is the threat with a melee weapon indicated by 8 individuals (26.7%); in penultimate place are the other types of physical violence not mentioned in the questionnaire represented by 5 individuals (16.7%); and, lastly, there are 3 victims (10%) who said they had been threatened with a firearm. Concerning psychological violence against the victims of marital violence, it is observed that the greatest aggression is to call names, insults and the attribution of lovers, with 91.4% showing that they suffered this type of psychological violence; then there are threats to harm the victim by the aggressor flagged in 70.3% of the sample; psychological violence follows based on the depreciation and blame of the victim with 22 individuals (62.9%) claiming to be the target of this type of psychological violence; followed by 60% of the sample who is victim of negative and humiliating comments about physical appearance; then, it is verified that 57.1% of the participants in the study suffered psychological violence through the restriction of contact with the outside; subsequently, the threat of taking away the children or hurting them with 45.7%; 14 participants (40%) of the study claim to have been victims of deprivation of money; and, finally, with a lower degree of representation are the damages to personal objects and other types of psychological violence, both with 12 individuals (34.3%), in which 9 (30%) were subject to sexual violence in this sense, all being forced to have sex against their will. Of the nine victims of sexual violence, 3 (33.3%) suffered an attempt of rape or were in fact raped and 2 women (22.2%) were assaulted in their genital organs. With less representation, sexual violence is reflected in women's exposure to pornographic magazines, photographs or movies, as well as other types of sexual violence, both with one individual (11.1%) indicating that they were the target of this type of sexual violence. No woman reports that the abuser forced her to have sex with another person or to become a prostitute. The data obtained in this research evidenced that the possession and/or use of a weapon by the aggressor during the acts of violence occurred with 7 victims (18.9%). Regarding alcohol consumption by the aggressor, it is reported by 56.8% of the women. As regards to the consumption of drugs on behalf of the aggressor, it is reported by 4 individuals (10.8%). It was verified that the aggressive acts were practiced in the presence of minors in 59.5% of the cases. The consequences of the aggression were minor injuries (21 individuals - 56.8%) and severe injuries to 4 women (10.8%). The main reasons for the marital violence against the victims were: the altered state of the aggressor due to alcohol consumption and/or non-legal drugs (13 women - 35.1%) and the other motive was related to money, goods, expenses, debts and unemployment in 24.3% of the sample (9 women).

The sample of the present study reveals a mean of psychological distress of 72.5%. The victims of marital violence in this sample show an average of 28, having a standard deviation of 8.95 and presenting a minimum value of 17 and a maximum of 51. Thus, we conclude that these individuals are anxious, since the mean value is below the mean of the variation limit (10-60). As far as depression is concerned, there are some depressive features in the victims, since the mean scores obtained are 16.43, being slightly below the mean of the range of variation which goes from 5 to 29. The standard deviation is approximately 4.8 and a minimum value of 5 and maximum of 25 was assessed. The dimension of mental health, loss of emotional and behavioural control appears with an average of 28.03 with a standard deviation of 9.18, a minimum value of 14 and maximum of 48. The study sample presents difficulties in the emotional and behavioural control, since the mean of the results is

slightly below the mean of the variation limit (9-53). Regarding psychological well-being, the mean score was 38.76, also above the middle of the score limit (14-84), with a standard deviation of 12.35, a minimum score equal to 19 points and the maximum of 66, thus revealing that the victims display a reasonable level of psychological well-being. As for the positive affection of the victims of marital violence, the mean is 30.78 points, thus it is below the middle of the limit (11-66), having a standard deviation of approximately 10.81 and presenting as minimum value 14 and maximum 55. As a result, it is noticeable that the victims have little positive affect. In this study, the data show that victims have an average of 30.78 concerning emotional bonds, which shows that they are below the middle of the limit of variation (11-66) and, hence, this dimension of mental health is somewhat compromised. They also show a standard deviation of 10.81 and the minimum score reached was 14 and the maximum 55. Finally, regarding the mental health of the sample, the mean of the scores obtained was 111.27. Accordingly, it is above the score limit (38-226), with a standard deviation of 32.08, a minimum score of 65 points and a maximum score of 186 points, showing that the victims present a satisfactory level of mental health.

CONCLUSIONS

With reference to the characterization of the sample and based on the most recent statistical data on the victims of marital violence collected by APAV in 2010, the present study confirms that marital violence is practiced mostly against women, since the sample does not include any male subjects. Regarding the age of the victims, this varies between 20 and 69 years, thus encompassing the age groups (between 26 and 45 years) described in the literature as being the predominant one. It is also concluded that the marital status that prevails in this sample is married, corroborating with the state of the art. The data obtained confirm that the family type is nuclear with children, adding with the present research that the number of children varies between 1 and 8 children per victim. As far as literacy in this sample is concerned, the majority have the 3rd cycle and a higher education level, the latter being predominant according to the theory, so in this study the results obtained do not fully corroborate. Contrary to the state of art, most are unemployed and only later do the employed women appear. Nevertheless, the study participants are not financially dependent of the aggressor. Based on the data described by APAV (2010), in terms of marital violence, the most prevalent types of violence are psychological abuse and physical abuse, corroborating the results obtained in the present study.

Multiple marital victimization, according to Walker (1984, quoted by Pinto, 2009), consists of physical maltreatment; social isolation; emotional, verbal and psychological abuse; resort to male or female privileges; threats; sexual violence; and economic control. The data collected add to the state of the art the details of each type of violence (physical, psychological and sexual) that are often used against the victim. Hence, at the level of physical violence, the aggressor many times uses physical force against the victim; in relation to psychological violence, it is verified that the man insults and attributes lovers to the woman; and finally, with regard to sexual violence, the most common is the aggressor to force the victim to have sexual intercourse against his/her will. The literature points out that in most cases there is no use of a weapon in the practice of a crime (APAV, 2010) since most of the victims deny the use of the weapon at the moment of the aggression. Costa and Duarte (2000) report that alcoholic people are more likely to practice marital violence, and this is verified in the present study. APAV (2010) found that the probability of violence is higher when the aggressor is dependent on substances (alcohol, drugs), whereas in this study only a minority of the victims affirms that the aggressor is a consumer of narcotic drugs. The existence of violence in the family of origin (by the parents through maltreatment or severe discipline, as well as having witnessed marital abuse) has direct or indirect consequences on the individual, which may be violent in marriage (Fernandes, 2002). Hence the relevance of identifying whether or not the violent acts were practiced in the presence of minors. It was found that in most cases the children witnessed marital violence between their parents.

Almeida (2009) states that the consequences for the victim of marital violence are diverse and extremely serious. Still, the study reveals that most participants suffered minor injuries. Dias (2004) mentions that the place where marital violence frequently takes place is in the household where the family lives, also highlighting this fact in the present study. The couple's home is the place where most of the women admit to being the target for aggressions. As for the reason for the aggression, what is most highlighted is the consumption of alcohol and/or non-legal drugs, which is one of the reasons that individual-centred approaches defend (Cunha, 2009). The other objective was to describe the mental health of victims of marital violence. As a result, the data obtained show that the victims present little psychological distress, that is, the victim has a certain ability to overcome the experience of stressful situations (Sparrenberger et al, 2003). These women show that they have altered/pathological states of anxiety, that is to say, they have feelings of insecurity, fear, restlessness, imminent danger, with no real ground and that these feelings become too strong and prolong throughout time, with negative consequences for their life, preventing the victim from carrying out a normal day-to-day life (Norvatis, 2011).

The sample highlights difficulties in emotional and behavioural control. In other words, victims have little knowledge of their internal states and the influence these have on their thoughts, behaviours and attitudes. They also show that they do not know how to control impulses, therefore the victim's thoughts lead to acts without having previously thought about their consequences (Lucas, 2010).

Another dimension of mental health that is involved in the victims of marital violence is depression, evidencing some more marked or prolonged sadness, loss of interest in activities usually seen as pleasant and loss of energy or easy fatigue, once they have experienced situations that affect them in a negative way (Borges, s.d.). On the other hand, the sample presents indexes of reasonable psychological well-being, that is, they make a reasonable evaluation in relation to their life and in terms of affectivity based on others and the world (Nunes, 2008; Novo, 2003). The positive affection of these women is a little compromised, meaning they rarely experience pleasant feelings and emotions, and on the contrary they reflect sadness and lethargy (Nunes, 2008). The data also point out that the emotional ties of the victims are not very strong. According to Mota and Matos (2008), they cannot tolerate the most difficult moments in the best way, thus showing that in their childhood the proximity and ability to receive, give and take care of the loving figure was short on the demand physical and psychological protection of the victim. Finally, the mental health of the victims of marital violence is satisfactory, thus revealing that the victims have a certain state of subjective well-being; communication skills and interpersonal relationships; skills in both their personal and social life; abilities of autonomy and choice of life project; intellectual and emotional self-realization; and adaptation to reality. In other words, they demonstrate a certain physical, mental and social well-being (WHO, 2002). The prevalence of marital violence is a complex problem that will not be easily solved. For that reason, the main objective of this study was to characterize the victims of marital violence and the mental health of the victims in Portugal. Most are unemployed, although they indicate that they are not financially dependent of the aggressor. The types of violence predominantly practiced are psychological violence and physical violence. The detailed physical violence that usually targets the victims is the use of physical force by the aggressor. On the other hand, the detailed psychological violence most used against the victim is the aggressor calling him/her names, insulting him/her and stating he/she has lovers. The detail of the sexual violence that the aggressor applies to the victim is the obligation to have sexual relations against his/her will. Generally, the aggressor did not possess or use weapons at the time of the act of violence; in these cases, they are mostly consumers of alcohol, but do not consume drugs. Violent situations were witnessed by minors and the victim was slightly injured. The place where the violence took place was in the private home of the couple and the reason for the aggression was related to the altered state of the aggressor due to the consumption of alcohol and/or drugs. At the mental health level of the victims exposed to this problem, it is verified that these present little psychological distress, nevertheless they are anxious people, with difficulties in controlling their emotions and behaviour, and they present depressive states. With concerns to the psychological well-being of these women, it is reasonable, yet these evidence little positive affection and few emotional ties. Accordingly, it can be concluded that although the victims of marital violence have a reasonable mental health, from the point of view of the predominantly affective dimensions they show a deterioration. The limitations of the study focus on the choice of the sample, since it is a sampling for convenience, not allowing the generalization of the results. Nonetheless, the results obtained with this study are pertinent to identify risk groups that may be the target of prevention and intervention actions, as well as to identify the impact on the mental health of the victims. All in all, these results demonstrate how important the reinforcement of technical teams is, at the level of psychosocial support to these women, since they are deprived of any affective and emotional support. This aspect should be of particular importance since, without an adequate mental structure, it will be very difficult for these women to re-establish themselves and to restart their lives in peace.

In the course of this study, other issues that could be explored empirically were raised, and it is considered pertinent to, in future studies, compare a group of victims with a group of non-victims regarding personality and mental health. We also suggest research that allow the collection of psychological characterization data at different moments in the women's life trajectory, whether pre or post-marital victimisation. It would also be interesting to know the mental health of minors who witness violent practices between their parents. The study could be replicated in other types of violence, including those that were recently discovered and thus little known, a crucial contribution to scientific knowledge, namely violence in youth intimacy, sexual violence among young people, stalking, trafficking human beings and their sexual exploitation, institutional violence, state violence, control/violence against certain communities (Machado, 2010).

It is important that more and more future researchers take into account more globalizing approaches to the phenomenon, so that an integrative solution of the different actors is sought whenever possible, at the level of theoretical explanation, as well as the intervention of technicians, thus seeking to develop alternative social support structures that also include working with the perpetrator. The latter, in most cases, also lacks

professional help in the sense that it is often the case that people with personality disorders do not appear as a deterrent to their behaviour, but rather as a possibility for interpretation and intervention. As long as some family structure remains, even if it is dysfunctional, and while all its resources have not been exhausted, its capability for positive reorganization should not be rejected, and this effort requires intervention also with the aggressor, whenever such is possible.

With the present research we hope to have contributed in some way to a deepening of the knowledge about the mental health of the victims of marital violence in Portugal.

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MESLEK YÜKSEKOKULU ÖĞRENCİLERİNİN MEMNUNİYET DÜZEYLERİ ÜZERİNE BİR ARAŞTIRMA

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ÖZET

Bu çalışmanın, Kocaeli Üniversitesi Kocaeli Meslek Yüksekokulunda okuyan öğrencilerin memnuniyet düzeylerinin belirlenmesi ve bazı değişkenler açısından öğrencilerin tatmin düzeylerinin incelenmesi hedeflenmektedir. Araştırmanın örneklemi Kocaeli meslek yüksekokulunun 10 bölümünde okuyan 219 öğrenciden oluşmaktadır. Araştırmada veri toplama aracı olarak hazırlanan anket formu Bakan ve Büyükbeşe, (2004) tarafından geliştirilmiş ve memnuniyete yönelik 6 boyuttan oluşan (iletişimden tatmin, eğitim öğretimin niteliğinden tatmin, okulun imajından tatmin, öğretim elemanlarının niteliğinden tatmin, yönetsel yaklaşımdan tatmin ve okul arkadaşlarından tatmin) ve 24 sorudan oluşmaktadır. Araştırma örneklemindeki öğrencilerin tatmin düzeyleri, cinsiyet, yaş, başarı ortalaması gibi bazı değişkenler açısından farklılaşması istatistiki olarak analiz edilmiştir. Araştırma sonucunda, araştırma hipotezi kapsamında yapılan analizler ile araştırma grubundaki öğrencilerin memnuniyet (tatmin) düzeylerinde değişkenler açısından anlamlı farklılıklar olduğu belirlenmiştir.

Anahtar kelimeler: MYO, öğrenci memnuniyeti, demografik farklılıklar

A RESEARCH STUDY ON THE SATISFACTION LEVELS OF THE VOCATIONAL SCHOOL STUDENTS

ABSTRACT

In this study, it is aimed that the determination of kocaeli vocational school students' satisfaction level and the examination of the connection between their satisfaction level and some parameters. The sample is 219 students from ten different departments in kocaeli vocational school. The questionnaire prepared as a data collection by utilizing Bakan and Büyükbeşe's study (2004), contained 24 questions involving 6 dimensions toward satisfaction

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(satisfaction from communication, satisfaction from the quality of education-teaching, satisfaction from image of the school, satisfaction from quality of instructors, satisfaction from managerial approaches and satisfaction from schoolmates). Differentiation of students in the sampling of research in terms of certain variables such as satisfaction levels and gender's means, age was statistically analyzed. The results showed that significant differences were determined between the analyses performed within the scope of research hypothesis and the variables in the satisfaction levels of students in research group.

Key words: vocational school, student's satisfaction, demographic differences.

GİRİŞ

Akademik kurumlar, sosyal, ekonomik, sanatsal, kültürel, bilimsel, teknolojik kısacası her alandaki gelişimde öncü birimlerdir. Her alanda orijinal üretimlerin yapılabilmesi ve çağdaş değerlere ulaşabilmek nitelikli eğitim-öğretim ortamlarının bir sonucu olarak ortaya çıkabilir. Bu kapsama üniversitelerin, bir ülkenin yarınlarının teminatı olan gençlerin yetişmelerine en yüksek düzeyde katkıda bulunmak ve onların bir memnuniyet ortamında gelişimlerini sağlamak gibi temel bir işlevleri olduğu söylenebilir ((Tasçı, 1995; Eroğlu, 2002; Yenen ve Gözlü, 2003 & Koç, Arslantürk ve Arslan). Bir kişinin çevresinde, çalışma ortamında kısacası bulunduğu her sosyal alanda yaşayabileceği veya hissedebileceği duygular onun tatmin düzeyini ifade eder (Clark, Walker & Keith, 2002). En genel tanımı ile tatmin; bireyin işine, çalışma ortamına, karşılaştığı davranışlara ve aldığı hizmetlere ilişkin gösterdiği olumlu duygusal tepkiler olarak ifade edilebilir (Knight, 1994; Tütüncü ve Doğan, 2003; Yenen ve Gözlü, 2003 & Ay ve Koç, 2014) şeklinde ifade edilebilir.

Öğrenci memnuniyeti ve memnuniyeti etkileyen faktörleri araştıran çalışmalar bir çok ülkede farklı araştırmacılar tarafından yapılmıştır. Butt ve Rehman (2010), öğrenci memnuniyetini etkileyen faktörleri öğretmen deneyimi, kursların sunumu, öğrenme ortamı ve sınıf yapısı olarak belirlemişlerdir. 350 öğrenci üzerinde yapılan araştırmada bu faktörlerin tümünün öğrenci memnuniyeti üzerinde etkili olduğunu ancak öğretmen deneyiminin en yüksek etkiye sahip değişken olduğu sonucunu elde etmişlerdi. Napoli ve Wortman (1998) öğrenci memnuniyetine psikolojik faktörlerin etkisini araştırdıkları çalışmalarında, kampüs alanlarındaki sosyal alan ve etkinliklerin, etkili olduğu bulgusuna ulaşmışlardır. Öğrencinin memnuniyeti derinlemesine incelendiğinde çok boyutlu bir olgu olduğu söylenebilir (Ay ve Koç, 2014). Bu olgu; eğitim kalitesi, fiziki mekânlar, olanakları, sosyal kültürel ve sportif alanlar ve öğrenci kişiliği ve kimliği gibi biri birinden bağımsız sosyal değişkenleri ve özellikleri içerisinde barındırmaktadır.

Bu çalışmanın amacı, Kocaeli Üniversitesi Kocaeli Meslek Yüksekokulunda okuyan öğrencilerin memnuniyet düzeylerinin belirlenmesi ve bazı değişkenler açısından öğrencilerin tatmin düzeylerinin incelenmesidir.

YÖNTEM

Araştırmanın örneklemini Kocaeli Üniversitesi Kocaeli Meslek Yüksekokulunun 10 bölümünde ikinci sınıfta öğrenim gören 219 öğrenci oluşturmaktadır. Araştırmanın örneklemini oluşturmada basit tesadüfi yöntem kullanılmıştır.

Araştırmada veri toplama aracı olarak, (Bakan ve Büyükbeşe, 2004) tarafından hazırlanan ve (Ay ve Koç, 2014) tarafından 24 maddeye indirgenen ölçek kullanılmıştır. Tatmin ölçeği, iletişimden tatmin, eğitim öğretimin niteliğinden tatmin, okulun imajından tatmin, öğretim elemanlarının niteliğinden tatmin, yönetsel yaklaşımdan tatmin ve okul arkadaşlarından tatmin olmak üzere 6 alt boyuttan oluşmaktadır. Araştırma örneklemindeki öğrencilerin tatmin düzeyleri, cinsiyet, yaş ve başarı ortalaması olmak üzere dört değişken üzerinden analiz edilmiştir.

BULGULAR

Okulun 10 bölümüne ait örneklem grubunun öğrenci sayıları, yaş grupları ve cinsiyet dağılımlarının istatistiksel görüntüsü aşağıdaki gibidir (Tablo 1-3).

Bölümler	N	%
Bilgisayar teknolojileri	22	10,0
Büro hizmetleri ve Sekreterlik	21	9,7
Elektrik ve Enerji	23	10,5
Elektrik ve Otomasyon	22	10,0
İnşaat	21	9,7
Kimya ve Kimyasal işletme teknolojileri	22	10,0
Makine ve Metal teknolojileri	20	9,2
Muhasebe ve Vergi	23	10,5
Pazarlama ve Reklamcılık	22	10,0

Yönetim ve Organizasyon	23	10,5
Toplam	219	100,0

Tablo 1: Öğrencilerin bölümlere göre dağılımı

Yaş	N	%
20 yaş altı	72	32,9
20-21	112	51,2
21 yaş üstü	35	15,9
Toplam	219	100,0

Tablo 2: Öğrencilerin yaş guruplarına göre dağılımı

Cinsiyet	N	%
Kadın	122	55,8
Erkek	97	44,2
Toplam	219	100,0

Tablo 3: Öğrencilerin cinsiyet değişkenine göre dağılımı

Öğrencilerin okudukları bölümlerle, bölümlerden elde edecekleri kazanımların ilerideki meslek hayatına yansımaları konusunda farklı ve dağınık bir görüntü verdikleri söylenebilir. İlgili analizler aşağıdaki tabloda gösterilmiştir (tablo 4).

Meslekte Çalışma İsteği	N	%
Evet	125	57,0
Hayır	53	24,3
Kararsızım	41	18,7
Toplam	219	100,0
Toplumda saygınlık uyandırma düşüncesi	N	%
Evet	158	72,2
Hayır	61	27,8
Toplam	219	100,0
Kariyer imkanı sunma düşüncesi	N	%
Evet	136	62,1
Hayır	83	37,9
Toplam	219	100,0

Tablo 4: Öğrencilerin okudukları bölümlere yönelik bazı temel düşünceleri

Araştırma grubunun %57 si mezuniyet olduktan sonra eğitim aldıkları meslekte çalışma konusunda istekli ancak %24,3'ü mezuniyet sonrası meslekte çalışmak istememektedir. Öğrencilerin %18,7'si aynı bölüm üzerinden çalışma hayatına atılma konusunda kararsız olduklarını ifade etmektedirler.

Mesleğin saygınlığı konusunda ise öğrencilerin %72,2'si mesleğin toplumda saygınlık uyandırdığına inanmaktadır. Bununla birlikte hiçte azımsanamayacak bir oranda öğrenci gurubu %27,8'i aksi görüş bildirmişlerdir.

Öğrencilerin dağılımın görüntü verdikleri diğer bir konu ise mesleğin gelecek yaşamlarında kariyer imkanı sunup sunmayacağı konusundaki düşünceleridir. %62,1'lik bir öğrenci gurubu mesleğin kariyer sağlayacağı konusunda olumlu, %37,9'u ise olumsuz görüş bildirmişlerdir.

Daha sonra öğrencilerin okul başarıları ile memnuniyetleri arasında anlamlı bir ilişkinin olup olmadığı Pearson Korelasyon analizi yardımıyla incelendi (Tablo 5).

		Tatmin ort. puanı	Not ort. puanı
Tatmin ort. Puanı	Pearson Korelasyon	1	,223*
	Sig. (2-tailed)		0,00
	N	219	219
Not ort. Puanı	Pearson Korelasyon	,223*	1
	Sig. (2-tailed)	0,00	
	N	219	219

* Correlation is significant at the 0.01 level (2-tailed).

Tablo 5. Örneklem Grubunun Tatmin ortalama puanları ile Not ortalama puanları arasındaki Korelasyon

Tablo 5'e göre, öğrencilerin başarı ortalaması ile tatmin düzeyleri arasında doğru orantılı anlamlı bir ilişki olduğu söylenebilir ($r = 0,252$, $p < 0,01$). Diğer bir ifade ile öğrencilerin tatmin ortalamaları ile başarı ortalamaları arasında pozitif yönlü bir ilişki olduğu gözlemlenmiştir

Bu aşamada, Araştırmaya katılan örneklem grubunun cinsiyet değişkeni ile tatmin düzeyleri arasında anlamlı bir ilişki olup olmadığına bakılmıştır (Tablo 6).

Cinsiyet	N	\bar{X}	s.s.	t	p
Kadın	122	2,341	,459	2,263	0,03
Erkek	97	3,668	,721		

Tablo 6: Örneklem grubunun cinsiyet değişkenine göre tatmin ortalamaları

Araştırmaya katılan örneklem grubunun cinsiyet değişkeni ile tatmin düzeyleri arasında anlamlı bir ilişki olduğu gözlemlenmiştir ($t = 2,263$; $p < 0,05$). Tablo 6 incelendiğinde erkek öğrencilerin kadın öğrencilere göre memnuniyet düzeylerinin anlamlı sayılabilecek bir düzeyde daha olumlu olduğu görülmektedir. Bu farkın önemli bir nedeni olarak meslek yüksekokulunun nispeten küçük sayılabilecek bir yerde olması ve böyle bir yerde kadın öğrencilerin çokta rahat hareket edememeleri gösterilebilir.

SONUÇLAR

Meslek yüksekokulu öğrencilerin tatmin ortalamaları ile başarı ortalamaları arasında pozitif yönlü bir ilişkinin bulunması, beklendiği gibi başarı arttıkça memnuniyetin arttığı sonucunu ortaya çıkarmıştır. Bununla birlikte cinsiyet değişkenine bağlı olarak ta öğrencilerin memnuniyetlerinin değişkenlik gösterdiği gözlemlenmiştir. Kadın öğrencilerin memnuniyet puan ortalamalarının düzeylerinin düşük bir seviyede olması kadın öğrencilerin memnuniyet açısından daha seçici oldukları olarak yorumlanabilir. Son olarak, öğrencilerden mesleklerinin kariyer imkanı sunduğunu düşünenlerin tatmin düzeyleri kariyer imkanı sunmadığını düşünenlerin tatmin düzeylerinden daha yüksek olduğu analiz sonuçlarıyla desteklenmektedir.

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METAMORFOSA KUPU-KUPU SONG: INTEGRATION OF LANGUAGE AND SCIENCE SUBJECTS FOR DEVELOPING EARLY CHILDHOOD EDUCATION TEACHERS COMPETENCES IN TEACHING SCIENTIFIC CONCEPTS

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ABSTRACT

The paper examines the integration of Language and Science subjects for developing early childhood education teachers' competences in teaching scientific concepts of metamorphosis through the song. In Indonesia, science is considered as difficult subject for early childhood and the teachers faced the challenges of integrating scientific concepts through playing and fun learning experiences. In the study, the researcher has written the *Metamorfosa Kupu-Kupu* song which its lyric contains of butterfly metamorphosis process. The song lyric is made into three versions which help students to understand the first, second, and third subject pronouns; I, you, and he/she in Language subject and the butterfly metamorphosis in science concepts. The qualitative methodology was conducted in the study through observation and interview with the early childhood education teachers. The results show the teachers has developed their competences in teaching scientific concepts within fun and meaningful learning experiences. The teachers also found that the song helped the students to understand the scientific concepts easily. The song has helped the teachers in developing the integration of science and language subject which is related to Indonesia early childhood education curricula.

Keywords: *science, language, song, butterfly, early childhood education*

INTRODUCTION

Joyful learning has to be applied in a learning process of every field, inclusively in fields of Science and Language. Most teachers are likely to be entangled with a sole experimental method when introducing Science to the early childhood. This also applies to introducing language learning which mostly employs lecturing and storytelling as the most dominant methods. Conversely, early childhood learning particularly the one applied in kindergarten (either the first or second level) is supposed to be joyful and left unburdened.

THE STUDY

A singing activity might be designed as the one to apply in the so-called joyful learning method. Mrs. Kasur explained that children learn through activities they enjoy doing i.e. singing and playing, doing cheerful activities like moving their bodies and singing a song with which they feel happy (Soeratman&Pour, 2003, p. 164). Practicing singing as a learning medium for children, it is suggested that a teacher choose a song that meets children's needs and is appropriate with their age. Rudy My explained that a song is a lyrical message with tones arranged in a melody (Rudy My, 2008, p. 64). The lyric refers to a language used as a means of communication to transfer information. Kodally and Off in Sheppard explained that the naturally occurring music of a child's culture and environment holds the key to the musical development and personality of the child. Furthermore they say that music with the lyrics of a mother language of child tends to encourage language skills and expression as well as help balance social ability (Tarwiyah, 2009, p.42-43)..

The terminology of language usually refers to a code, encryption and other forms of communication system artificially formed. Noam Chomsky formulated a generative theory on language in 1960. The theory stated that the most basic form of a language is a combination of universal syntactic rules for all humans that underlie grammar of all human languages. Wittgenstein explained that a language is a thought that is understandable, related to reality, and has a logical form and structure (2013)

Ferdinand de Saussure, a Swiss linguist, was the first to semantically differ a French word *langage* that means a concept, *langue* that means a specific linguistic system, and *parole* that means a concrete use of a particular language as an utterance. Saussure further explained that a language is the most prominent distinguished characteristic since it signifies each social group as a whole unit that differs from others (2012). This writing refers to a language as a combination of words which form sentences containing meaning in a lyrical song.

The objectives of Science and Language learning, like other learning objectives in general, is to enable children to know, understand, and be able to apply and synthesize what has been learned so that they are able to create something. This complies with scientific learning approach stated on 2013 curriculum and revealed in Bloom's taxonomy.

Bloom's theory suggested that learning must meet the needs of the audience. There should not be a hindrance in learning the knowledge when introduced to the early childhood; indeed, there should be a way to figure out its being possibly transferred at ease.

Singing might be the answer to overcome the above problem since it involves a song, part of music that cannot be in separation with human life. Gardner explained that music is an initial intelligence humans have had since birth (Gardner, 1993). Sheppard revealed that singing might be a way one learns in order to communicate (Sheppard, 2007, p.7). With regards to the theory, it is recommended that Early Childhood Education teachers always be well-prepared with a song bank that will facilitate the learning needs for meeting the day-to-day learning theme objectives.

Availability of the songs somewhat gives rise to another obstacle the teachers encounter when providing joyful learning. Indeed, it is absolutely required for learning through play activity the children. It is delivered most of the master students who have background as an early childhood teacher. Therefore to help the students add the bank of songs containing science and language about the birth of butterflies, in order to improve student competence as early childhood or prospective childhood teacher.

Introducing the knowledge by means of song is a practical way because it may minimize the use of tools which are somehow likely to hinder the transfer of information about the knowledge itself. A song can be practiced at no cost by the voice of the teacher and children which has been physiologically innate. Thus, introducing the knowledge by means of song in a singing activity to early childhood is considered practical, economical and fun in the attempt to foster intelligence. Especially in this case language intelligence. And of course also the musical intelligence.

Science and Language have been part of learning materials that are compulsory to be introduced and taught in Early Childhood Education. The word science is derived from Latin *scientia* that means "knowledge" or "understanding" (2013) This word then formed an English word of science. Science, in the true sense, is knowledge that learns a number of natural phenomena by which secrets of nature can be revealed and understood.¹ Some characteristics of learning science resemble the characteristics of the science itself i.e.: the object of the study is concrete and science develops empirical experiences.

In association with both characteristics in addition to the way the learning is conducted, there should not be a difficulty in learning the science. Unfortunately, teachers may have come to an end when they have to teach it onsite. They have assumed that quality learning always corresponds to significant amount of fund. In fact, there are a number of activities and ways teachers can initiate in order to facilitate joyful learning for children and to promote their intelligence (Tarwiyah, 2013, p.2).

The Law No. 20 Year 2003 regarding National Education System in Indonesia, Article 1 Number 14 states that Early Childhood Education is a development effort designated to a child since birth to age six which is conducted through educational stimulation to allow physical and mental growth and development with a view to preparing children for more advanced education.

The method used in this study is qualitative research. The data begins from the master students report about the difficulty of teaching science in early childhood. The data was taken after they got enriched on a song loaded with science.

FINDINGS

Below is the content of Science and Language learning in the song of "MetamorfosaKupu-Kupu" i.e. learning metamorphose of butterfly and introduction to personal pronoun of I, You, and It respectively. Children are, by means of this song, introduced to the process of butterfly metamorphose, its living environment, and the use of personal pronouns of I, You, and It. This song introduces children to life cycle of a butterfly beginning from a nasty caterpillar, cocoon, to beautiful butterfly. On the other hand, the language content in this song introduces new related vocabulary and practices the use of personal pronouns of I, You, and It either as a subject or object.

METAMORFOSA KUPU-KUPU (Versi 1)**4/4****By Tuti TAS****Do=C**

Soprano

A ku u lat ke cil... Tubuh ku unik dan mu-
 ngil... Bila wak tu ku ti ba... Tubuh
 ku bergan ti ru pa... A ku ke
 cil... A ku mu ngil... A
 ku mera yap be bas... di a lam lu
 as... Ki ni A ku ke pom pong me nem
 pel di ba tang po hon... La lu ku ja di ku pu ku
 pu... ter bang ke la ngit bi ru...

The song above explains children about the life cycle of a butterfly starting from a caterpillar, transforming into cocoon and eventually butterfly. Almost people in Indonesia have been conditioned to think that a caterpillar is a nasty and frightening animal. However, this impression has been diminished by the lyric of the song due to its emphasizing on the idea that a caterpillar is a mere tiny creature with which children unnecessarily feel frightened. Furthermore, children's amazement will be emerged by the idea that the butterfly with which they have been familiar is surprisingly a transformed animal from a caterpillar. This will foster children's positive attitude to have thought that a caterpillar is no longer a nasty and frightening creature. Clearly, children scientifically learn to understand that a caterpillar transforms into a cocoon when the time comes. This cocoon hangs on parts of a tree (trunk/branch, twig, even leaf). Eventually, it will transform into a marvelous butterfly which can fly aloft to where it likes. It can be explained that the life cycle of a butterfly starting from a caterpillar to cocoon has a scientific reasoning and naturally occurs by the hand of God. Children will have a critical thinking when learning this science and have interest in learning more knowledge by means of a joyful song. In consequence, they will start their learning happily.

In terms of Language, the use of word "I" in bolded and colored is made to indicate that this part of the sentence can be in place of other words i.e. You and It. Therefore, this song can be sung in three versions: the caterpillar may refer to "I, You and It. When sung with I, the song will follow version I. Instead, when changed into version You or It, the blue-bolded typed words will accordingly change into You or It.

Clearly see the change that has to be noticed, and understood. Thus, children will finally be able to use the word corresponding to its grammatical function.

METAMOFOSA KUPU-KUPU (Versi 2)**4/4****By Tuti TAS****Do=C**

Soprano

4 Ka mu u lat ke cil... Tubuh mu unik dan mu-
 7 ngil... Bila wak tu mu ti ba... Tubuh
 10 mu bergan ti ru pa... Ka mu ke
 13 cil... Ka mu mu ngil... Ka
 16 mu mera yap be bas... di a lam lu
 19 as... Ki ni Ka mu ke pom pong me nem
 22 pel di ba tang po hon... La lu ka mu ja di ku pu ku
 pu... ter bang ke la ngit bi ru....

The second version of the song conditions the children as if they were talking to the butterfly face to face. The use of the word You, in terms of language, is in place of the first personal pronoun, butterfly.

Next, notice the change of the song in version 3, It version. The children are positioned as if they were telling about the third personal pronoun, butterfly.

METAMORPHOSIS KUPU-KUPU (Versi 3)**4/4****By Tuti TAS****Do=C**

Soprano

Di a u lat ke cil.... Tubuh nya unik dan mu-
 ngil.... Bila wak tu nya ti ba.... Tubuh
 nya bergan ti ru pa.... Di a ke
 cil.... Di a mu ngil.... Di
 a mera yap be bas... di a lam lu
 as.... Ki ni di a ke pom pong me nem
 pel di ba tang po hon... La lu di a ja di ku pu ku
 pu... ter bang ke la ngit bi ru....

Version 3 conditions the children as if they were telling about the so-called creature, butterfly. In addition to learning about butterfly's life cycle beginning from a caterpillar, cocoon to butterfly, the children learn specific vocabulary and personal pronouns.

Based on the abovementioned explanation, children are eventually able to learn numerous things particularly Science and Language at one time with fun atmosphere. They can understand the process of butterfly's life cycle.

STEPS TO LEARN SCIENCE AND LANGUAGE BY MEANS OF "METAMORFOSA KUPU-KUPU" SONG

In particular, the content of the song is as follows:

Version 1:

I am a little caterpillar, my body is unique and tiny

When my time comes, my body metamorphoses

I am small, I am tiny

I crawl down free in the wild

Now, I am a cocoon, hanging on the tree trunk

Then I transform into a butterfly, fly away up into the blue sky

When the subject "I" is changed into "You", the children will automatically learn how to use personal pronoun. When the subject "I" is used, the children will sing pointing at themselves. Instead, when the subject "You" is used, they will stretch out their hand pointing at the little caterpillar as if they were talking to it. The change of the lyrics is completely as follows:

Version 2:

You are a little caterpillar, your body is unique and tiny

When your time comes, your body metamorphoses

You are small, you are tiny

you crawl down free in the wild

*Now, you are a cocoon, hanging on the tree trunk
Then you transform into a butterfly, fly away up into the blue sky*

When the children sing version 3, they are positioning as if they were telling others about the third personal pronoun “It” and automatically moving their hand pointing away as a sign of “little caterpillar” which is not around. The lyrics version 3 is completely as follows:

Version 3:

*It is a little caterpillar, its body is unique and tiny
When its time comes, its body metamorphoses
It is small, it is tiny
it crawl down free in the wild
Now, it is a cocoon, hanging on the tree trunk
Then it transform into a butterfly, fly away up into the blue sky*

Below are expressions that are possibly shown by the children as their understanding of the use of first person pronoun (song-version 1), second person pronoun (song-version 1), (song-version 2), and third person pronoun(song-version 3).,:



Version 1

Version 2

Version 3

(All pictures are design by Andi)

Steps to introduce knowledge about metamorphose of butterfly and the use of words I, You, and It by singing “Metamorfosa Kupu-Kupu” are as follows:

1. Sing the song version 1 repeatedly.
2. Have children sing together under the teacher’s lead repeatedly.
3. Ask what the children know about the process of butterfly’s life cycle.
4. Underline the butterfly’s life cycle.
5. Repeat the song (version 1).
6. Repeat the question about metamorphose of butterfly.
7. Teacher introduces “Metamorfosa Kupu-Kupu” Song version 2.
8. Teacher explains the use of the first and second personal pronouns.
9. Teacher ask students to sing “Metamorfosa Kupu-Kupu” song version 2 in pairs and dealing
10. Teacher introduces “Metamorfosa Kupu-Kupu” Song version 3.
11. Teacher asks students to sing “Metamorfosa Kupu-Kupu” Song version 3.
12. Teacher explains the use of the first, second and third personal pronouns.
13. Teacher has children sing “Metamorfosa Kupu-Kupu” Song version 1, 2, and 3 interchangeably.
14. Teacher has children sing “Metamorfosa Kupu-Kupu” Song in groups with different versions each.
15. Teacher has children make use of the first, second, and third personal pronouns as instructed.

Another finding are from a number of 24 master students who have been given experience to provide an understanding of science, 17 people who have become teachers expressed satisfaction in teaching science to students. They generally say by teaching science through songs, students understanding of the concept of science becomes more acceptable.. Even children are happy and cheerful while learning with song.

CONCLUSIONS

Singing the song of “Metamorfosa Kupu-Kupu” as one medium to learn Science and Language enables teachers to create a joyful learning. This song can motivate children to learn Science and Language further. The children will better understand the process of butterfly’s life cycle in a fun way. They learn to know particular vocabulary in relevance with the song and easily understand the grammatical use of personal pronouns of I, You, and It. Thus, children are able to learn lots of things at one time by means of song and this promotes a more joyful, practical and economical learning process.

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MEZHEP İÇİ ‘ÖTEKİLEŞTİRME’NİN TEOLOJİK/POLİTİK TEZAHÜRLERİ: ‘ZEYDİ DÜŞÜNEDEN MUTARRİFİYYE-MUHTERİA’ ÖRNEĞİ

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İnsan faktörünün belirleyici olduğu ve içinde bulundukları dönemin siyasi, sosyo-kültürel, ekonomik vs şartları çerçevesinde teşekkül eden, kurumsallaşmış dini yapılar olarak karşımıza çıkan mezheplerin teolojik farklılaşmanın ötesinde sosyolojik birer vakıa olduğu söylenebilir. Tarihsel süreç içerisinde toplumsal kimliğin belirleyici bir unsuru haline gelen mezhepler dini, siyasi, sosyal, kültürel hayatın şekillenmesinde yönlendirici bir aktör olarak karşımıza çıkmaktadır. Bu çerçevede mezhepler arasındaki ilişki veya mezheplerin birbirlerine karşı tutumu inananların davranışlarına ve dini-politik tercihlerine yansımaktadır. İslam düşünce tarihinde, özellikle erken dönemlerde vuku bulan olayların etkisi neticesinde, siyasi-itikadi gayelerle vücut bulmuş olan ve dinin anlaşılma biçimleri olarak da tanımlanan siyasi-itikadi nitelikli İslam mezhepleri arasında bir ‘ötekileştirme’ sürecinin yaşandığı görülmektedir. Gerek mezhepler arasında gerekse aynı mezhebin mensupları arasında yaşanan ‘Biz ve Öteki’ veya ‘Ötekileştirme’ olarak ifade edebileceğimiz ve mezhep mensupları arasında şiddet içeren çatışmalara varan süreç bir problem alanı oluşturmaktadır. Ötekileştirme sürecinde taraflar çoğunlukla siyasi sebeplerden kaynaklanan problemi teolojik bir zemine taşıyarak meşruiyet arayışına girmektedirler. Olayın dini-politik bir zeminde tartışılması inananlar arasında derin ayrılıklara yol açabildiği gibi dinin sağlıklı anlaşılması noktasında da yeni sorunları beraberinde getirmektedir. Bu çalışmada söz konusu ötekileştirme sürecinin teolojik-politik tezahürlerini/aşamalarını hicri 6 ve 7. yüzyıllarda Yemen’de Zeydiyye mezhebi içerisinde yaşanan Mutarrifiyye ve Muhteria farklılaşması olarak isimlendirdiğimiz örnek üzerinden ortaya koymaya çalışacağız. Şii düşünce geleneği içerisinde yer alan Zeydiyye mezhebi 3/9. Yüzyılın sonlarından itibaren Kuzey Yemen’de hakim mezhebi unsur olarak varlığını sürdürmektedir. Başlangıçta kendine özgü öğretileri ve ılımlı-uzlaşmacı tavırlarıyla dikkat çeken Zeydiler 6/12. Yüzyılda kendi aralarında derin ayrılıklar yaşamaya başlamışlardır. Politik-karizmatik liderci zihniyetin tezahürü olan Zeydi düşünce içerisinde Mutarrifiyye ve Muhteria olarak isimlendirilen gruplar arasında yaşanan ve başlangıçta fikri tartışmaların ağır bastığı ayrışma sürecinin 7/13. Yüzyılda tekfir ve yok etme noktasına geldiği görülmektedir. Teberri, tövbenin reddi, tekfir, siyasal tepki/şiddet/varoluş mücadelesi şeklinde tasnif ettiğimiz bu ötekileştirme süreci fikri ayrılıktan başlayarak teolojik/hukuki ayrışma ve ardından siyasal tepki ve neticede şiddet/güç kullanarak karşıdakinin fiziki varlığını yok etme noktasına ulaşmaktadır. Kabilecilik faktörü/siyasi tercihler, farklı kültür/fikirlerle etkileşim ve ulema/din-teoloji gibi unsurların şekillendirdiği bu sürecin teorik bir ifadesi bize dini gruplar arasında yaşanan ötekileştirme sürecinin analizinde katkı sağlayacağı kanaatindeyiz.

MIDDLE SCHOOL STUDENTS VIEWS' ON SOCIO-SCIENTIFIC ISSUES: GLOBAL WARMING EXAMPLE

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ABSTRACT

The purpose of this study is to investigate the views of middle school students about socio-scientific issues. The questionnaire was developed to reach the aim and was conducted with 32 students who were studying at the Toki Mehmet Akif Ersoy Middle School in 2016-2017 academic years. At the implementation of the research; students were shown a 10-minute animation about global warming. How global warming is revealed and how it emerges was explained in animation. The students were asked three open-ended of questions about global warming. For the analysis, frequency analysis was used, which is a content analysis method. The students' answers given to the questions were coded by the researcher. According to the results of the research, the majority of the students stated that global warming was dangerous. They stated that the most important cause of global warming is human behavior. The students stated that if something is not done, it will be bad for humanity. They predicted that the world would become unbearable twenty years later. This study is important for younger students to become conscious about the factors that threaten the human future like global warming. The formation of this consciousness will help students to move in for measures that need to be taken later.

Keywords: Global warming, socio-scientific issues, students' views, middle school.

INTRODUCTION

Science and society have, throughout history, influenced, and is still influencing each other (Topçu, 2015). New developments in this process have paved the way for advancements in technology and at the same time had different effects on society, which are positive or negative. Scientific advancements contributing to the development of technology and helping society progress have also resulted in the materialization of some risks and fueled debates on them, which have been introduced to science education as research topics in recent years. It is stated that science education needs to be renewed due to these developments (Abd-El-Khalick & Choi, 2006, Osborne & Dillon, 2008; Tytler, 2007). Issues that cause such controversies are referred to as socio-scientific issues, which are regarded as complicated, open-ended, mostly disputable and questionable (Sadler, 2004). Socio-scientific issues are defined as science-based topics on the fringe of scientific knowledge with local and general dimensions from social and political perspectives that require generating ideas and making decisions in a personal or social sense (Ratcliffe & Grace, 2003). Examples of socio-scientific issues include hydroelectric power plants, global warming, biotechnology applications, construction of nuclear power plants, armament, organ donation, cloning and genetically modified foods (Kolsto, 2006, Sadler, 2004).

Since socio-scientific issues support the cognitive, emotional and social development of individuals in terms of scientific issues concerning society at large, the inclusion of these issues in curricula is regarded as a sign of science literacy (Dawson & Venville, 2009). It is therefore obvious that socio-scientific issues play a significant role in decision making processes concerning social issues related to science in science literacy.

Studies indicate that socio-scientific issues contribute to the development of students' discussion and decision-making skills and provide opportunities for members of the new generation to improve their science literacy (Lee et al., 2006; Zeidler, 2001; Topçu, 2010). It is also stated that engaging in discussion and evaluation activities for socio-scientific issues during science education can contribute to the rational, sensory and social development of individuals (Topçu, 2008). Eastwood, Schlegel, and Kristin (2011) point out that curricula including socio-scientific issues can help students think logically and make rational decisions about real and complex problems. Sürmeli (2008) emphasizes that teachers should make time for the analysis and discussion of socio-scientific issues in the classroom environment in order to enable students to make effective decisions about them.

The fact that socio-scientific issues are being included in science curricula and discussed more and more today raises the importance of the very same issues. This situation entails the analysis and evaluation of studies on those issues. Studies conducted in Turkey on socio-scientific issues are few and generally use university students as sample (Genç & Genç, 2017; Genç, 2016; Genç, 2015; İşbilir, Ertepinar & Çakıroğlu, 2012; Özdemir & Çobanoğlu, 2008; Soysal, 2012), and focus on only one topic among those issues (Demir & Düzleyen, 2012; Özdemir & Çobanoğlu, 2008; Uzunkol, 2012).

METHOD

This study was carried out using a screening model. The aim of screening models is to depict a past or present situation as it was/is (Karasar, 2008). The addressed event, situation, individual or object is defined and analyzed within its own conditions without attempting to modify or affect its underlying structure (Karasar, 2009: 77; Büyüköztürk et al., 2009; Cohen et al., 2007). The screening is the model of choice for this study for it aims to determine teacher candidates' views on socio-scientific issues.

STUDY SAMPLE

The sample consists of a total of 32 (17 female and 15 male) fifth-grade students at a public middle school (2016-2017).

Data Collection and Analysis

To collect data, participants were asked to watch a 10-minute animation about global warming and then asked three open-ended questions. Their answers to the questions were analyzed by content analysis.

Transcripts were collected from a graduate level virtual conference seminar course taught during summer session, 1998 at Northern Arizona University. Participants were in-service classroom teachers. A kindergarten through high school grade range of classroom assignments was represented by these teachers. Course work included outside class reading assignments of selected current research in the field, a final research paper, and active participation in the on-line discussion forum with focus questions by the instructor. The seminar offered was a Tools for Teachers course designed to promote reflective practice. Seven teachers from four different communities participated in this pilot course during the summer of 1998. Five of the participants were female and two were males. An interactional sociolinguistics (Schiffrin, 1995) approach was used to examine the texts of conversations. This approach draws upon concepts of culture, society, language, and the self. The meaning, structure, and use of language is socially and culturally relative (Gumperz, 1982). Meaning in dialog, like that of conversation, is socially constructed. Data was also examined for evidence of micro displays of sex class linked gender identities; displays that are commonly associated specifically with either gender. An example of this is the use of tag questions. Female participants, much more so than males, tend to use tag questions as a discourse strategy to invite response and inclusion or solidarity within the group. (Tannen, 1994) Simple quantitative analysis was done to determine total lines of text generated by each participant, amount of participation, total sums of questions, statements, as well as number of directed responses sent and received. Patterns of participation were mapped/graphed and correlated to the contexts of interactions. Style, register, and "voice" or tone analysis were also used on the data sets to try to discover the dynamics among the participants.

FINDINGS

Table 1 shows the distributions and frequencies of participants' answers to the question "What do you think about the present state of the world?"

Table 1. Distributions and frequencies of participants' answers to the question "What do you think about the present state of the world?"

What do you think about the present state of the world?		Frequency
Negative View	Bad	29
	Global warming	19
	Air is polluted	18
	Glaciers have melted/diminished	18
	Water and electricity are being wasted	15
	Fossil fuel use has increased	8
	The number of species has decreased	8

	Trees have been cut down	7
	Water is polluted	5
	The world is very dirty	5
	Greenhouse gas	4
	Habitats have declined	4
	The amount of trash has increased	4
	The ozone layer is depleting	3
	Nature has been destroyed	3
	Soil is polluted	2
	Living things except humans are suffering	2
	People are unconscious	2
	The world is becoming a desert	1
	Waste batteries are hazardous	1
	Private vehicle use has increased	1
Positive View	Good	4
	The number of technological devices has increased	2

The answers indicate that the majority of participants agree that the situation is negative.

Table 2 presents the distributions and frequencies of participants' answers to the question "What can be done to make our world a better place?"

Table 2. Distributions and frequencies of participants' answers to the question "What can be done to make our world a better place?"

What can be done to make our world a better place?	Frequency
We must use Public transport	31
We must save water	28
We must save electricity	27
Trees must be planted	23
Air pollution must be prevented	20
We must use bicycle	17
Environmental pollution must be prevented	11
Water pollution must be prevented	10
We must consume less	9
Solar panels/energy must be used	8
Wind power stations must be built	6
Deforestation must be prevented	5
Renewable energy sources must be used instead of fossil fuels	4
We must use energy saving bulbs	4
We must protect the green areas	4
Thermal insulation must be used	4
We must raise public awareness	3
Soil pollution must be prevented	2
We must use less perfume	2
We must recycle	1

Table 2 shows that participants' answers concentrate on recommendations for precautionary measures and remedies.

Table 3 demonstrates the distributions and frequencies of participants' answers to the question "How will the world be in 20 years' time?"

Table 3. Distributions and frequencies of participants' answers to the question "How will the world be in 20 years' time?"

How will the world be in 20 years' time?	Frequency
Waters will disappear	20
Very bad	18
Animals will go extinct	18
Glaciers will have melted	15
Green areas will disappear	13
The world will become arid	11
Irrelevant answer	9
Very good	8
The temperature will increase too much	8
Environment will be dirty	6
The number of buildings will increase	6
Human race may disappear	6
There will be no such place as world	5
Life will become difficult	5
Oxygen will run out	3
Soil will become poisonous	3
Fossil fuels will have run out	3
The world will be a desert	3
Food will run out	3
There will be floods	2
Life will decline	2
People will get sick because of dirty air	2
People will be unhappy	2
No answer	2
Wars will break out	2

Table 3 indicates that participants' answers portray a negative situation.

CONCLUSIONS

Playing a significant role in the establishment of connection between students' lives and science, socio-scientific issues constitute an inseparable part in science education as they make it easier for students to understand that scientific knowledge is human product (Pedretti, 1999). This study aimed to determine the views of pre-service teachers in Turkey on socio-scientific issues, in general, and on global warming, in particular.

Scientists try to solve socio-scientific issues and arrive at a conclusion by in-depth discussion. In this process, socio-scientific issues contribute to the development of students' decision making and problem solving skills (Day & Bryce, 2011; Sadler and Zeidler, 2004). In addition, socio-scientific issues improve teachers' ability to develop their students' critical thinking and rational judgement skills. According to Ratcliffe and Grace (2003), socio-scientific issues play an important role in education for science literacy, citizenship and sustainable development. Similarly, Eastwood et al. (2011) state that curricula including socio-scientific issues help students to reason and produce logical solutions to real and complex problems. According to Albe (2008), the inclusion of

socio-scientific issues in the learning process improves students' motivation to engage in class activities and learning tasks. Öztuna-Kaplan and Çavuş (2016) state that helping students develop critical approaches to socio-scientific issues will provide them with confidence to participate in social decision-making processes and enable them to focus on the wellbeing of society in those processes. Sürmeli (2008) also emphasizes that making informed decisions about socio-scientific issues is an important feature of science literacy and that assisting students in improving their decision-making and critical thinking skills regarding socio-scientific issues is one of the most important duties of science education. Nuangchalem (2010) points out that addressing socio-scientific issues during education allows students to comprehend the core ideas and concepts of science by improving their high-level thinking, discussion and questioning skills.

Studies on socio-scientific issues in the literature are few and mostly use university students (İşbilir, Ertepinar & Çakıroğlu, 2012; Soysal, 2012; Turan, 2012) and teacher candidates (Genç, 2016; Cebesoy & Dönmez Şahin, 2013; Gürbüzöğlu Yalmanlı & Gözüm, 2016) as sample, and generally address only one topic among socio-scientific issues (Genç, 2016; Demir & Düzleyen, 2012; Özdemir & Çobanoğlu, 2008; Uzunkol, 2012).

Science education addressing socio-scientific issues aims to provide students with the ability to develop critical thinking, decision-making, analysis, synthesis and evaluation skills, and to comprehend the relationship among socio-scientific issues (Zeidler, 2001). Topçu (2008) also states that engaging in discussion and evaluation activities on socio-scientific issues in science education can contribute to the rational, sensory and social development of individuals. Sürmeli (2008) emphasizes the importance of addressing socio-scientific issues in the classroom environment to improve students' ability to make effective decisions about those issues.

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MOBİL İLETİŞİMDE REKLAM UYGULAMALARI: ADMOB, ADSENSE, CLICKSENSE

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ÖZET

Reklam ve reklamcılık dünyasında, dijitalleşmenin getirdiği hız ile baş döndürücü değişimler yaşanmaktadır. Özellikle çağımızın bilişim çağı olması bu değişimi çok daha hızlı ve değişken hale getirmektedir. Bugünün koşullarında, bir reklam, uygulamalarda gösterilerek, cep telefonu ve tablet kullanıcılarından oluşan ve giderek büyüyen bir kitleye ulaştırılması basit bir işlem olarak ifade edilebilir. AdWords'ün sizin yerinize reklamınızı Görüntülü Reklam Ağın'daki uygulamalarla eşleştirmesine izin verebilir veya belirli uygulama kategorilerini hedefleyebilirsiniz. Bu çalışmada, ilk olarak, AdMob, AdSense, ClickSense ve Google AdWords kavramları tanıtılmaktadır. Daha sonra, Reklam firmaları hakkında genel bilgiler verilir ve pazardaki dağılımları üzerine bilgiler verilmektedir. Son olarak, reklamcılık ve reklam unsurları dünyasında kullanılan genel malzemelerle ilgili önemli kavramların işleyişleri ifade edilmektedir. Bu çalışmanın amacı, mobil iletişim teknolojilerindeki gelişmelere paralel olarak ortaya çıkan mobil pazarlama ve mobil reklam uygulamalarını incelemektir.

Anahtar kelimeler: Mobil iletişim, Reklam, AdMob, AdSense, ClickSense

GİRİŞ

Mobil iletişim teknolojilerindeki gelişmelerin bir sonucu olarak, mobil pazarlama faaliyetleri farklı bir ticari model olarak günümüz dünyasında etkin bir şekilde yerini almıştır (Pousttchi ve Wiedemann, 2007). Mobil telefonların, pazarlama faaliyetleri için önemli olmasının temel sebepleri olarak, müşterilerin mobil telefonlarını her zaman, her yerde yanında taşıması, her zaman iletişime açık ve müşterilerle bire bir iletişim kurulmasının daha fazla ilgi çekmesi söylenebilir (Yuan ve Cheng, 2004). Televizyon ve radyo reklamları, mobil telefon reklamlarından daha renkli, ilgi çekici, ikna edici görülmesine rağmen, mobil telefonların çift yönlü interaktif bir iletişim ortamı sağlaması, geleneksel pazarlama araçlarından daha önde olmasının gerekçesi olarak söylenebilir (Binatlı, 2006). Mobil pazarlama genel bir ifadeyle mobil telefonları kullanılarak yapılan pazarlama, mobil telefonları aracılığıyla iletişim faaliyetlerinde bulunulması ve yapılan ticaretteki tüm taraflara faydası olacak şekilde mobil telefonlar aracılığıyla malların, hizmetlerin ve fikirlerin tutundurulması faaliyetleri olarak tanımlanabilir (Scharl et al. 2005 & Tek ve Özgül, 2005).

ADMOB

Günümüzde internet, sadece firmalar için ticaret yapma ve para kazanma alanı olmaktan çıkıp, bireyler içinde gelir sağlama hatta büyük miktarlarda kazanç sağlama olanağı sunmaktadır. Sosyal medya kanallarıyla, sosyal ağlar üzerinden nasıl para kazanılır? Neler yapılabilir? İnternette doğru adımlar uygulandığında para

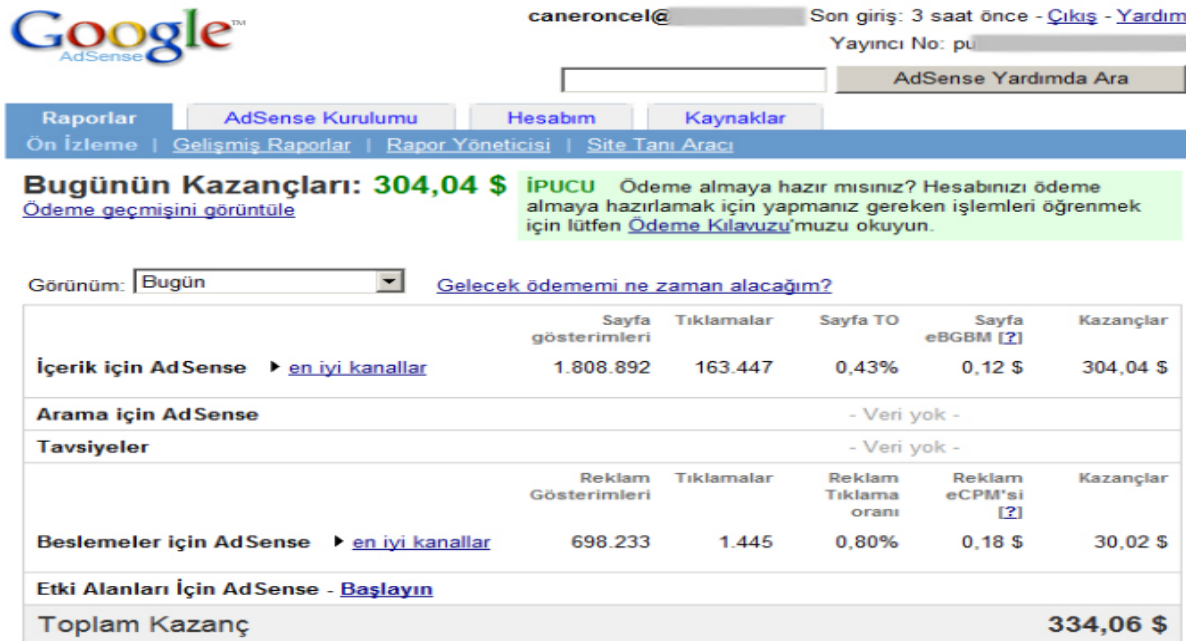
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kazanmanın artık zor olmadığı söylenebilir. İnternette para kazanmanın yollarından biri Admob'dur. Nedir Admob? Nasıl para kazanılır? Nasıl uygulanır? Neler yapmak gerekir? Admob; mobil reklam ekleyerek para kazanmak olarak ifade edilebilir. Mobil reklam alanında android uygulamalarıyla para kazanmanın fırsatlarının yakalanmasını sağlayan uygulamadır (A.N, 2017). Google Adsense ile Google Admob'un karıştırılmaması gerekir. Admob, mobil uygulamalar için kullanılan bir uygulamadır. Mobil uygulamaya sahip olduğunda uygulama üzerinde admob' ta kullanılabilir. Google Adsense ise mobil görünümü sitelerde (uygulama dışı), desktop ve tabletler vs. de kullanılan bir uygulamadır. Admob ile para kazanma yöntemi şöyle özetlenebilir; bunun için ilk yapılması gereken Admob uygulamasını kullanmaya başlamaktır. Sonraki aşama ise açılacak bir Google hesabı ile ara yüz uygulamasına geçip reklamları oluşturmaktır. Reklamlar oluşturmaya başladıktan sonra, uygulama sahiplerine ücreti ödenir. Bu ücretleri ödemek ise ücret ödenmesi ve reklamların dağıtım görevini yapan reklam servislerince yapılır (http://www.aristolog.com/admob-nedir-nasil-para-kazanilir/, 18.05.2017). Admob uygulamasının bu servislerin en çok tercih edilenleri arasında yer aldığı söylenebilir.

Google, Admob uygulamasını bünyesine katarak, kullanıcılarına sunduğu hizmet kapsamını önemli ölçüde genişletmiştir. Böylece, nternette para kazanma yollarının fırsatlarını sunan Google Admob ile kullanıcılar, oluşturdukları reklamlar sayesinde para kazanabilmektedir. Google Admob uygulamasının ödeme işleyişi, kullanıcıların reklam linkini takip etmesine bağlı olarak değişiklik göstermektedir. Bir reklam ne kadar çok ilgi görürse o kadar çok para kazandırmaktadır. Ayrıca, Google Admob, Iphone, Android ve Windows Phone platformlarında kullanılma olanağı sunmaktadır.

ADSENSE

Google Adsense. Web sitesi sahipleri için Google'un sunduğu bir reklamcılık hizmeti olarak ifade edilebilir. Ücretsiz olarak Google üzerinden başvurulabilen bu sisteme kayıt onaylandığı takdirde kullanıcı google yayıncısı olmaktadır. Bundan sonra site sahibi, siteye gelen ziyaretçi sayısına bağlı olarak belirli bir gelir elde edebilmektedir (http://www.onlinepazarlama.co/google-adsense-nedir-ve-nasil-calisir/, 16.06.2017). Son yıllarda dünya üzerinde on binlerce site bu sistemi kullandığı görülmektedir. Ayrıca, aldığı yoğun ziyaretçi sayısına bağlı olarak içerinde oldukça iyi para kazanan siteler olduğu söylenebilir.



Şekil 1 : AdSense uygulamasına bir örnek



Şekil 2: Google AdSense

Google tarafından üyelik başvurusunda bulunan bir sitenin üyeliği onaylandığında, yen üye olan sitenin ödeme alacağı yöntemi hesap ayarlarından seçmesi gerekmektedir (çek veya banka havalesi). Daha sonra çeşitli boyutlarda reklam birimleri oluşturup ilgili kodu sitede istenilen yere yapıştırılır. Bu işlemlerin tamamlanması sonucunda, 2-3 dakika içerisinde sitenin içeriğine ve kapsamına bağlı olarak reklamlar gözükmeye başlamaktadır (<http://www.onlinepazarlama.co/google-adsense-nedir-ve-nasil-calisir/>, 16.06.2017). Reklam veren şirketler, Google AdWords ile kampanyalarını oluştururken sadece arama ağı değil de yayıncı siteleri de hedeflerse bu reklamlar AdSense yayıncı havuzunda toplanır. Bundan sonra, bu reklam, benzer içerik barındıran sitelerde veya sayfalarda görüntülenmektedir (<http://shiftdelete.net/google-adwords-nedir-nasil-kullanilmali-38961>, 23.03.2017). Google örümcekleri bu siteyi sürekli endekslediklerinden dolayı sitenin içeriğinin kategorisini belirlerler. Eğer, site moda sitesi ise sitede kombi reklamları yayımlanmaz. Bunun faydası ise tıklanma oranının arttırmasıdır. Bu sayede hem Google hem yayıncı daha çok gelir elde etmiş olur.

Adsense ile para kazanmak

Web sayfasında görüntülenen reklamlar tıklandığı zaman google site sahibine belirli bir komisyon ödemektedir. Örneğin tık başı maliyeti 1 TL olan bir reklamdan google 30 kuruş alırken, site sahibi 70 kuruş gibi bir miktar almaktadır. Bununla birlikte, reklam verenlerin bütçesi adsense gelirini direkt etkilediği söylenebilir. “Tatil” kelimesindeki rekabetten dolayı adwords’te ” tık” başı maliyet yüksek olur dolayısıyla sitedeki bu tarz bir reklama tıklama daha çok gelir getirir (<http://www.onlinepazarlama.co/google-adsense-nedir-ve-nasil-calisir/>, 16.06.2017). Dünya üzerinde bu sistemi kullanarak oldukça fazla gelir elde eden siteler olduğu görülmektedir. Örneğin ünlü sosyal medya blogu mashable.com’un aylık 600.000 \$ AdSense gelirinin olduğu tahmin ediliyor (<http://www.onlinepazarlama.co/google-adsense-nedir-ve-nasil-calisir/>, 6.06.2017).

Öncelikle, AdSense en güvenilir internet şirketlerinden bir tanesi olan Google’ un güvencesindedir. Kurallara aykırı bir işlem yapmadığı sürece kullanıcıya parası her ay düzenli olarak ödenir. İkinci olarak, büyük bir site olmadan reklam alınmanın oldukça zor olduğu söylenebilir ancak günde 100 tekil ziyaretçiye sahip bir Blog’dan günde 2-3 \$ kazanmak mümkün olabilmektedir. Dolayısıyla en düşük miktarda, ayda 150 TL gibi bir gelir elde edilme şansının olduğu görülmektedir. Sonuç olarak, AdSense’ in belirli bir kategoride yayın yapan küçük site sahipleri için oldukça iyi bir sistem olduğu söylenebilir.

CLICKSENSE

Günümüzde, İnternette para kazanma yolları arasında çok farklı yollar ve yöntemlerin olduğu söylenebilir. Bu yöntemler içerisinde “reklam izle para kazan” sloganı ile ifade edilen yöntem birçok kişi tarafından tercih edilmektedir (<http://www.connectedvivaki.com/wp-content/uploads/2014/11/iab.jpg>, 09.05.2017). “Reklam izle para kazan nedir”, internette en çok araştırılan konuların başında geldiği görülmektedir. Çeşitli reklam siteleri reklamları yayımlamak için yayıncılarla anlaşmalar yapmaktadır. Sonrasında bu reklamları izlemeleri karşılığında insanlara o reklamdan aldıkları ücretin bir miktarını verirler. Bu şekilde hem kendisi hem de reklamı izleyen bireyler kazanç sağlamaktadır. Bu sistem üzerinden çalışan siteler için reklam izleyerek para kazandıran siteler” ifadesi kullanılmaktadır (<http://www.connectedvivaki.com/wp-content/uploads/2014/11/iab.jpg>, 09.05.2017).

Örnek sitelerden bir kaçını şöyle sıralayabiliriz. Neobux.com, Clixsense.com ve onbux.com. Siteleri açtıktan sonra siteye üye olunarak ClickSense hizmetleri hakkında kapsamlı bilgi sahibi olma şansı elde edilmektedir. Sonrasında view ads kısmını tıklayarak izlenmesi gereken reklamları izleyerek her reklam başına 0.001-0,005 dolara kadar para kazanılır. Ayrıca bir kişi referans olduğu başka bir kişinin bu sitelere üye olmasıyla aynı şekilde 0.001-0.005 dolara kadar kazanma şansı vardır (<http://www.connectedvivaki.com/wp-content/uploads/2014/11/iab.jpg>, 09.05.2017).

The screenshot shows the ClixSense website interface. At the top, there's a navigation bar with links like 'View Ads', 'Surveys', 'Offers', 'Tasks', 'ClixGrid', 'Advertise', 'Affiliates', and 'Forum'. Below this is a breadcrumb trail: 'Home > My Account > Account Summary'. The main content area is titled 'My Account Details' and includes a profile picture, name, email, and member since date (February 11, 2016). It also shows account type (STANDARD) and a prompt to upgrade to PREMIUM. A table displays earnings for PTC Clicks, ClixGrid Clicks, Completed Tasks, and Completed Offers. To the right, there's a 'WATCH VIDEOS and EARN CLIXCENTS' button and a 'Daily Checklist Bonus' section with a table of requirements and rewards.

REQUIREMENTS	REWARD
✓ View PTC Ads	19 clicks \$0.028
✓ ClixGrid Game	30 clicks \$0.00
✗ Complete Tasks	10 tasks required \$0.00
✗ Complete Offers	2 offers required \$0.00
✗ Visit the Forum	1 page view required
Total earned: \$0.028	

Şekil 3: Clixsense.com sayfasında bir pazarlama işlemi

GOOGLE ADWORDS

Google Adwords, dünyanın en büyük arama motoru olan Google'da doğal arama sonuçlarında sıralama olarak geride kalan web sitelerini bir takım ücretli işlemlerle üst sıralara taşıma işlemi yapan bir internet aracıdır. "Tıklama Başına Maliyet" (TBM) olarak kurulan bir sistemle, Google arama sonuçlarına göre geride kalmış bir web sitesinin sağladığı hizmet veya ürünlerin Google aramalarında, aranan kelimeler menüsünde üst sıralarda çıkmasını sağlayan ücretli bir araçtır (<http://www.onlinepazarlama.co/google-adsense-nedir-ve-nasil-calisir/>, 16.06.2017). Google Adwords'ün en önemli özelliklerinden bir tanesinin, bütçeniz ne olursa olsun, Google'da reklam vermenin en hızlı ve en basit yollarını size sunabilmesi olduğu söylenebilir (<http://shiftdelete.net/google-adwords-nedir-nasil-kullanilmali-38961>, 23.03.2017).

Anahtar kelime hedefli, Google reklamı vermek için öncelikle reklam vermek istenilen anahtar kelimeleri seçer daha sonra bu anahtar kelimelere her tıklama için reklam veren kişinin belirlediği en yüksek tutarı girmesi gerekmektedir. Google reklamları görüntülemek için herhangi bir extra ücret talep etmemektedir. Kullanıcı reklamı görüp tıkladığında ücretlendirme devreye girmektedir. Bununla birlikte, bir reklamın üst sıralarda yer almasının tek koşulunun verilen TBM'lerin olmadığını belirtmekte fayda vardır anahtar kelime "deri elbise modeli" olarak arandığında kullanıcıya gösterilmiyordu. Ama getirilen bu yenilik sayesinde artık bu kelime de görülebilmektedir (<http://shiftdelete.net/google-adwords-nedir-nasil-kullanilmali-38961>, 23.03.2017).

Google Adwords reklam veren ve kullanıcı deneyimlerini korumak adına anahtar kelimelere 1 ile 10 arasında bir "Kalite Puanı" atamaktadır. Bir kullanıcı Google'da arama yaptığında bu anahtar kelimeye reklam verenlerin TBM'leri ve Kalite Puanları çarpılarak bir açık arttırmaya gidilmektedir (<http://shiftdelete.net/google-adwords-nedir-nasil-kullanilmali-38961>, 23.03.2017). Bu açık arttırma sonucunda bu anahtar kelimeye reklam verenlerin sıralamaları belirlenir. Google'ın algoritmasına göre yapılan her aramada tüm reklam verenler aynı açık arttırmaya girmektedir. Yani sıralama her aramada Kalite Puanına bağlı olarak değişmektedir. Kalite Puanını belirleyen faktörler ise Tıklama Oranı (TO), açılış sayfasının kalitesi (Şeffaflık, alakalı içerik, kolay gezinebilir olmak), anahtar kelimelerin reklamla olan alaka düzeyi gibi değişkenlerin olduğu söylenebilir (<http://shiftdelete.net/google-adwords-nedir-nasil-kullanilmali-38961>, 23.03.2017).

"Anahtar kelime" uygulaması

Google, anahtar kelime aramalarında son zamanlarda, tam eşleme ve sıralı eşleme ile ifade edilen yeni seçenekleri sunmaktadır. Google'ın bu değişiklikleri yapmasının en önemli nedeni tıklamaların ortalama olarak yüzde 3 olarak artacağı beklentisi olduğu ifade edilmektedir. Bu yeniliklerin en önemlisi yazım yanlışları için getirilen yeniliklerdir. Tam eşleme olarak eşleştirilen bir anahtar kelime yanlış yazıldığında reklam gösterilmiyordu. Bu da potansiyel müşterinin reklama tıklamasını engelliyordu. Ancak yeni gelen özellik ile bu durum ortadan kalktığı görülmektedir (<http://shiftdelete.net/google-adwords-nedir-nasil-kullanilmali-38961>, 23.03.2017). Bu durumun bir örnekle şöyle izah edilmektedir; "takı satışı" anahtar kelimesi tam eşleme ise arama çubuğuna "tak satışı" yazıldığında reklam gösterilmiyordu. Yeni uygulamayla bu eksiklik giderilmiş ve potansiyel müşteri adaylarının ilgisinin çekilmesi sağlanmıştır (<http://shiftdelete.net/google-adwords-nedir-nasil-kullanilmali-38961>, 23.03.2017).

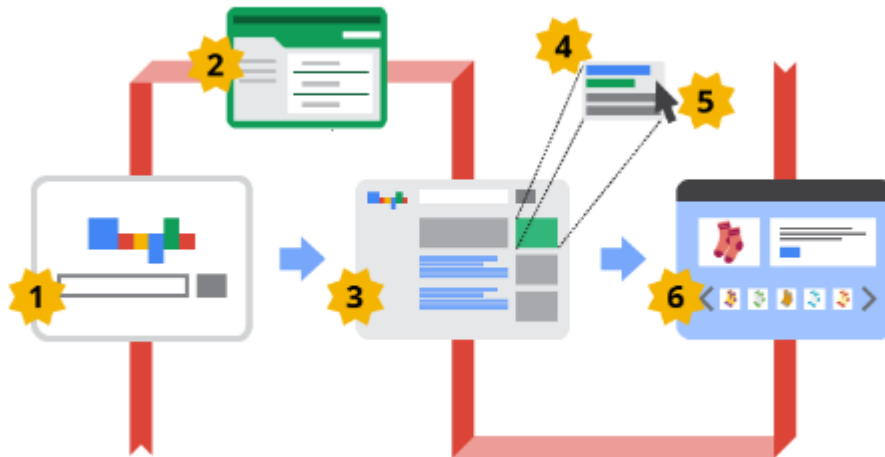
kullanilmali-38961, 23.03.2017). Google'ın bu yeniliği getirmesinin en önemli nedeni ise yaptığı analizlere göre aramaların yüzde 7'si yanlış yazımlardan kaynaklandığını belirlemiş olmasıdır. Bu da göz ardı edilemeyecek bir oran olduğu söylenebilir. Özellikle düşük bütçeli hesaplar için tam eşleme kullanıldığında önemli bir rakam haline gelmektedir. Bu yenilik ile düşük bütçeli hesapların daha fazla dönüşüm elde etme olasılığı artacağı tahmin edilmektedir (<http://shiftdelete.net/google-adwords-nedir-nasil-kullanilmali-38961>, 23.03.2017).



Şekil 4: Google AdWords

Sisteme daha farklı kelimelerin de eklenme durumu olduğu belirtilmektedir. Bir diğer önemli yenilik ise tam eşlemede tekil/çoğull formlardır. Tam eşlemeli olarak eşleştirilen bir kelimenin önceden çoğulu gösterilmiyordu. Ancak yeni değişiklik ile tam eşleştirilmiş tekil bir anahtar kelimenin çoğul hali aranırda reklam yine görülebilmektedir. Örneğin; anahtar kelime "tablet" ise aramada "tabletler" yazılrsa da reklam kullanıcıya gösterilmektedir (<http://shiftdelete.net/google-adwords-nedir-nasil-kullanilmali-38961>, 23.03.2017). Bu yenilikte dönüşümleri arttırması yönüyle de önemli olduğu söylenebilir.

Son değişiklik ise yapım eki almış köklerde meydana gelen yeniliktir. Bu özellik şöyle örneklendirilebilir; önceden "deri elbise model" anahtar kelimesi tam eşlemeli olarak eşleştirildiğinde, anahtar kelime "deri elbise modeli" olarak arandığında kullanıcıya gösterilmiyordu. Ama getirilen bu yenilik sayesinde artık bu kelime de görülebilmektedir (<http://shiftdelete.net/google-adwords-nedir-nasil-kullanilmali-38961>, 23.03.2017).



Şekil 5: Google AdWords nasıl çalışır?

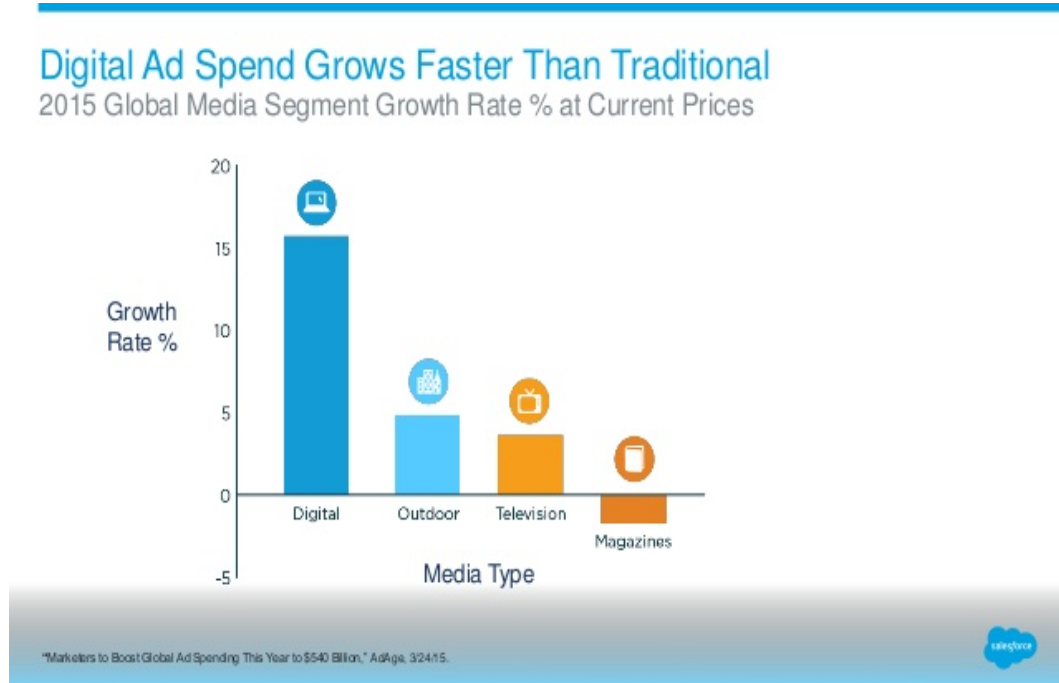
Yukarıdaki şekle göre iş akışı;

1. İnternette tanıtımını yapmak istediğiniz marka, ürün ve hizmetlerinizle ilişkili tüm anahtar kelimeleri belirleriz.
2. Kampanyalarınızı, promosyonlarınızı, sağladığınız avantajları, internete özel fırsatlarınızı ve rekabette sizi güçlü yapan özelliklerinizi öğreniriz.
3. Tüm bunları harmanlayarak, internet kullanıcılarının ilgisini çekecek reklam metinleri yazar ve bunları arama yapıldığında yayınlanmaya hazır hale getiririz.

4. Kullanıcılar belirlediğimiz bu anahtar kelimelerden birini kullanarak Google'da arama yaptıklarında, hazırladığımız metinlerden ilgili olanı arama sonuçlarının en üstünde veya sağında görüntülenir.
5. Metin kullanıcıların ilgisini çeker ve sizi tercih ederek internet sitenize ulaşırlar.
6. Sizde bugünden itibaren Google Adwords'te reklam vermeye başlayabilir ve potansiyel müşterilerinizi internetten sizi bulmasını sağlayabilirsiniz (<http://shiftdelete.net/google-adwords-nedir-nasil-kullanilmali-38961>, 23.03.2017).

REKLAMCILIK

Reklam; malların, hizmetlerin veya fikirlerin geniş kitlelere duyurulması ve benimsetilmesi amacıyla, bir ücret karşılığında kişisel olmayan bir biçimde sunulmasıdır olarak ifade edilmektedir (<https://reklamyatirim.com/Hizmetlerimiz/GoogleReklamlari>, 26.05.2017). Bir diğer ifadeyle, tüketici yönünden, iletişim süreci, bilgilendirme ve motive etme gibi çok çeşitli tanımları da yapılabilmektedir. Reklamcılık "Bir mal veya hizmetin sürüleceği piyasası ve bu mal veya hizmetin alıcısı olacakları tarafından tanınması için yapılacak araştırmalar, reklam amacının, reklam giderlerinin ve mesaj türlerinin tasarlanması, reklam bütçesi, reklamın ne zaman yapılacağı, hangi iletişim araçlarının kullanılacağı konusundaki kararlar ve reklam içeriğinin hazırlanması gibi faaliyetlerin bütünüdür" olarak tanımlanmaktadır (<https://reklamyatirim.com/Hizmetlerimiz/GoogleReklamlari>, 26.05.2017).



Şekil 6: Reklam Medya Alanlarına Göre Dünya Reklam Gelirleri Grafiği (2015)

Reklamın Amacı

Reklamın temel amacı hedef tüketicilere bir ürün veya bir hizmet ile ilgili olarak tüketiciye bilgi vermek, ürüne, markaya, işletmeye karşı tüketicilerde olumlu bir eğilim oluşturmayı sağlamaktır. Toplumun ekonomik ve sosyal gelişimine paralel olarak tüketicinin bilgi ihtiyacı ve bu bilginin mümkün olan en kısa süre içerisinde elde edilmesi gittikçe önem kazanmaktadır. Reklam da tüketicinin hızlı ve ucuz bir biçimde bilgi edinme ihtiyacını karşılayarak ona hizmet etmektedir (<https://reklamyatirim.com/Hizmetlerimiz/GoogleReklamlari>, 26.05.2017).

Reklamın satış amacı kısa vadede ve uzun vadede olmak üzere iki biçimde görülür. Kısa vadede reklam, tüketicileri motive ederek kısa bir zaman dilimi içinde o mal ya da hizmeti satın almaya ikna etmeye çalışır. Uzun vadede ise firmalar reklam sayesinde ürettikleri mal ya da hizmetleri tanıtarak, tüketiciye getireceği yararları göstererek o mal ve hizmete karşı talep yaratmayı amaçladığı ifade edilmektedir (<https://reklamyatirim.com/Hizmetlerimiz/GoogleReklamlari>, 26.05.2017).

Bunların dışında reklamın uzun ve kısa vadedeki ortak amacı aşağıdakilerin bir bütünü olduğu ifade edilmektedir (<https://reklamyatirim.com/Hizmetlerimiz/GoogleReklamlari>, 26.05.2017).

- Tüketicuyu ya da aracıya bilgi vermek, ürün ya da hizmeti hatırlatmak ve satışa ikna etmek,
- Mal ya da hizmetin satışını sağlamak,

- Toptan ve perakendeci satıcıya yardımcı olmak,
- Mal ya da hizmete karşı talebi artırmak,
- Talebin yaratacağı fiyat esnekliğini en aza indirmek.

Satış ve iletişim reklamının ana amaçlarıdır. Ancak bu amaçlardan başka üreticilerin reklam yaparken elde etmek istedikleri aşağıda belirtilen özel amaçları da vardır (<http://www.bilgeweb.com.tr/googleReklam>, 10.04.2017).

- ❖ İşletmenin saygınlığını sağlamak,
- ❖ Kişisel satış programın desteklemek,
- ❖ Dağıtım kanallarıyla ilişkileri geliştirmek,
- ❖ O sektördeki genel talebi artırmak,
- ❖ Malı denemeye ikna etmek,
- ❖ Malın kullanımını yoğunlaştırmak,
- ❖ Malın tercihini devam ettirmek,
- ❖ İmajı doğrulamak ya da değiştirmek,
- ❖ Alışkanlıkları değiştirmek,
- ❖ İyi hizmeti vurgulamak,
- ❖ Tüketicuyu eğitmek,
- ❖ Önyargı, yanlış ve olumsuz izlenimleri düzeltmek, Piyasaya egemen olmak ve monopol yapıya geçmek,
- ❖ İşletmenin prestijini artırmak.

Reklam Unsurları

Yaygın kanaate göre, reklam fikri ve anlayışının, insanlar arasında alışverişin başlamasıyla beraber ortaya çıktığı söylenmektedir. Dünya ekonomisinin büyük bir kısmı serbest piyasa ekonomisine dayanmakta olup, serbest piyasa ekonomisinin temelini de rekabet yaratma özgürlüğü oluşturmaktadır. Bu aşamada devreye reklam kavramı girmektedir. Reklam, reklam verenlerle tüketiciler arasındaki iletişimi sağlayan en önemli faktörlerinden bir tanesi olduğu söylenebilir. Ayrıca serbest rekabetin en önemli araçlarından biri olarak ta ifade edilmektedir. Çeşitli mal ve hizmetlerin tüketicilere tanıtılması, dolayısıyla tanıtılan malların satışlarının artırılmasında belirleyici olması dolayısıyla da piyasayı belirlemede de önemli bir unsur olduğu söylenebilir. Üretici veya satıcı, reklam aracılığı ile mallarını ve hizmetlerini tüketicilere tanıtarak, bu malların ve hizmetlerin onlar tarafından satın alınmasını sağlar. Bir ücret ödeyerek yapılan ve kişisel olmayan bir tutundurma unsuru olduğu da söylenebilir. Bu niteliği itibarıyla reklam, satın alınacak malı ve hizmeti belirleyerek, satın alma fikrinin doğumuna sebep olmakta ve sonuçta mal ve hizmetlerin tüketiciye geçmesini sağlamakta önemli bir belirleyici unsur olarak ortaya çıkmaktadır (Yazıcı, V., 2004).

Reklam Çeşitleri

Günümüzde çeşitli reklamlar yapılmaktadır. Türlü açılardan gruplanarak reklam çeşitleri şöyle sıralanabilir (Yazıcı, V., 2004). *Reklamı Hazırlayana Göre*;

- *Üretici reklamı*: Reklamı yapanlar üretici firmalardır ve ürettikleri malın reklamını ülke çapında ve kitle iletişim araçlarıyla yaptıkları söylenebilir. Bunlar genel reklamlar olarak ta ifade edilmektedirler.
- *Aracı reklamı*: Aynı malın yalnızca kendi mağazalarında satıldığını bildiren ya da belirli bir coğrafi bölgedeki tüketicilere seslenen ancak üretici olmayan firmaların reklamları ise “aracı reklamı” ya da “yerel reklam” olarak tanımlanmaktadır. Genel reklam ürünü, yerel reklam ise ürünün satıldığı yeri vurgulaması gerekmektedir. Maliyet açısından bakıldığında genel reklam için yapılan harcamalar daha yüksek olmasına rağmen birim başına düşen maliyet daha az olduğu görülmektedir.
- *Hizmet işletmesi*: Hizmet işletmesi reklamları ise genelde sigorta şirketleri, bankalar, oteller gibi ürettikleri hizmetleri hedef tüketicilere tanıtmak amacıyla reklam yapan işletmeler olarak ifade edilebilir.

Reklamın Amacına Göre;

Reklamın hedef kitle üzerinde iki tür istek yaratma amacı vardır.

- *Asıl istek yaratma amacı güden reklam*: “Birincil istek yaratmak, belirli bir mala karşı istek oluşturmak ve var olan isteği arttırmaktır” anlamına gelmektedir. Bu tip reklamlarda marka imajından çok ürünün nitelikleri ve tüketiciye getireceği yararlar üzerinde durmaya önem verildiği görülmektedir. Bu reklamlar genelde pazara sunulan yeni ürünler için tercih edildiği söylenebilir.
- *Seçici istek yaratma amacı güden reklam*: Seçici istek yaratmak amacıyla yapılan reklamda ise tüketicinin dikkati genelde ürün kategorisine değil, o kategori içinde yer alan belirli bir markaya çekilmeye çalışılması ön plana çıkmaktadır. O markanın farkı, üstünlükleri ve ayrıcalıklarının ön plana çıkarıldığı görülmektedir.

Hedef Kitlelerine Göre;

Tüm reklamlar ya son tüketicilere ya üreticilere ya da aracılara yöneliktirler.

- *Tüketicilere yönelik reklam:* Basit bir ifadeyle, tüketicilere yönelik reklamlar tüketici reklamları olarak tanımlanmaktadır.
- *Aracılara (dağıtım kanallarına)yönelik reklam:* Üreticilere ve aracılara yönelik reklamlar; ticari reklamlardır. Aynı reklam araçları kullanılarak birden çok pazar türüne bir malın reklamı yapılabilir.

Taşıdığı Mesaja Göre

- *Mal reklamı:* Çoğu reklamlar mal reklamlarıdır. Bu tür reklamlarda, belirli bir malın ya da belirli markalı bir malın satışını arttırma amacı güdülür. Bu tür reklamlar, üreticiler ya da aracılar tarafından yapılır. Yapılan reklam, malın fiyat ve kalite gibi nitelikleriyle doğrudan ilgilidir.
- *Kurumsal reklam:* Öte yandan, kimi reklamlar kurumsal reklamlardır. Reklamı yapan işletme, pazarda saygınlık yaratmayı amaçlar. Belirli bir malı satma çabası göstermekten çok, işletmeye karşı olumlu davranış yaratmaya çalışır. Böylece, pazar birimlerinin işletmeye karşı saygınlık duymasını sağlamak için çaba gösterebilir. Örneğin, işletme çevre kirlenmesine karşı ne gibi önlemlere başvurulduğunu reklamlarında açıklayabilir.

Zaman Kriterlerine Göre;

Tüketiciye yönelik reklamlardaki ikna süreci farklılıklar gösterir.

- *Hemen satın aldurmaya yönelik reklamlar:* Tüketicinin hemen harekete geçirilerek malı ya da hizmeti kısa süre içinde satın alması teşvik edilir.
- *Uzun dönemde satın aldurmaya yönelik reklamlar:* Malın satışı belli bir ikna sürecini gerektirir. Belirli bir marka ürüne karşı olumlu davranış geliştirilmesi ve o malın hedef pazar tarafından benimsenmesi sağlanır.

Coğrafi Kriterlere Göre;

- *Bölgesel reklam:* Belirli bir bölgenin ticari alanını hedefleyen bölgesel reklamlar, o bölgede üretim yapan ve ürününü o bölgedeki tüketiciye sunan üretici firmaların kullandıkları reklam türüdür. Yerel reklam ise çoğu kez perakendeciler tarafından yapılır.
- *Ulusal reklam:* Ulusal sınırlar içinde ilgili pazarın tümünü hedef alır. Ulusal reklam genellikle üreticiler tarafından yapılır.
- *Uluslararası reklam:* Değişik ülkelerdeki uluslararası pazarlara yönelik reklamlar uluslararası reklam olarak sınıflandırılır.
- *Global reklam:* Tüm dünyayı tek bir pazar olarak ele alarak her yerde aynı tarihlerde aynı biçimde uygulanır. Günümüzde küreselleşme ve gelişen teknolojiye en çok etkilenen alanlardan birisi de pazar yapısı ve buna bağlı olarak yapılan pazarlama çalışmalarıdır. Büyük firmaların ürettiği ürünleri dünya üzerinde başka pazarlara yönelerek satmak istemesi, gelişen teknolojiyle beraber bu ürün, hizmet ya da marka hakkında dünya üzerinde birçok kişinin bilgi sahibi olması ve yine her iki nedenle de bu pazarlara yönelik çalışmaların yapılabilmesi global pazarlama kavramını doğurmuştur. Bu noktada global reklamcılık kavramı ortaya çıkmıştır.

MOBİL REKLAMCILIK

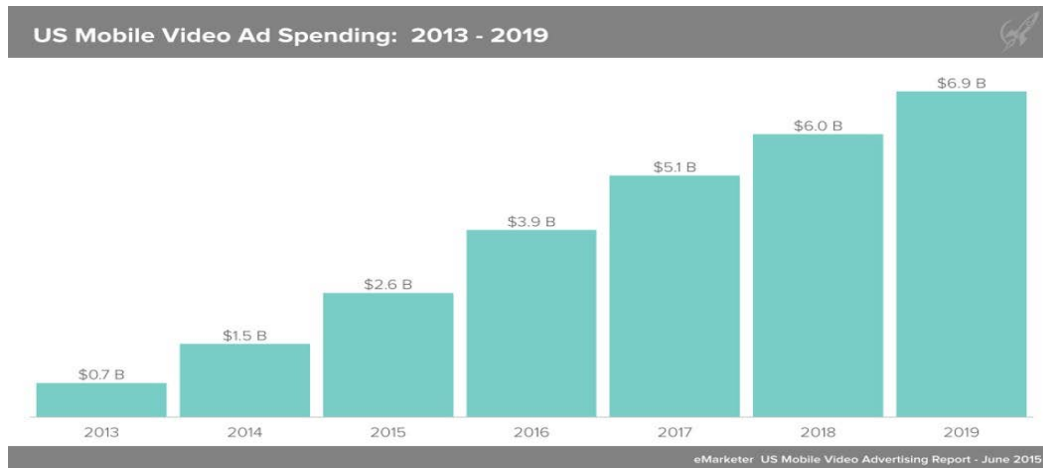
Teknolojik gelişmelerin kullanıldığı her alana sağladığı avantajlar ve getirdiği kolaylıklar gibi mobil iletişim teknolojilerindeki gelişmelerinde, geleneksel iletişim araçları ile gerçekleştirilemeyecek fırsatları sunduğu rahatlıkla söylenebilir. Mobil pazarlama faaliyetleri, mobil telefonlar aracılığıyla gerçekleştirilmesinden dolayı mobil telefon ve mobil pazarlama arasında önemli bir ilişki vardır. Mobil telefonların, pazarlama faaliyetleri için önemli olmasının nedenleri; müşterilerin mobil telefonlarını her zaman, her yerde yanında taşıması, her zaman iletişime açık olması, müşterilerle bire bir iletişim kurulmasının daha fazla ilgi çekmesi, müşterilerin gönderilen mesajları kaydederek daha sonra yanıtlayabilmeleri, müşteriler ile bire bir sesli ve görüntülü iletişim kurma fırsatı sunması ve müşteriler için uygunluk ve pazarlama yöneticileri için etkinlik sağlaması olarak da sıralanabilir (<http://www.investopedia.com/terms/m/mobile-advertising.asp>, 12.04.2017). Buna göre mobil telefonlar, geniş kitlelere etkin şekilde ulaşabilen, hedef kitlelere her yerde ve her zamanda etkileşim kurabilen doğrudan pazarlama aracı olduğu söylenebilir (Milli Eğitim Bakanlığı, 2005).

Geçmişten günümüze pazarlama kavramının farklı belirleyici unsurları olduğu söylenebilir. Ancak, çağdaş pazarlama anlayışı içinde işletmelerin hedef müşterileriyle kurmak istedikleri satış ve ilişki yönlü iletişimin bir bileşeni olarak reklam, günümüzün vazgeçilmez pazarlama iletişim aracı konumundadır (Babacan, 2005). Bu nedenle, teknolojik gelişmelere bağlı olarak sürekli yeni reklam araçları hedef müşterilere ulaşmak için kullanılmaktadır. Özellikle mobil telefonların reklam aracı olarak kullanılmasıyla mobil reklamcılık kavramı ortaya çıkmıştır. Pazarlama piyasasında mobil reklamcılık temelde iki anlama sahiptir. Birincisi, bir yerden bir yere taşınan (örneğin toplu taşıma araçlarında) reklamlar, ikincisi ise mobil telefonlara gönderilen reklamlardır. Günlük yaşamda insanların hareketliliği yüzünden geleneksel medya araçlarıyla hedef müşteri gruplarına

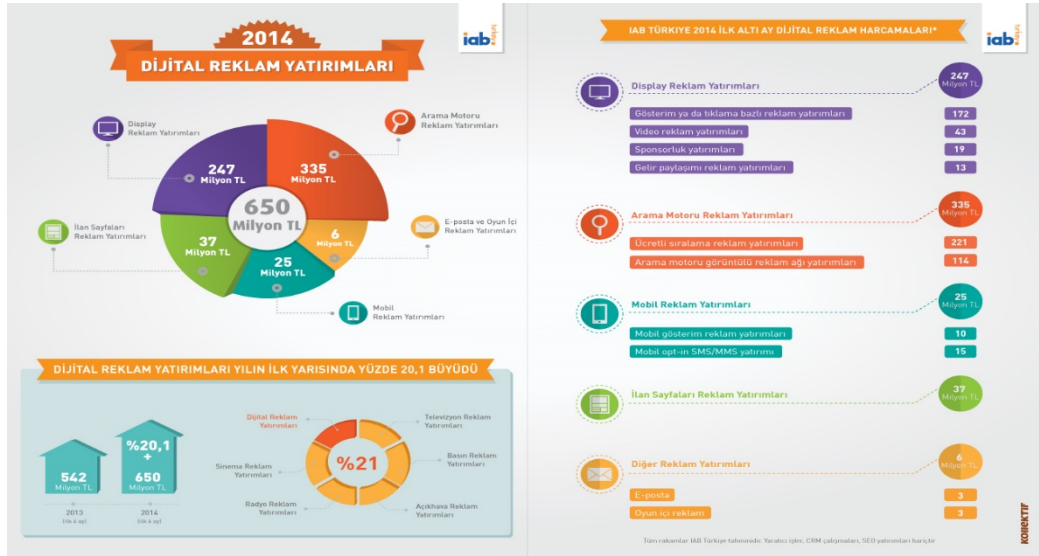
ulaşmak giderek zorlaşmaktadır. Mobil reklam, mobil iletişim araçları kullanarak, hedef gruba kişiselleştirilmiş bilgilerle ürün, hizmet ve fikirler sunulması, hedef müşteri grup/gruplarının bulunduğu yer, zaman ve ilgilerine göre kişiselleştirilmiş bilgilendirici, hatırlatıcı veya ikna edici reklam mesajlarının gönderilmesi veya doğrudan pazarlama mesajlarının mobil telefonlara iletilmesi ve internet veya televizyon reklamlarındaki gibi mesajının mobil telefona iletilmesi olarak tanımlanabilir (Milli Eğitim Bakanlığı, 2005).

Mobil teknoloji ve özellikle mobil iletişim üzerine de yoğun araştırmalar yapıldığı söylenebilir. Bununla birlikte, günümüzdeki araştırmaların, mobil telefon kullanıcılarının mobil reklamlara yönelik tutumları ve istekleri üzerinde yoğunlaştığı görülmektedir (Barutçu & Öztürk, 2013). Örneğin, yetişkin mobil telefon kullanıcılarının %35'lik bir kısmının özendirici reklamları görmeye istekli oldukları, bu yetişkin kullanıcıların %78'i kullanıcıya para kazandıran, %63'ü ücretsiz konuşma dakikası sunan, %40'ı ücretsiz oyun ve melodiler yükleme fırsatı sunan ve %40'ı ise indirim kuponları sunan mobil reklamları almak istediği belirlenmiştir (Milli Eğitim Bakanlığı, 2005). Dünya çapında 11 ülkede 3300 kişi ile yapılan araştırma sonuçlarına göre, kullanıcıların yüzde 86'sı mobil reklam almayı, mobil iletişim giderlerinin bir bölümünün reklam veren tarafından karşılanması halinde kesinlikle istemektedir. Ancak tercih (mesajların gelmesini ya da gelmemesini belirleyebilmek), kontrol (istenen mesajların bazılarının gelip gelmemesinin belirlenebilmesi), kişiselleştirme (alınacak mesajların kişiselleştirilmesi) ve karşılıklı faydanın (reklam mesajlar karşılığında kullanıcının bir şekilde -telefon ücretlerinin düşürülmesi gibi- fayda elde etmesi) bu isteğin oluşmasında önemli bir rolü bulunmaktadır, 18.06.2017). Mobil telefonlar aracılığıyla alış-veriş yapmak istememelerine rağmen mobil reklamlara karşı olumlu bir tutuma sahip oldukları belirlenmiştir. Mobil telefon kullanıcılarının tercih ettiği mobil reklam türünün belirlenmesine yönelik yapılan araştırmada, cevap verenlerin %56'sı mobil reklamları yazılı mesaj (SMS), %40'ı ise resimli mesaj (MMS), %25'inden daha azı ise videolar (%24), e-posta (%23) ve sesli (%22) mesaj olarak almayı tercih ettikleri belirlenmiştir (Milli Eğitim Bakanlığı, 2005).

Mobil teknoloji dünya üzerinde farklı kullanım oranları gösterdiği söylenebilir. Mobil teknolojilerin en yaygın olarak kullanıldığı Kuzey Avrupa'da binlerce gönüllünün katılımı ile yapılan bir çalışma, mobil telefonlara doğrudan gönderilen SMS'ler aracılığı ile ürün pazarlama yönteminin, satışları etkin bir biçimde artırabileceğini ortaya koymaktadır. Proje kapsamında yer alan McDonald's şirketinin, müşterilerine gönderilen SMS mesajları sayesinde, hedef kitlesinin yüzde 25'inin restorana geldiği belirlenmiştir. Gerçek pazarda izinli bir SMS tabanlı pazarlama kampanyası yürüten İtalya'daki Dunkin' Donuts şirketinin 2,5 aylık kampanyası sonucunda satışlarda % 9 artış görülmüştür. İngiltere'de yapılan bir başka pazarlama kampanyası ise Cadbury çikolata firması ile yürütülmüş ve 3 aydan kısa bir sürede 5.000.000 kişiye ulaşılmıştır (<http://www.investopedia.com/terms/m/mobile-advertising.asp>, 11.05.2017). Benzeri örnekleri çoğaltmak ve Türkiye'ye de uyarlamak mümkündür. Pazarlama aracı olarak SMS göz ardı edilemez bir etkiye sahiptir ve bu gerçek, ABD'de ve Asya'da da geçerli olmaktadır (www.bogaziciiletisim.com). Mobil reklam uygulamalarında çeşitliliğe bir bakıldığında bugün markalar mobil reklam kampanyaları yapabilmektedir. Ayrıca, çok da yeni olmayan çalarken dinlet (ring-back-tone) gibi hizmetler, 3. Nesil (3G) mobil telefon sistemleriyle kullanıcının hayatına girecek olan görüntülü konuşma, sponsorlu-arama gibi uygulamalar mobil pazarlamayı zenginleştirirken, mobil internet kullanımında her ülkede olduğu gibi büyük bir artışa neden olacaktır. Mobil internet ile bugünün arama-motoru pazarlama uygulamaları mobilde de derinliğini hızla arttırmaktadır. 3. Nesil mobil telefon sistemleri ile Türkiye'de pazarlama ve reklam dünyası, bir anda çok farklı kapsam ve çeşitte mobil bilgilendirme hizmetleri sunulması hedeflenmektedir (11).



Şekil 7: 2013-2019 Yılları Arası Mobil Reklamcılık Video Kazanç Grafiği



Şekil 8: Dijital Reklam Yatırımları (2014)

SONUÇ

Mobil cihazların kişisel cihazlar olarak kullanılabilmesi, pazarlamacıları bu alandaki reklamcılık faaliyetleri açısından umutlu ve heyecanlı bir süreç sokmuştur. SMS (Short Message Service), MMS (Multimedia Message Services) ve WAP (Wireless Application Protocol) gibi uygulamalarla reklam verme işlemleri kolaylıkla gerçekleştirilebilmektedir. Bu çalışmada yapılan analiz ve değerlendirmelerin bir sonucu olarak, Admob, adsense ve clicksense' in en etkin ve yaygın kullanılan mobil reklam araçları olarak dünya mobil pazarlama piyasasında ön plana çıktıkları söylenebilir.

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MOBILE ADDICTION AMONG ADOLESCENTS A KUWAIT CASE STUDY

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ABSTRACT

The technology revolution has facilitated various inventions in the world. This study aims to investigate the effects of mobile addiction among intermediate students based on three different aspects namely social life, academic performance and health. The hypotheses have been tested through issuing some questionnaires in various private schools in Kuwait as a study case. The questionnaires investigated indicators of mobile addiction and their associations with demographic and personal related variables among adolescents.

INTRODUCTION

Most of the cell phones made today have the ability to play video games, connect to the internet and run social media sites and applications. There is a difference between ordinary users of mobile phone devices and those who are addicted to them (Hong et al 2012) . Recently, the number of individuals addicted to these gadgets has increased significantly creating problems in social behavior, time management, health, and concentration. In the last decade, Kuwait has seen a huge development in the number of individuals who use mobile phones especially after the emergence of smartphones. Our study attempts to answer the question about the issue of mobile phone addiction and its impact on health and social behavior of students.

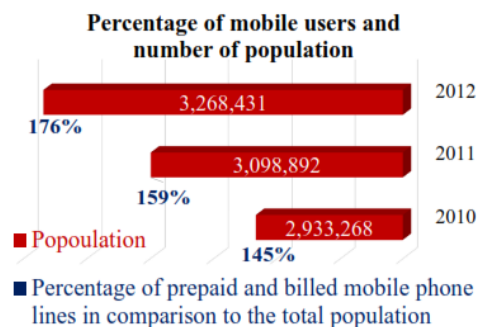


Figure 1: Percentage of prepaid and billed mobile phone lines in comparison to the total population in Kuwait issued by the Central Statistics Bureau.

THE STUDY

The study focuses on exploring some indicators related to mobile phone addiction of intermediate students in Kuwait. The method of choice for data collection in this research was questionnaires. A questionnaire that measures the effects of mobile addiction on the academic performance of intermediate students in was developed. These questionnaires were issued to some private school students (112 students) in Kuwait. The survey was written in English, but researchers offered assistance to those who need help filling the questionnaire to ensure reliable feedback.

Questionnaire Design

The questionnaire was focused on finding out the aspects of mobile phone addiction and student behavior among those who use their gadgets on a daily basis. Three dimensions were used to measure students' addiction to mobile phone usage. These included student health, academic performance, and behavior. There were closed-ended questions, open-ended questions, and 5 Likert scale questions. The questionnaire contained three demographics namely academic year, sex and age.

FINDINGS

For this study we found the following :

- 42 % of participants spend their spare time in using their mobile phones.
- 25 % of participants has two or more mobile phones.
- 58 % of participants become anxious if they could not locate their mobile phones.
- Responses indicate that the majority of the sampled individuals (74.1%) carry their mobile devices everywhere.
- Responses reported that watching videos is the most frequent act utilizing mobile phones followed by making calls, then accessing recent information and eventually communicating with teachers.
- Most of participants admitted that mobile devices make students lose concentration while studying and some reported that it distracts them from eating and praying.
- Results does not show any statistical variation at level 0.05 between the means of the sampled individuals on the use of mobile devices according to grade, age or gender.

CONCLUSIONS

The results are showing a very alarming rate. 74% of the participants carry their mobile devices everywhere where 42% of them prefer to spend their time using their mobile phones. More than half of the participants with a 58% feel anxious when their phones are out of their sight.

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MOBILE LEARNING PERCEPTION SCALE: A SHORT VERSION FOR THE ITALIAN CONTEXT

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ABSTRACT

Mobile-Learning techniques represent new horizons within the educational field that enhances more learner-centered pedagogical approach in front of the more typical educator-centered. Knowing teachers' perception and attitudes toward the use of M-Learning could facilitate a more successful implementation in the learning environment. The aim of this study is to propose a first validation of a short version of the Mobile-Learning Perception Scale (MLPS) for an Italian Context. To accomplish this, the items of the instrument were first back-translated from English into Italian. A survey among Italian primary, middle, and high school teachers ($n = 985$) was constructed in order to explore the psychometric properties of the Italian short version (13 items). Results of the EFA revealed, in accordance with our expectations, a three-dimensional structure underlying the 13 items. Specifically, the first factor extracted explained 44.04% of variance (Flexibility/Convenience). The second (Communication) and the third factor (Classroom Strategies/Techniques) explained 10.86% and 8.16% of the variance, respectively. All Cronbach's alphas were satisfactory ($\alpha > .70$). In addition, MLPS subscales were found to be significantly associated with a scale of school orientation to student empowerment and a scale of teacher frequency use of mobile device within school, providing evidence for both predictive and convergent validity. Overall, these results suggested the validity and the applicability of the instrument in an Italian educational context.

Key words: Learning, Mobile learning, Learning environment

INTRODUCTION

Today's students are considered "Digital Natives" whereas many today's teachers, who did not grow-up in the digital age, are considered "Digital Immigrants" (Prensky, 2001). As a consequence, the employment of mobile technologies in the educational field, with the aim of facilitating learning processes and improve students' readiness demands and challenges, has been only recently started (Al-Emran & Shaalan, 2015). One of the new research trend in this sector is Mobile Learning (M- Learning).

M-learning may be considered a new platform of distance learning which is the natural evolution of e-learning, giving to end-users, students and educators, the opportunity to learn more into short time frame. (Mostakhdemin-Hosseini, & Tuimala, 2005). It refers to "handled technologies enabling the learner to be on the move, providing anytime and anywhere access for learning" (Price, 2007; pp. 33-34). As a technology, it offers all the benefits of e-learning by allowing people to connect and interact using any other portable devices (e.g., notebook, smart phones, tablets, PDAs) to exchange information (Georgiev, Georgieva & Smirkarov, 2004). Among its many other benefits, M-learning is said to: 1) help learners improve literacy and numeracy skills; 2) encourage both independent and collaborative experiences; 3) help learners identify areas in which assistance and support are needed; 4) help to bridge the gap between mobile technology, Information and Communication Technology; 5)

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help remove some of the formality from the learning experience and encourage reluctant learners; 6) help learners remain focused for longer periods; and 7) help raise students' self-esteem and self-confidence (Attewell, 2005). Another significant advantage in using M-Learning is making it easy for disabled students to participate in learning process (Beaton, 2006).

Using M-Learning techniques has the potential to enhance the typical educator-centred classroom into a more learner-centered classroom (Holzinger, Nischelwitzer, & Meisenberger, 2005; Keskin & Metkalf, 2011). Consistent with the Constructivist Learning Approach, teachers become facilitators of the learning process, encouraging students to co-operate through their active role in solving problems.

Most studies related to Mobile Learning in education, focus on development of Mobile Learning materials but little is known about the attitudes of teachers towards Mobile Learning (Al-Fahad, 2009). In addition, students stated that one of the main obstacle to use technology at school is represented by the rules against the use of their personal devices such as cell phones, smartphones, laptops and MP3 players (Project Tomorrow, 2010). As stated by Corbeil and Corbeil (2007), the presence of technological tools during class activities does not imply automatically an enhancement in the pedagogical approach and, subsequently in the learning outcomes. To overcome this gap, it should be determined how teachers perceive the use of technology within the educational context. Knowing teacher perceptions and attitudes toward the use of M-Learning could facilitate a more successful implementation in the learning environment. Moreover, considering that teaching is a high-stressful occupation *per se* (Converso et al. 2015; Guidetti, et al., 2015; Guidetti, et al., 2017; Viotti et al. 2017; Sottimano et al. 2017) often burdened by the school climate as well (Orsi et al., 2016), m-learning could represent another source of stress for teachers whose are not accustomed to use technology as a pedagogical tool. Knowing teachers' M-learning attitudes before the implementation could prevent resistance attitudes or negative outcomes on teachers' wellbeing.

The M-Learning Perception Scale (MLPS) (Uzunboyly & Ozdamli, 2011) represents to date, a promising measure of teachers' perceptions and readiness to successfully implement M-learning strategies. This tool is based upon a literature review of the construct as well as an analysis of feedback from teachers' responses, including their feelings, opinions and attitudes toward M-learning. In Uzunboyly & Ozdamli's perspective (2011), M-Learning is specifically focused on the use of both school purchased and student-owned mobile devices (for example, cell phones, Smartphones, iPods, iPads, Kindle) and wireless hand-held computers in the classroom (Uzunboyly & Ozdamli, 2011). The MLPS was constructed with the premise that a positive perception about M-learning will support student success and increased achievement (Roche, 2013).

Validity and reliability of the scale were proved by Uzunboyly & Ozdamli (2010) in a sample of Cyprian secondary school teachers. The questionnaire is composed of 26 items divided into three dimensions. The first dimension is "Aim-Mobile Technologies Fit" (A-MTS) which describes the fit between traditional and m-learning goals. "Appropriateness of Branches" (AB) is the second dimension, which describes the appropriateness of M-Learning materials with the subject taught. Finally, the last dimension, "Forms of M-learning Application and Tools' Sufficient Adequacy of Communication" (FMA and TSAC) describes how M-learning could be placed in the educational context and its role in enhancing communication in learning environments.

Moreover, from this study emerged that male teachers' perceptions of M-Learning technologies were comparatively higher than female teachers whereas no significant differences were found among different branches (Uzunboyly & Ozdamli, 2011). Within the Cyprian context and consistently to these results, Serin (2012) has not found, in a sample of prospective teachers, neither gender difference nor differences between departments. Another study was carried out by Roche (2013) involving a sample of U.S. K-12 teachers. This study aimed at evaluating the psychometric properties of a modified version of the MLPS for the U.S. context, and to determine whether there were significant associations between the teacher perceptions of M-learning and the teacher self-reported technology skill level (i.e., novice, beginner, competent, proficient or expert. Roche (2013) found a factorial structure slightly different from the original structure identified by the Authors (Uzunboyly & Ozdamli, 2011). Possible explanations for these results may be the cultural differences between samples (Turkey vs U.S.) and the item translation. The emerging factors were: 1) "Flexibility/Convenience" which underlies the possibility of m-learning technologies in facilitating the sharing of material; 2) "Communication" which underlies the facilitation of communication processes; 3) "Classroom/Strategies Techniques" which underlies how m-learning could improve the learning process.

Both the aforementioned studies seem to indicate that the instrument, whether in its original or modified form, measure similar constructs and that both samples of teachers showed above medium/neutral levels of perception toward m-learning.

In Italy, similarly to other European countries, educational policies are giving growing importance to the use of M-Learning in the teaching context, as it was documented from the REACH project. This project took place from 2011 and 2013 and aimed at showing teachers how to use mobile learning to increase students' participation and motivation in learning activities.

Despite this, to date, no studies have been carried out in an Italian context to evaluate teacher perceptions about impact of mobile technologies on educational environment or teacher attitudes toward M-Learning. Based on the modified version of the MLPS proposed by Roche (2013), we developed a shortened version consisting of 13 items. This could be an easily accessible tool from school leaders planning for targeted professional development in M-learning, or to assess perceptions pre- and post- implementation of a M-learning platform.

This study represents the first contribution to the development of the Italian version of the Mobile-Learning Perception Scale (MLPS). Specifically, it has the aim to examine the psychometric properties of a shortened version (13 items) in a sample of Italian teachers.

MATERIALS AND METHODS

Teachers from public school institutions of a region of Northern Italy were involved during the academic year 2016/2017. Presentation of the project, sharing of content, objectives and modalities of research implementation were firstly presented to School Leaders, and consequently to all the participants involved into the project.

The self-reported questionnaire was administered, anonymously, to a sample of 1220 teachers (expected questionnaires). The questionnaire was filled out individually during the working hours, while a researcher of the Department of Psychology (University of Turin), was available to the participants for clarification about the completion. Data were anonymously processed, and privacy protection was ensured in all research stages, in accordance with the country (Italy) legislation.

Participants

In total, 985 teachers filled out correctly the questionnaire and therefore they were considered valid for the present study. Of them, 407 (41.3%) were teachers of primary school, 199 (20.2%) of middle school, and 379 of secondary school (38.4%). Regarding gender, 80.4% (n=792) were females and 16.5% (n=163) were males. Participants were aged between 23 and 63 years with a mean age of 45.69 years (DS = 9.65). The job tenure of participant in the Italian public school system ranged from 1 to 43 years (M = 19.55; DS = 11.23). The majority had a permanent (74.9%) contract.

Instruments

The data were obtained by means of a self-report questionnaire including a socio-demographic section and the short revised version of Mobile-Learning Perception Scale (Uzunboyly & Ozdamli, 2011) proposed by Roche (2013) and translated into Italian.

Student Orientation (SO) was measured with a subscale from the Italian version of the School Organizational Health Questionnaire (SOHQ) (Guidetti, Converso & Viotti, 2015). The frequency of use of PC and other portable devices within the school context was measured through an *ad-hoc* measure.

The items from MLPS (Uzunboyly & Ozdamli, 2011; Roche, 2013) were translated from English into Italian using the back translation method (Brislin, 1986) and included in the present questionnaire. After the translation process, the scale consisted of 13 items adapted for an Italian teaching context (e.g. *M-Learning techniques allow discussion with no limit of time and space*). Response were given on a four-point Likert scale ranging from 1 = *Totally disagree* to 4 = *Totally agree*.

School's Student Orientation consisted of 4 items derived from the SOHQ (Guidetti et al., 2015) aimed at measuring school orientation to students' empowerment through a four-point Likert scale ranging from 1 = *Totally disagree* to 4 = *Totally agree* (e.g. *Students in this school are encouraged to experience success*).

Finally, frequency of use of PC and other portable devices within the school context were measured with a 4 items scale (e.g. *How frequently do you use tablet at school?* $\alpha=.69$) (Likert scale ranging from 1 = *Never*, to 3 = *Often*).

RESULTS

Data analysis were performed using SPSS Statistical Package version 24 in four steps: a) testing factorial validity of the MLPS through Exploratory Factor Analysis (EFA; Method of Estimation: GLS; Rotation method: Oblimin); b) item analysis (mean, standard deviation, skewness and kurtosis); c) assessment of score reliability of the MLPS sub-scales (Cronbach's alpha and alpha if item is deleted); d) Pearson's correlations between MLPS,

and Student Orientation and frequency of use of portable devices in order to analyze convergent and predictive validity. We hypothesize that MLPS positively correlates with higher level in school orientation in promoting student empowerment and to higher teachers' use in portable device at school.

Exploratory Factor Analysis (EFA)

The Kaiser-Meyer-Olkin measure ($KMO = .89$) and Bartlett's test of sphericity ($\chi^2=5016,12$; $df=78$; $p < .00$) indicate that the factor model is appropriate.

As expected, a three-dimensional factor-structure was found underlying the 13 items. Overall, the amount of variance explained is 63.06%. Table 1 presents the items loadings on the three factors. The first factor explained 44.04% of variance. It consisted of five items. Consistently to what emerged from the study of Roche (2013) we called this factor "Flexibility/Convenience".

Table 1: Factors, items loadings, variance explained of MLPS

Item	Factors		
	I	II	III
11) Provide access to content related materials	.85	-.13	-.074
10) Convenient to share with colleagues	.65	.06	-.03
12) Materials could be sent out in many ways	.65	.01	-.03
9) Remove traditional limitations of time/space	.56	.13	.04
13) Used as a classroom discussion tool	.46	.04	-.24
3) Provides convenience for class discussions	-.04	.81	-.06
4) Good method for interaction in my class	-.06	.75	-.08
2) Facilitate more efficacious student-student communication	-.02	.68	-.01
8) Facilitate teacher-student communication	.27	.42	-.14
1) Facilitate student-student communication	.19	.36	.06
6) Effective method in my content/classroom	-.06	.013	-.94
7) M-learning technologies can be used as a supplement in all classes on all subjects	.22	.002	-.60
5) Effective method in my content/classroom	.08	.14	-.55
% of Variance	44.04%	10.86%	8.16%

Note 1– Bold type indicate Value $\geq .40$.

On this dimension, factor loadings were always greater than .40 (the lowest value is on item 13 "used as a classroom discussion tool" with a value of .46). The second factor was called "Communication" with 10.86% of variance explained. It consisted of 5 items. The lowest factor loading was reached by item 1 "facilitate student-student communication" with a value of .36. The third factor, "Classroom Strategies/Techniques" explained the 8.16% of the variance. It consisted of three items and the lowest factor loading was reported by item 5 "Effective learning method in my content/classroom" with a value of -.55.

Internal consistency

For all items, the corrected item-total correlation achieved values equal or greater than $r = .50$. All values of skewness and kurtosis are comprised in the range -1.0 to $+1.0$, suggesting no violation of normal distribution (Table 2).

The internal consistency of the three sub-dimensions were satisfactory as the values of Cronbach's alpha reached respectively .79 for Flexibility/Convenience subscale and .82 for both Communication and Classroom/Strategies Techniques (Table 2). In addition, all items seem to give a relevant contribution to the subscales they belongs.

Table 2: Descriptive Statistics of MLPS Items.

	M (SD)	Corrected item-scale correlations	Skewness	Kurtosis	Alpha if item deleted
Subscale					
Item					
Flexibility/Convenience ($\alpha=.79$)					
11) Provide access to content related materials (Consentono di disporre	3.22 (.64)	.67	-.55	.70	.73

immediatamente di materiale utile nel corso delle lezioni)					
10) Convenient to share with colleagues (Facilitano la condivisione di conoscenze e informazioni tra colleghi)	3.02 (.67)	.63	-.42	.48	.74
12) Materials could be sent out in many ways (Mi consentono di condividere e inviare materiale scolastico ai miei studenti)	2.91 (.84)	.58	-.53	-.20	.75
9) Remove traditional limitations of time/space (Programmi come Messenger e Skype facilitano il confronto senza limiti spazio-temporali)	2.72 (.83)	.51	-.54	-.02	.78
13) Used as a classroom discussion tool (Possono essere uno strumento da utilizzare durante una discussione in classe)	2.93 (.80)	.54	-.39	-.29	.76
Communication ($\alpha=.82$)					
3) Provide convenience for class discussions (Le nuove tecnologie facilitano la creazione di un ambiente comunicativo)	2.51(.80)	.69	-.05	-.45	.77
4) Good method for interaction in my class (Possono facilitare la qualità delle relazioni all'interno della classe)	2.25 (.78)	.62	.30	-.20	.79
2) Facilitate more efficacious student-student communication (Gli studenti comunicano più efficacemente grazie alle nuove tecnologie)	2.56 (.85)	.64	.09	-.64	.78
8) Facilitate teacher-student communication (Facilitano la comunicazione tra professori e studenti)	2.57 (.78)	.55	-.12	-.35	.81
1) Facilitate student-student communication (Gli studenti possono comunicare più facilmente grazie alle nuove tecnologie)	3.02 (.79)	.61	-.58	.02	.79
Classroom strategies/Techniques ($\alpha=.82$)					
6) Effective method in my content/classroom (Aumentano la qualità delle lezioni all'interno della classe)	2.85 (.72)	.54	-.35	.07	.69
7) M-learning technologies can be used as a supplement in all classes on all subjects (Possono essere un importante supporto per tutte le classi e per tutte le materie di insegnamento)	3.07 (.69)	.67	-.50	.41	.74
5) Effective method in my content/classroom (Sono un affidabile strumento di apprendimento)	.274(.68)	.61	-.33	.14	.81

Correlations among subscales

The three subscales showed high positive correlations in the expected direction (see table 3). Even if the correlations indices with Student Orientation and frequency of use of portable devices were quite low (below .20), they were significant and in the expected direction. These findings suggest an adequate convergent validity with the measure of Student Orientation and predictive validity for the use of portable device at school.

Table 3: Pearson's correlations among subscales

	FXC	COM	CST	SO	Smartphone	Desktop PC	Laptop PC	Tablet
FXC	1	.56**	.59**	.12**	.17**	.11**	.13**	.12**
COM		1	.53**	.15**	.11**	.11**	.10**	.12**
CST			1	.15**	.08**	.06*	.18**	.10**
SO				1	-.05	-.02	.05	-.03

Smartphone	1	.09**	.13**	.18**
Personal Computer		1	.02	.19**
Notebook		.016	1	.08*
Tablet				1

** p < .001; * p < .05

CONCLUSIONS

The purpose of this study was to examine the psychometric properties of the Italian version of MLPS. The results obtained indicate that MLPS is an adequate tool for assessing teacher attitudes toward m-learning technologies in the Italian educational context. In line with previous studies (Uzunboyu & Ozdamli, 2011; Roche, 2013) our study shows the presence of a three-factor structure of the MLPS. Specifically, the factor structure emerged is in line to what has emerged in the U.S. context. Moreover, our study highlights the reliability of a short version of the instrument that could be a useful tool in the Italian context for measuring teacher m-learning perceptions. Knowing teachers' attitudes could improve future outcomes and a more informed process toward m-learning.

This study has some limitations. The most important are that the data collection was extended to only one Italian Region, and that participants were selected in a non-random way. Future study should adopt representative samples in order to provide stronger evidence for the adequacy of the psychometric proprieties of a short version of the MLPS for an Italian context.

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MODEL OF PROJECT-BASED LEARNING ON CLOUD COMPUTING TECHNOLOGY IN COLLABORATION TO ENHANCE ICT LITERACY

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ABSTRACT

This research aims to 1) design the model of project-based learning on cloud computing technology in collaboration to enhance ICT literacy, and 2) assess the model of project-based learning on cloud computing technology in collaboration to enhance ICT literacy. The research process was divided into 3 stages: 1) study and analyze the relevant documents and researches of project-based learning on cloud technology in collaboration to enhance ICT literacy, 2) design the model, and 3) assess the appropriateness of the model. The samples were 10 experts selected by purposive sampling. The data is analyzed by means and standardized deviations statistically. The research result shows that 1) the model of project-based learning on cloud computing technology in collaboration to enhance ICT literacy had consisted of 4 key components which were 1.1) Need Analysis, 1.2) Learning Process, 1.3) Authentic assessment, 1.4) Feedback and 2) the overall model evaluation scores were suitable ($\bar{X}=4.52$).

Keywords: Project-Based Learning, cloud computing technology, Collaboration, ICT literacy

INTRODUCTION

In today's information and communication technologies literacy (ICT literacy) is required in nearly all areas of work and ICT-related competencies are a necessary constitutive of employability (Autor, Levy, 2003). Because of the rapidly replacing technological environment, self-regulated and continuous life-long learning is a significant factor for successfully keeping pace with recent progress in the area of ICT (European Commission, 2008). The new skills needed for navigating education and the workplace in the current century have been labeled 21st century skills (Griffin, McGaw, & Care, 2012) and be featured as being critical for functioning effectively in society (Partnership for 21st Century Skills [P21], 2012). Skills that are listed in both frameworks include creativity, innovation, cross-cultural understanding, communication and collaboration. Collaborative learning activities have been distinguished. A relevant distinction for this study was made by Little (1990), who distinguished four types of collaboration based on the degree of interdependency and collegiality. The types of collaboration are: (1) storytelling and scanning, (2) aid and assistance, (3) sharing and (4) joint work. The first category, 'storytelling and scanning', refers to interactions that are characterized by low interdependency between teachers as well as low collective autonomy. Within the next categories, the interdependency and the collective autonomy increase, with the last category 'joint work' referring to the highest level of interdependency between teachers and a high level of collective autonomy (Little, 1990). Project based learning involved authentic learning environment (Eskrootchi & Oskrochi, 2010) that authorizes learners to construct knowledge in authentic context (Papanikolou & Boubouka, 2010). Such learning environment is highly believed to be the excellently approach that would promote learners to have full control all over their learning process. It requires students to complete certain tasks and exposed them to traverse possible ways to absolute the task (Kwok & Tan, 2004).

This research reports a collaboration project model on cloud technology involving student groups for enhance ICT literacy. The process of learning will run systemically step by step, acquiring up-to-date knowledge and it can be applied for student in the real life which is efficient for teaching and also it is unlimited to disseminate the knowledge into others sciences. ICT literacy could be assigned as the ability to use digital technology, communications tools, access, manager, integration, and evaluate (The International ICT Literacy Panel, 2002). One interesting aspect of the challenge based learning model is cloud technology. This allows the user to access a fast internet connection without a requirement for hardware and an operating system (Bhaskar et al., 2009), (Mariana & Merwe, 2011) In addition, cloud computing can also be thought of as a device to support learning and teaching models that are relevant for the 21st century and challenge based learning. Therefore, the researcher had an idea to develop the model of project-based learning on cloud computing technology in collaboration to enhance

ICT literacy within undergraduate students as a beneficial guideline for effective educational management in the future.

PURPOSE OF THE STUDY

2.1 To design the model of project-based learning on cloud technology in collaboration to enhance ICT literacy.

2.2 To evaluate the model of project-based learning on cloud technology in collaboration to enhance ICT literacy.

LITERATURE REVIEW

Project-based learning

Project-based learning is a response to the lack of contextualization and over-simplification and excessive abstraction of learning in schools. As Resnick (1987) notes "the traditional school often fails to prepare students for the type of learning, behaviour and attitude that is needed outside the school environment." Research that analyzes the learning process outside the educational context, show that the authenticity of a learning activity and its context are integral to knowledge and learning outcomes. Is in that sense where learning is understood as a situational concept (Brown, Collins & Duguid, 1989) and not timeless or out of context. According to LaFey et al. (1998), project-based learning is a modification of what was initially conceived as "contextual statement" a methodology that emphasized knowledge construction and problem solving by students in a given situation and that often happened during a long period of time. Thomas and MacGregor (2005) consider that collaborative development of projects in Higher Education presents an ideal opportunity to provide problem-solving situations present in the real world. Under the umbrella of a project-based learning wide types of tasks conducted in all kind s of training and in different educational levels are brought together: field studies, applied research, mechanics, and laboratory practices. These wide range of projects share a set of characteristics: (1) authenticity: learning involves a real problem and an effective solution has to be found; (2) complexity: the problems are complex tasks, and solution requires a significant investment of time; (3) centrality: the activity is significant and central to the curriculum of students, it is not complementary or a peripheral activity; (4) construction research: a goal-directed process, which involves asking students to discuss and build their knowledge and solve problems. The central activity of the project should involve knowledge processing and knowledge construction (Bereiter & Scardamalia, 2003). If project activities are not difficult for students or can be made by applying skills or information already known, the project is an exercise, not a project-based task; (5) use of tools: students use different tools and techniques to investigate, manage, plan, implement and report the project; (7) autonomy: the projects are not led by teachers or packaged in instructions, they incorporate a high degree of autonomy, choice, personal unsupervised work and greater responsibility.

Cloud Computing Technology

Cloud computing has become an increasingly popular phenomenon in every field. Cloud computing currently includes a series of hardware and software service provided via the Internet (Venters & Whitley, 2012). Since applications and user data would be stored remotely on cloud servers, users can seamlessly access cloud services and applications by using any digital device with an internet connection. In other words, cloud computing can enable users to access, process, share, and store information via the Internet from any location or device (Lin, Fu, Zhu, & Dasmalchi, 2009). In traditional IT systems, user productivity may be restricted since personal information was exclusive to specific applications, services or devices (Sang & Sung, 2013). However, these obstacles would be overcome by cloud computing since it can provide services to users seamlessly. Therefore, cloud services would make users more efficient, help facilitate collaboration with their peers, and give users seamless access to their information anytime and anywhere from any digital device (Marston, Li, Bandyopadhyay, Zhang, & Ghalsasi, 2011). However, the age of cloud computing saw other web applications such as SkyDrive, Evernote, DropBox, and Google Apps being developed. Different from traditional web pages and applications, such cloud computing applications offer SaaS to users who can use various digital devices to apply these services openly and freely. Users today are inundated with a myriad of web applications that provide friendly user interfaces and powerful functions in the cloud. Therefore, many instructors and students were already using these cloud applications in their daily lives (Lin & Jou, 2012). Most of both instructors and students would be more motivated in using these applications in an educational context since they already have the necessary technical skills (Dohn, 2009). Therefore, they would only need to learn how to apply these applications in supporting educational activities for their classes (Pretlow & Jayroe, 2010).

With these in mind, this study integrated Google web applications as a set of teaching and learning tools within a reflective learning environment. The applications used are briefly described in the following:

Google plus: This application is a free social networking service that can be accessed from various digital devices. Social networks between instructors and students can be established easily using Google plus. The social networks

would allow users to share reflective thoughts, activities, and events effectively.

Google drive: This web-based office suite allows users to create and edit documents online while collaborating with other users in real-time. Google drive allows instructors and students to immediately write down, view, and reply to ideas conveyed through any connected PC or mobile device.

Google sites: This structured wiki- and webpage-creation application allows users to create dynamic web pages with their partners with the ease of writing a document. The use of Google sites can therefore assist instructors and students in consolidating and expressing their reflective thoughts.

Collaborative learning

Numerous studies have reported positive impacts of the use of collaborative technology in the educational context (Ishtaiwa & Abulibdeh, 2012; Parker & Chao, 2007; Ravid et al., 2008; Zorko, 2009). For instance, Zorko (2009) reported that the Wiki as a collaborative technology stimulated several collaborative behaviors, such as enhancing the opportunity of students' learning from each other and interacting with the instructor. More recently, Ishtaiwa and Abulibdeh (2012) found that collaborative technologies (asynchronous discussion board, blog and email) improved students' interaction with peers, instructor and content. The strengths of collaborative technology include its potentiality to provide an interesting and motivating learning environment that is suitable for the characteristics of today students, provide a practical and flexible platform for thinking, reflection and discussion that allows students to participate anytime and anywhere, and minimize obstacles of learning which include deficiency of communication skills, cultural limitations, or shyness (Ishtaiwa & Abulibdeh, 2012; Zorko, 2009).

In July 2009, Google officially introduced Google Docs as a free browser based productivity and web storage suite. In April 2012, Google Drive became the new home for Google Docs. The software includes word processing, spreadsheet, a presentation editor and a form designer. In addition, the site offers a space on the server for storing the created documents. Google has also made it possible for users to upload files of any type in the storage area as an effective tool of online file backup. The shift from PC/LAN to cloud computing allows users to access their files from any computer with Internet connection. This makes Google Docs a more flexible tool for content creation and sharing (Firth & Mesureur, 2010). However, there are some shortcomings of Google Docs as a collaborative technology. Most notably are (Firth & Mesureur, 2010):

Limited formatting ability: This shortcoming clearly appears during the conversion of files created in Microsoft Office into Google Docs. Microsoft documents lose many of their formatted elements when they are converted into Google Docs because Google Docs' limitation of font tools, converting complex charts and tables, and slide transitions and animations.

The simultaneous editing/syncing of shared documents. The application allows more than one user to work on a document at any given time. This in turn makes the document subject to the potential speed and accessibility issues that may lead to some update conflicts.

Text-based only: The Google Docs collaboration protocol can be used for collaborating on text documents only. The application does not support collaborating on graphics or other content.

Off-line support: Like other online collaboration technologies, Google Docs application currently does not support offline working which limits the opportunity of editing/sharing while traveling or in a place with no Internet connection.

ICT LITERACY

As a consequence of the large number of concepts related to values, attitudes, and knowledge of digital technology, a variety of explanations accompanying these concepts exists. Most scholars agree that operationalization's of ICT literacy has changed over time due to the advancement and changes in the availability of technology (Erstad, 2006). In the following, three widely used explanations of ICT literacy are provided to illustrate the comprehensiveness of these concepts. We are aware that this selection does by no means provide an exhaustive overview of the concept of ICT literacy; nevertheless, the three definitions presented here can be identified in a number of published papers and reoccur in existing small- and large-scale studies.

METHODOLOGY

This research was divided into 2 phases which are (1) The study that related to theories, research and experts' opinion, (2) Evaluation on the proposed model.

Phase 1: The study that related to theories, research, and experts opinion.

The study in this phase included the study of theories and research on the project-based learning, cloud computing

technology, collaboration, and ICT literacy to be used as guidelines in determining learning processes and components of the model. The model will be designed after documentation review, and then the interview will be conducted to get an opinion towards the model from ten experts.

Phase 2: Evaluation on the proposed model.

After gathering all of information and modifying the model, ten computer education experts were selected to evaluate the model by using five scales model evaluation form. The expert selection criteria consisted of (1) the experts must have more than 5 years of experiences in the computer education field, (2) the experts must have a related work in computer education, and (3) the experts must have experiences in designing or teaching with undergraduate students.

RESULT

Stage 1: The model of project-based learning on cloud computing technology in collaboration to enhance ICT literacy is composed of 4 key components which are:

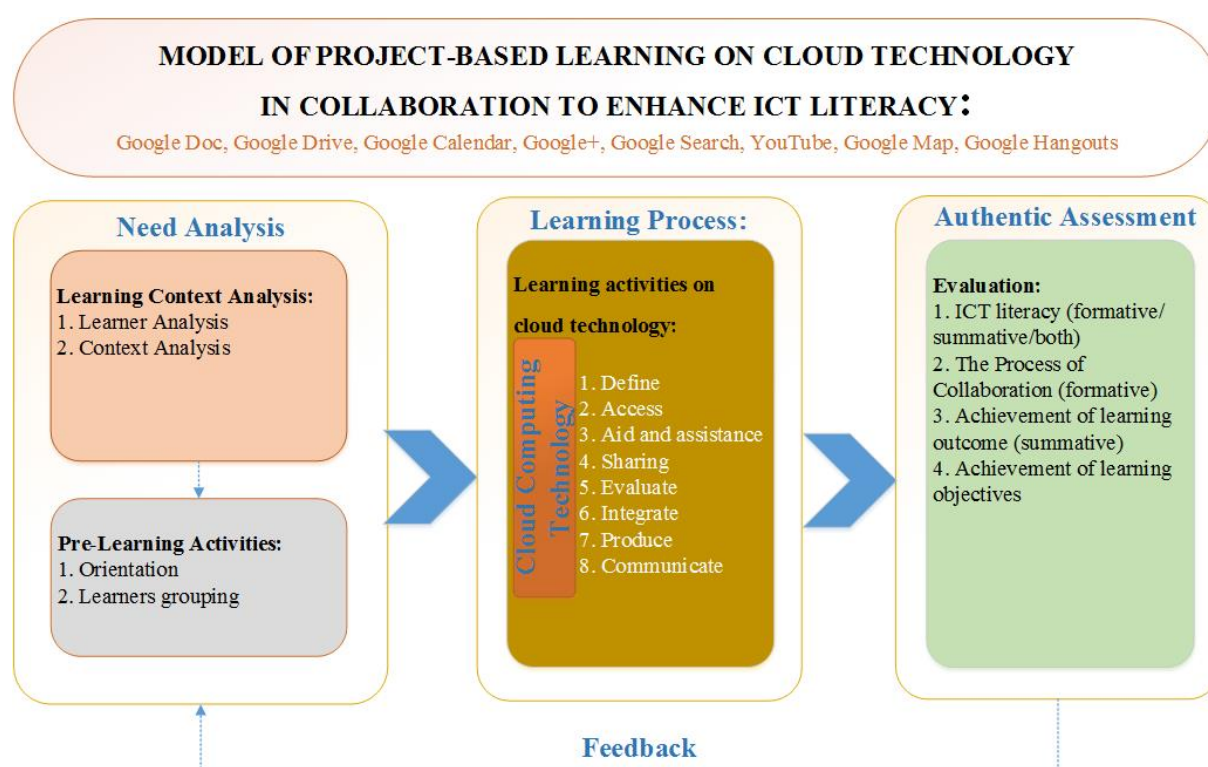


Figure 1. Model of project-based learning on cloud computing technology in collaboration to enhance ICT literacy

The learning activities consisted of four main components:

1) Need Analysis:

1.1) Learning context analysis

1.1.1) Learner analysis identify a set of learner characteristics shown to affect learning above and beyond general characteristics such as age, grade level, and topic being studied.

1.1.2) Context analysis of performance setting to know the environment in which our learners will be using their new skills

1.2) Pre-learning activities

1.2.1) Orientation

Teachers recommend courses, learning objectives, learning methods, learning activities, ways to send and verify assignments, communication channels and measurement and assessment procedures through cloud technology

1.2.2) Learner grouping

Students are divided into groups. Each group consists of five people. Group names are created, the roles of group members defined and a group leader and secretary nominated

2) Learning Process:

2.1) Learning activities on cloud technology

This step can be divided into eight phases:

2.1.1) Define: Understand and articulate the scope of an information problem in order to facilitate the electronic search for information.

2.1.2) Access: Collect and/or retrieve information in digital environments. Information sources might be web pages, databases, discussion groups, e-mail, or on-line descriptions of print media.

2.1.3) Aid and assistance: Asking questions or help.

2.1.4) Sharing: Exchanging and/or discussing information (knowledge), experiences, and ideas.

2.1.5) Evaluate: Judge whether information satisfies an information problem by determining authority, bias, timeliness, relevance, and other aspects of materials.

2.1.6) Integrate: Interpret and represent information, by using digital tools to synthesize, summarize, compare, and contrast information from multiple sources while.

2.1.7) Produce: Adapt, apply, design, or construct information in digital environments.

2.1.8) Communicate: Disseminate information tailored to a particular audience in an effective digital format

3) Authentic assessment

3.1) Evaluation

The evaluation of the proposed model can be classified into ICT literacy (formative/summative/Both), the process of collaboration (formative), Achievement of learning outcome (summative), and achievement of learning objectives.

4) Feedback

4.1) Feedback from the students and improving the model accordingly.

Stage 2: The result of appropriateness measurement of the model of project-based learning on cloud computing technology in collaboration to enhance ICT literacy.

Table 1: Experts' evaluation scores of the model of project-based learning on cloud computing technology in collaboration to enhance ICT literacy

Assessment Topics	\bar{X}	S.D.	Assessment Result
1. Objective of the Model	4.63	0.49	Highest
2. Uses of Concepts and Principle	4.60	0.49	Highest
3. Components of Model	4.46	0.50	High
4. Process of Learning	4.50	0.50	Highest
5. Tools Usage	4.45	0.51	High
The overall results	4.52	0.49	Highest

In Table 1, the research found that model of project-based learning on cloud computing technology in collaboration to enhance ICT literacy was evaluated at the highest level in Objective of the Model, Uses of Concepts and Principle, and Process of Learning. The Components of Model and Tools Usage were at the high level. The model of project-based learning on cloud computing technology in collaboration to enhance ICT literacy showed overall results at highest level (arithmetic mean=4.52, standard deviation = 0.49).

CONCLUSIONS

The model of project-based learning on cloud computing technology in collaboration to enhance ICT literacy consisted of need analysis, learning process, authentic assessment, and feedback. The results were in accordance to those of The International ICT Literacy Panel (2002). The overall model evaluation scores were suitable ($\bar{X} = 4.52$).

Acknowledgement

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MODEL SITUATIONS FOR USAGE OF CREATIVE TECHNIQUES WHILE LISTENING TO MODERN POPULAR MUSIC AT SCHOOL

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ABSTRACT

Modern popular music currently plays an important role in the teaching of music. Apart from vocal, instrumental and music and movement activities, listening tasks are one of the fundamental elements of music teaching in the classroom. Throughout their music course, pupils gain various pieces of knowledge about music, which they can later use during the tasks and activities listed above. Creative techniques in combination with listening activities use a set of motivational games together with musical knowledge. Motivational games with incorporated musical knowledge focus on developing the musical thinking of the pupils and on connecting it with various activities in the music classroom. Such games are particularly suitable for pupils of lower-secondary schools and art schools. In this paper, I present two model situations using creative techniques by means of motivational games with incorporated musical knowledge in connection with listening to popular music. I have verified both of these model situations in practice by means of specific research. The main objective of the research was to experimentally verify the effectiveness of the creative techniques in connection with listening to popular music in two parallel classes at a lower-secondary school. The technique of one experimental and one control group has been used.

Key words: music teaching, creative techniques, model situation, modern popular music, motivational games, listening activities.

INTRODUCTION

The education system of music classes in the Czech Republic (CR) includes both classical music (art-focused music) and contemporary popular music (entertainment-focused music). However, the degree of use of modern popular music in teaching practice varies. The situation in the CR has been improving, particularly since the 1990s. Since that time, the interest of teachers in these musical genres has increased, a number of theses on the use of modern popular music have been published and numerous conferences on this topic have taken place.¹

MODEL SITUATIONS

A model situation is “the creation of functionally ideal techniques which respect given theoretical principles and match the practice. Such a model uses the essential features of the didactic practice chosen for solving the problem. At the same time, it does not prohibit the application of individual plans used for the specific teaching circumstances”.² The essence of a model situation is in its creation and verification in practice. The unconfined space of a model situation allows the teacher to focus on the musical portrait of an artist or a musical group, to deal with various musical styles or to compare different compositions, musical styles or periods. The model situations described below may make the teaching of modern popular music more interesting and varied. They have the potential to develop the musical thinking of the pupils and to inspire them to expand their musical activities.

Listening activities are one of the fundamental elements of music teaching in the classroom. Creative techniques in combination with listening activities use a set of motivational games using musical knowledge. The set of motivational games with incorporated musical knowledge includes the following: “Dominoes”, “A card pairs

¹ POLEDŇÁK, I. Hudební výchova a strašák populární hudby I. In: *Hudební výchova*, roč. 10, 2002, č. 1., s. 1 - 2. ISSN: 1210-3683.

² HERDEN J. Modelové situace v přípravě na poslech. In: *Poslech hudby. Sborník příspěvků z konference konané ve dnech 27. a 28. dubna 1998 na Pedagogické fakultě UK v Praze*. Praha: Pedagogická fakulta Univerzity Karlovy, 1998, s. 39. DOI: 80-86039-67-6.

game”, “Risk!”, “3+1”, or “The Musicians Want to Go Home”.³ The motivational games with incorporated musical knowledge take the form of board and card games. They can be used for individual or group activities, or in connection with a chosen musical activity. The aim of this paper is not to describe motivational games using musical knowledge, but to propose model situations for listening to modern popular music in the classroom.⁴

SPECIFIC RESEARCH

The object of the specific research consisted of music class pupils attending two parallel classes at a lower-secondary school. The subject of the research was the effectiveness of creative techniques in connection with listening to modern popular music in a lower-secondary school.

The research method used was a didactic (forming) experiment. The experiment maps the changes brought into a traditional teaching environment through the use of creative techniques using a set of motivational games with musical knowledge. The chosen research method makes it possible to compare the results of the two tested parallel classes, to compare the creative techniques with traditional teaching techniques, and to assess the effectiveness of the creative techniques.

The main objective of the research is to experimentally verify the effectiveness of the creative techniques in connection with listening to popular music in two parallel classes at a lower-secondary school. The technique of one experimental and one control group is used.

The collection of materials and the analysis of the results of the specific research were carried out by means of quantitative analysis, semantic differential, a questionnaire, observation, a listening pretest and retest, charts and pivot tables.

The specific research was conducted over four months in two parallel classes of a lower-secondary school (the 9th year of the Czech education system). The experimental group consisted of sixteen pupils and listening to popular music was carried out in combination with the use of creative techniques. While listening to popular music, a set of motivational games with musical knowledge (“A card pairs”, “Dominoes” and “3+1”) was used as a part of the creative techniques. The control group consisted of nineteen students. The listening activities were conducted without the use of creative techniques. Some of the traditional processes were used instead, including gap-filling, linking and assigning. In both tested groups, listening to popular music was connected to one selected musical activity (vocal, instrumental or music and movement) or was conducted separately.

Model Situations in Practice

In this section, I present two model situations using creative techniques by means of motivational games with incorporated musical knowledge in connection with listening to popular music, which I have tested in practice during the conducted research.

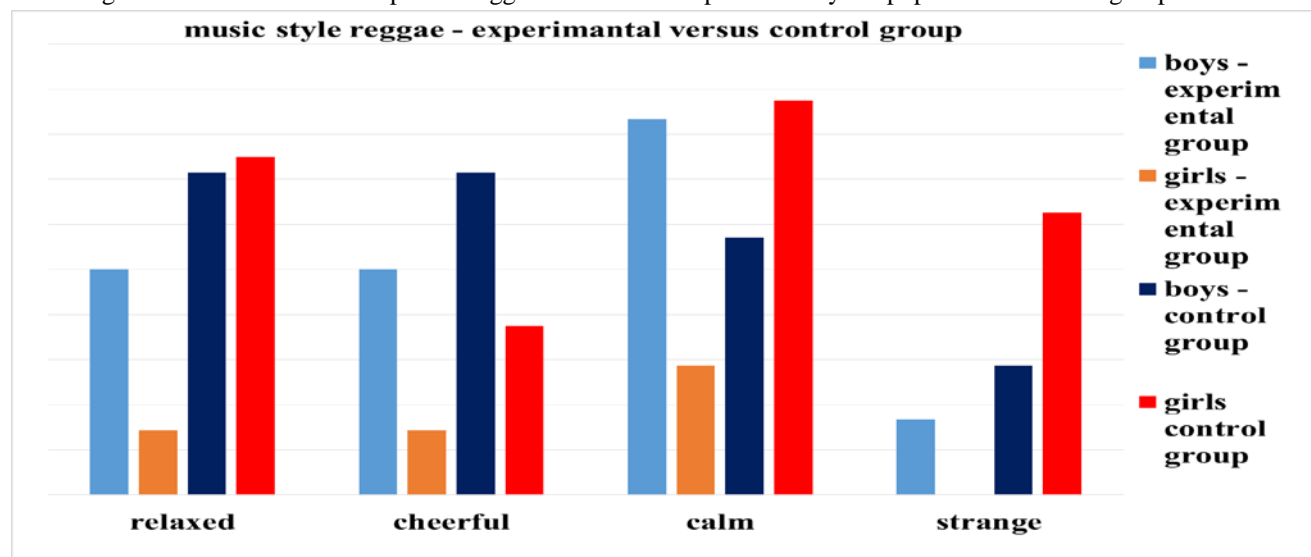
Comparison of Two Musical Styles

The topic of this model lesson was the 1970's music around the world. The aim of the lesson was to compare the musical styles of reggae and rock music (reggae: Bob Marley - Buffalo Soldier, and rock: The Rolling Stones - Satisfaction). The lesson focused on the perception of the music of these two distinct genres. The pupils themselves were to define what impression the music made on them. The subsequent task was to answer questions regarding the typical features of both music genres.

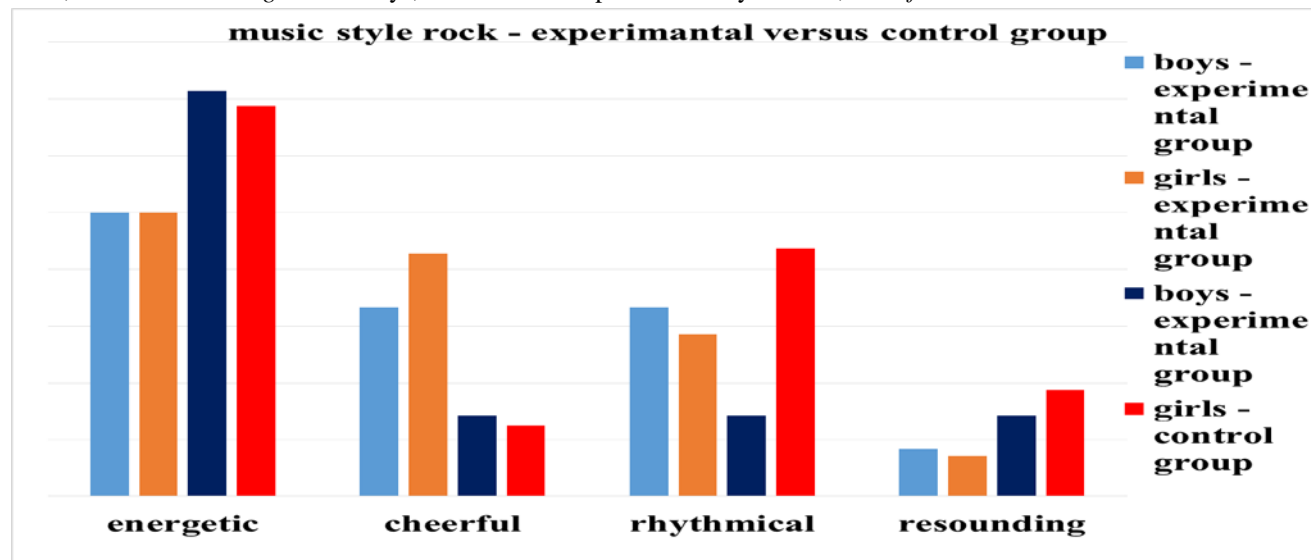
³ Inspirováno přednáškami prof. Evy Jenčkové na Pedagogické fakultě Univerzity Hradec Králové v letech 2008 - 2013.

⁴ Detailní charakteristiky, principy, vzdělávací přínosy a cíle motivačních her s hudebními poznatky lze najít v: ŠVONCOVÁ, V. Prezentace populární hudby ve škole - modelové příklady. In: Teorie a praxe hudební výchovy IV: Sborník příspěvků z konference studentů doktorandských a magisterských studií a pedagogů hudebního vzdělávání zemí V4 v roce 2015 v Praze. Praha: Univerzita Karlova v Praze, 2016, 189 - 194. ISBN 978-80-7290-875-2.

In both the experimental and the control group, Jaroslav Herden's basic structure of classroom organisation was used for the purposes of the listening activities.⁵ For the first instance of listening to the two samples of music, classroom discussion only was used. After listening for the first time, each of the pupils expressed his or her own impression of the music sample. In the subsequent analysis of the musical elements, the teacher's questions focused on the perception of the musical material and the characteristic features of the individual samples (regularity of the rhythm, predominance of different types of musical instruments, repetition, contrast, etc.). The analysis was followed by a synthesis of musical elements in the form of a second listening. The pupils received a research sheet and individually answered questions regarding the musical material of the given samples. The following charts show how the samples of reggae and rock were perceived by the pupils in both tested groups.



The charts clearly show that the predominant answer for both girls and boys in the experimental group while listening to reggae was *calm*, *cheerful* and *relaxed*. In the control group, the predominant answer for girls was *calm*, *relaxed* and *strange*. With boys, the answer was predominantly *relaxed*, *cheerful* and *calm*.



As for the rock sample, we can see that the girls and boys from the experimental group perceived it as *energetic*, *cheerful* and *rhythmical*. The girls and boys from the control group rated this sample as *energetic*, *rhythmical* and *resounding*.

⁵ HERDEN J. Modelové situace v přípravě na poslech. In: *Poslech hudby. Sborník příspěvků z konference konané ve dnech 27. a 28. dubna 1998 na Pedagogické fakultě UK v Praze*. Praha: Pedagogická fakulta Univerzity Karlovy, 1998, s. 40-41. DOI: 80-86039-67-6.

The pivot tables below show the success rate of both groups in questions about the typical features of reggae and rock.

PIVOT TABLE 1 - reggae							
EXPERIMENTAL GROUP	boys	girls	total	CONTROL GROUP	boys	girls	total
question 1	0.33	0.86	0.60	question 1	0.86	1.00	0.93
question 2	0.67	0.43	0.55	question 2	0.2	1.00	0.86
question 3	1.00	0.86	0.93	question 3	0.43	0.00	0.21
question 4	1.00	0.86	0.93	question 4	0.86	0.00	0.43
total	0.75	0.75	0.75%	total	0.71	0.50	0.61%

PIVOT TABLE 2 - rock							
EXPERIMENTAL GROUP	boys	girls	total	CONTROL GROUP	boys	girls	total
question 1	1.00	1.00	1.00	question 1	1.00	1.00	1.00
question 2	1.00	0.86	0.93	question 2	0.71	1.00	0.86
question 3	1.00	1.00	1.00	question 3	0.71	0.00	0.36
total	1.00	0.95	0.98%	total	0.81	0.67	0.74%

From the set of motivational games with musical knowledge, the chosen game in the experimental group was “Dominoes”. In the control group, the method chosen was traditional gap-filling.

The charts above show that the experimental group, in which the creative technique using a motivational game with musical knowledge was applied, gained more points than the control group with both music samples.

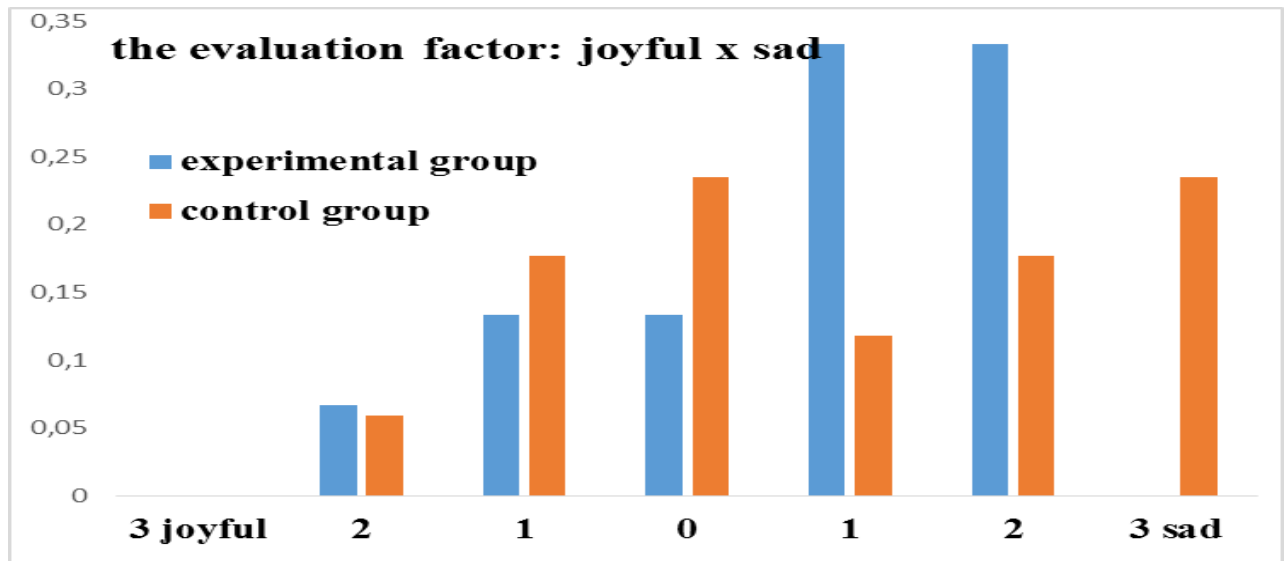
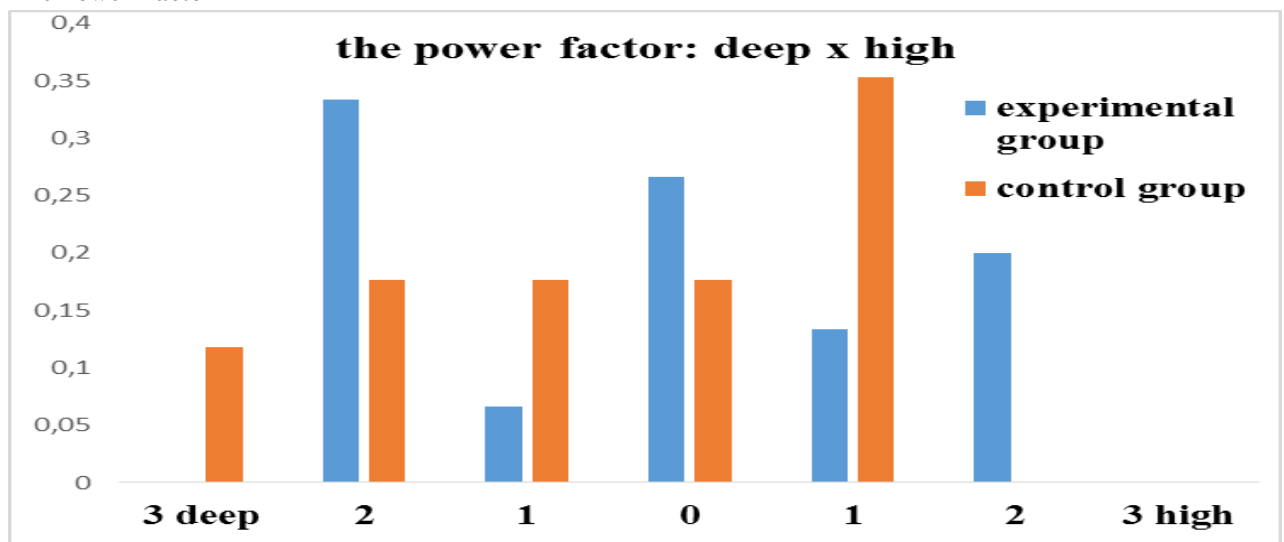
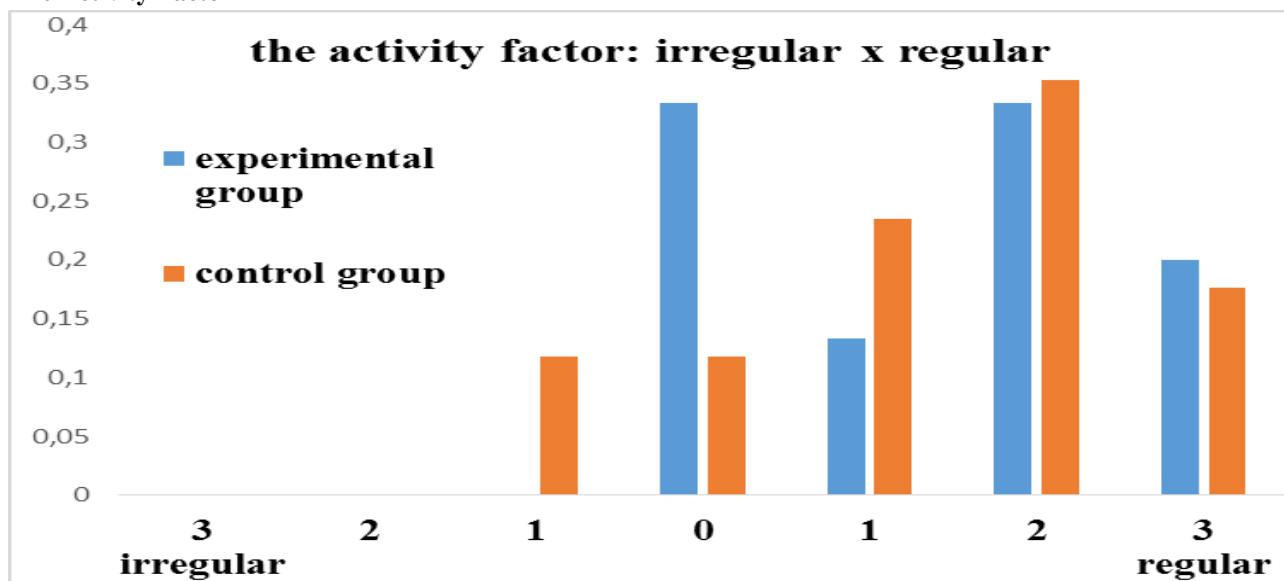
Semantic Differential

The second model lesson focused on the music of the 1980s around the world (music sample: Enya - Only time). The research technique chosen for this lesson was the *semantic differential* - in this technique, the pupils are asked to choose from a set of pre-selected polar adjectives and mark those that match their current perception of the music sample with a cross. This technique is typical for a research experiment and contains both scaling and association methods. The respondents are presented with pairs of opposing adjectives for each music sample (e.g. beautiful - ugly, strong - weak, fast - slow). According to their subjective feelings and thought processes, respondents mark the options on the scale that best match their current impression of the music sample with a cross. In the research sheet, connotative meanings were divided into three basic categories: evaluation factor, strength factor and activity factor. The evaluation factor rated emotional attitude, the strength factor rated tension, relaxation and potential energy, and the activity factor rated dynamics and variability over time.⁶

The evaluation of the semantic differential was carried out by calculating the average value of the results from each of the samples between the experimental and control group. The charts show the mean values. Each evaluated scale is expressed in a separate chart with each of the tested groups depicted in a different colour.

The selected sample charts below express how both groups perceived the individual factors.

⁶ VÁŇOVÁ, Hana a Jiří SKOPAL. *Metodologie a logika výzkumu v hudební pedagogice*. Univerzita Karlova v Praze. Praha: Karolinum, 2007, s. 171. ISBN 978-80-246-1367-3.

The Evaluation Factor**The Power Factor****The Activity Factor**

The selected charts show that the greatest variance in the responses scale between the pupils of both groups is in the evaluation factor and the strength factor. Conversely, the lowest variance is in the activity factor.

In the experimental group, the creative process chosen was the motivational game “3+1”. By contrast, the traditional method of gap-filling related to the lesson content was again used in the control group.

The following pivot table demonstrates, that the percentage success rate was once again higher in the experimental group, where the creative process consisting of a motivational game with musical knowledge was used.

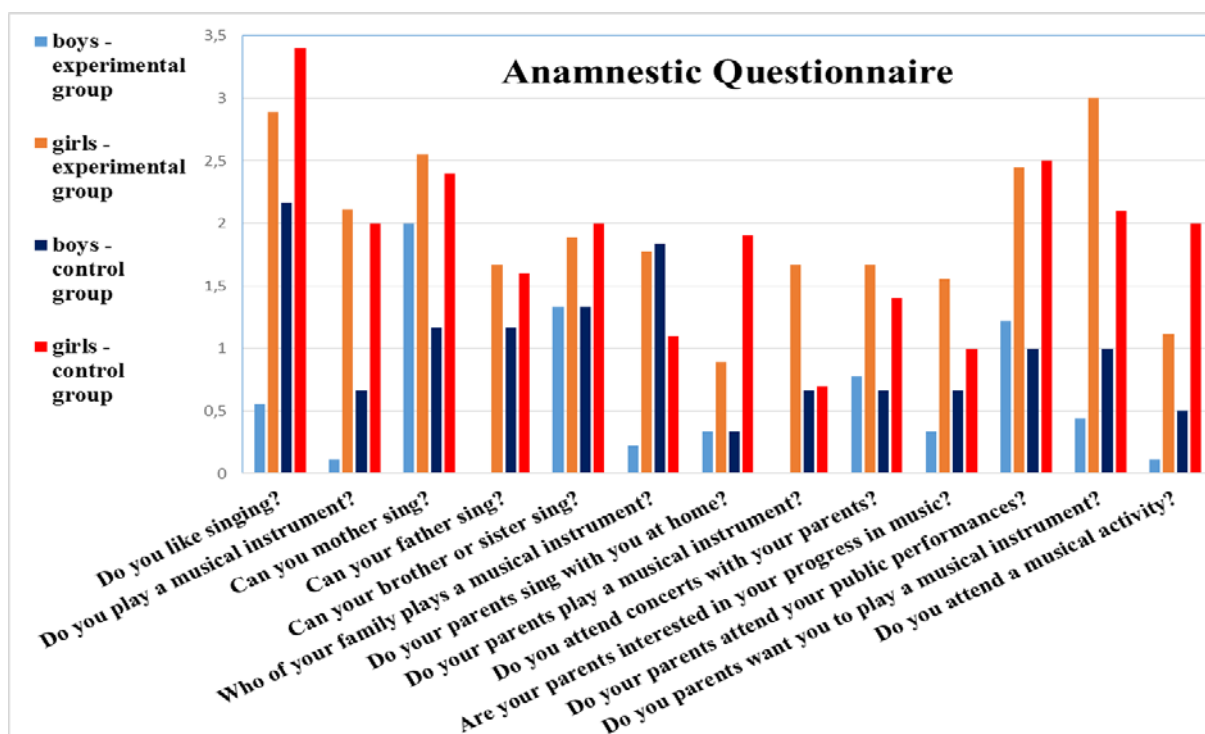
PIVOT TABLE 3							
EXPERIMENTAL GROUP	boys	girls	total	CONTROL GROUP	boys	girls	total
question 1	0.83	1.00	0.92	question 1	0.25	0.56	0.40
question 2	0.33	0.78	0.56	question 2	0.25	0.44	0.35
question 3	0.17	0.89	0.53	question 3	1.00	0.67	0.83
question 4	1.00	1.00	1.00	question 4	0.00	0.44	0.22
total	0.58	0.92	0.75%	total	0.38	0.53	0.45%

Anamnestic Questionnaire

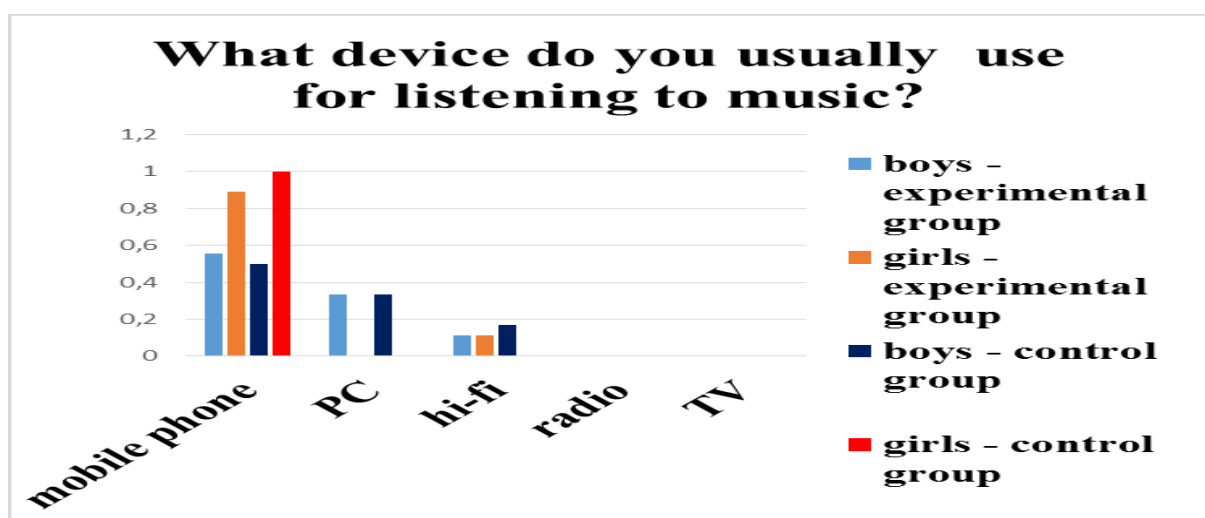
The questionnaire, in which a respondent answers the submitted questions in writing, is one of the most commonly used techniques in educational research. The main purpose of the questionnaire is to collect data about the respondents and their opinions and attitudes towards a given issue.⁷ The questionnaire consists of parametric questions, the answers to which vary between two opposite poles. The anamnestic questionnaire focuses on the evaluation of a pupil's musicality. It maps the effects of the extracurricular environment on the development of the pupil's musicality. The questions in this questionnaire are divided into five topical groups: musical activities of individual family members, stimulation functions in the child's musical development, social and integrational style of family education, extracurricular musical activities of the child and the amount of media input in the stimulation of the child's musicality.⁸

⁷ PELIKÁN, Jiří. *Základy empirického výzkumu pedagogických jevů*. Univerzita Karlova v Praze. Praha: Karolinum, 2011, s. 105. ISBN 978-80-246-1916-3.

⁸ VÁŇOVÁ, Hana a Jiří SKOPAL. *Metodologie a logika výzkumu v hudební pedagogice*. Univerzita Karlova v Praze. Praha: Karolinum, 2007, s. 58. ISBN 978-80-246-1367-3.



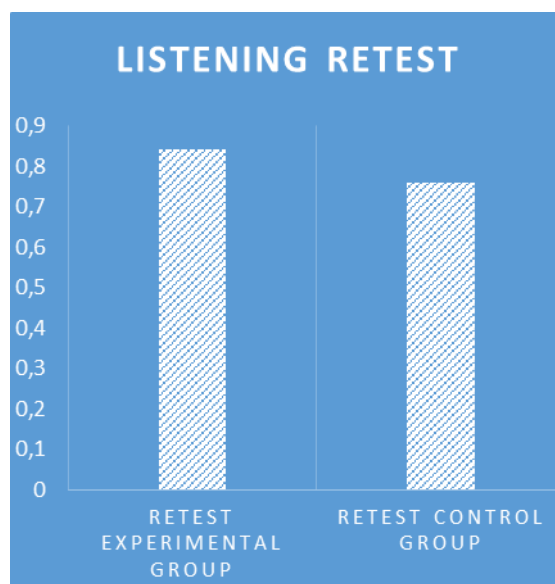
The anamnestic questionnaire chart shows that the highest rate of musical activity of family members is found among the girls in the experimental group. The rates of the stimulation function in the musical development of the child, the social and integrational style of family education and extracurricular musical activities are the highest with girls from both groups.



A chart showing the share of media in the stimulation of the children's musicality shows that all pupils in the experimental and control groups listen to music most often on their mobile phones.

Results, Conclusions and Recommendations

The final retest of the first phase of the research shows that the success rate was slightly higher in the experimental group.



The aim of this paper is to discuss model situations applying creative techniques through motivational games with musical knowledge in connection with listening to modern popular music in the classroom. Two specific model situations using creative techniques through motivational games with incorporated musical knowledge together with listening to modern popular music were verified in practice.

The results presented above suggest that the experimental group (in which the creative techniques using motivational games with musical knowledge were used) has better knowledge of modern popular music and is more capable of using this knowledge in other basic musical activities - vocal, instrumental and music and movement.

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MODELLING SMARTPHONE SECURITY BEHAVIOUR OF UNIVERSITY STUDENTS

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Abstract

Despite the popularity and usefulness of Smartphone there are reasons to believe that users are concern about the privacy and security of their personal information due to physical theft, malicious applications and wireless network attackers. Against this background, a study was conducted with the aim of identifying factors that could influence Smartphone Security Behaviour. Seven factors, extracted from the literature were hypothesized to have a significant relationship with Smartphone Security Behaviour. Using the survey research methodology and a questionnaire, 346 respondents were engaged in the study. Using the SEM-PLS analysis, the results showed that media influence, perceived ease of use, perceive usefulness and self efficacy are significant predictor of Smartphone security behaviour. The study has significantly contributed to the body of knowledge and should capture the interest of both academics and management practice.

Keywords

Smartphone, security behaviour, technology use, university students

1.0 Introduction

Smartphones have changed many aspects of human life. Smartphone can be defined as “a mobile phone running a complete operating system in a manner similar to a traditional computer, which offer advanced computing abilities and connectivity options” (Alfawareh & Jusoh, 2014). Nowadays, smartphones have been used to replace desktop or mobile computers. Activities that are normally performed by desktop or laptop computers such as sharing information, sending and receiving emails, chatting, opening and editing documents, paying for products, browsing and shopping are now being replaced by Smartphone - a small device which can be kept inside a pocket of a trouser or a shirt (Alfawareh & Jusoh, 2014). Smartphones and other mobile devices, such as tablet PCs, are small, easy to carry and powerful in computational and storage capabilities (Uffen, Kaemmerer & Breitner, 2013).

Because of the advantages offered by smartphones, the population of smartphones users has been growing at an exponential rate. In Malaysia, the total users of smartphones was about 14.5 million in 2015, while in 2016, it was estimated to be around 16.4 million For 2017, the number of Smartphone users in Malaysia is estimated to reach 17.8 million (Statistica, 2017). A survey done in 2016 showed that Malaysians were spending more than three hours on their smartphones each day, using 323MB of data on average. According to Head & Ziolkowski (2012), while Smartphone use has been increasing in different economic and age sectors, university students have been targeted as one of the most important user groups of Smartphone services. In Malaysia, university students form a major chunk of Smartphones users (Qadri, Abubaka & Ibrahim, 2015). A research conducted by Mohtar et al. (2013) revealed that university students in Malaysia utilize smartphones for sharing notes, sharing exam results on Facebook, recording lectures and more.

Given the popularity and usefulness of smartphones, there are reasons to believe that privacy and security concerns might be preventing users from benefitting the full potential of their smartphones (Chin et al. 2012). The study by Chin et al. (2012) discovered that users are more worried about privacy on their smartphones than their laptop computers. In addition, it was also found that the respondents concerned about physical theft and data loss, malicious applications and wireless network attackers. According to Mylonas et al. (2011), smartphones are an interesting attack vector due to the huge amount and quality of personal and business data they store.

A literature review on smartphone security revealed very little literature available on the subject, especially concerning user behaviors relating to security practices (Simpson, 2016). This is partly due to the fact that smartphones are still a relatively new technology and literature has yet to mature with the rapid advancement of smartphones (Mylonas et al., 2013; Simpson, 2016). Moreover,

although an enormous amount of IS literature on security exists; the literature is mainly rooted in the domain of traditional computing devices (Simpson, 2016) and is not applicable to smartphones (Landman, 2010). Huang, Rau, & Salvendy (2010) also noted that very few studies have been conducted concentrating on the socio-cognitive behaviors that affect IS user security practices and security behaviors.

This study sought to gain a deeper understanding into the factors that influence smartphone user security practices and security behaviors. To achieve this objective, this study identified seven possible factors, namely, media influence, people influence, perceived ease of use, perceived probability, perceived severity, perceived usefulness and self efficacy. Based on these factors, this study formed and examined seven hypotheses which aimed to answer the following research questions: Do media influence, people influence, perceived ease of use, perceived probability, perceived severity, perceived usefulness and self efficacy jointly affect Smartphone security behavior?

2.0 Theoretical Framework

Figure 1 presents the theoretical framework used in the study. Past studies on information systems have shown that innovation characteristics (i.e. technological characteristics), individual characteristics and environmental characteristics have significant bearings on individual usage behaviour of the technology (Trice & Treacy, 1998; Delone & Mclean 2003; Ali & Money, 2005; Jeyaraj *et al.* 2006; Masrek *et al.* 2008; Samadi & Masrek, 2015). On the basis of these study, we also argue that, technological characteristics (i.e. perceived ease of use, perceived usefulness, perceived probability and perceived severity), individual characteristics i.e. self efficacy and environmental characteristics i.e. media influence and people influence do have bearings and influence on smartphone security behaviour. The independent variables as shown in Figure 1 also have been examined by previous studies in the context of Smartphone (Tu & Yuan, 2012; Uffen, Kaemmerer & Breitner, 2013; Esmaeili, 2014; Simpson, 2016; Das & Khan, 2016).

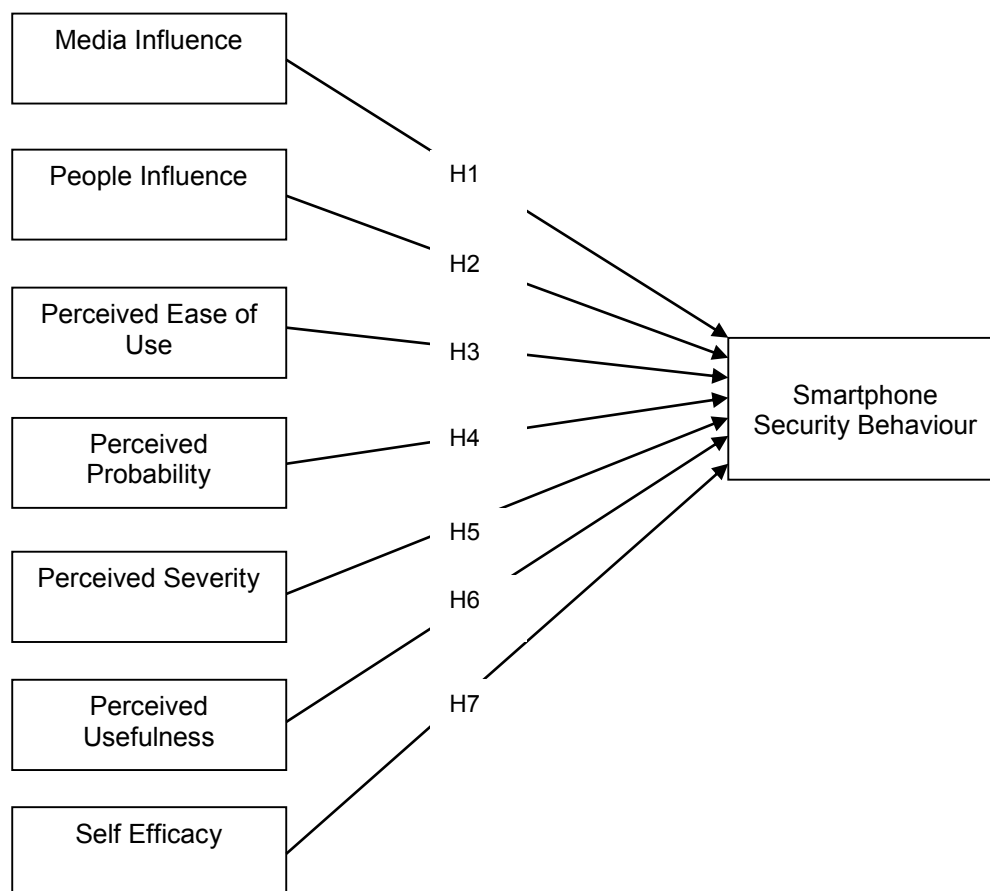


Figure 1. Theoretical Framework

Table 1: Operational definitions of constructs and research hypotheses

Construct	Operational Definition	Hypothesis
Smartphone Security Behaviour	The security conscious behaviors and actions that users demonstrate/conduct while using their smartphone	Not applicable
Media Influence	Support, encouragement or pressure by the mass media to use security technology in the Smartphone	H1: Media influence has a positive effect on of smart-phone security behaviour
People Influence	Support, encouragement or pressure by other people to use security technology in the Smartphone	H2: People Influence has a positive effect on of smart-phone security behaviour
Perceived Ease of Use	The degree to which a person believes that using a security technology in their Smartphone would be free from effort	H3: Perceived ease of use has a positive effect on of smart-phone security behaviour
Perceived Probability	The user realizes the probability that there is a security breach or risk on their Smartphone.	H4: Perceived probability has a positive effect on of smart-phone security behaviour
Perceived Severity	The extent to which an individual perceives that negative consequences caused by loss and theft of smartphone are severe.	H5: Perceived severity has a positive effect on of smart-phone security behaviour
Perceived Uefulness	The degree to which a person believes that using a security technology in their Smartphone would enhance his or her job performance	H6: Perceived usefulness has a positive effect on of smart-phone security behaviour
Self Efficacy	A belief in one's capability to protect information in the smartphone from unauthorized disclosure, modification, loss, destruction, and lack of availability".	H7: Self efficacy has a positive effect on of smart-phone security behaviour

3.0 Research Method

According to Egelman & Peer (2015), when studying human behavior, researchers across many different fields will normally use scales as proxies for observation. The authors further pointed out that scales are effective when behavioral or observational experiments are either too expensive, complex, or simply not possible. To this effect, this study also used scale for measuring all the constructs in the framework. The scale was developed by adapting the scales developed and used in past studied. The adaptation of the scale was done through pre-test involving several experts and prospective respondents. Based on their feedbacks and comments, a revision was made to the scales. Subsequently, a pilot test was executed involving 30 students and the reliability analysis was done based on Cronbach's alpha scores. The results showed that the scales were acceptably reliable as the score of the Cronbach's alpha for each construct surpassed 0.6. The questionnaire was then distributed to targeted respondents. The population of the study was students of Universiti Teknologi MARA Puncak Alam Selangor. A total of 450 questionnaire was distributed and after the data collection period was over, 346 usable questionnaire was returned. SmartPLS Version 3.0 was used to analyze the data (Ringle *et al.*, 2015).

4.0 Findings

4.1 Assessment of Common Method Bias

As this study used single source of data i.e. one respondent answering all questions in the questions, there is a need to assess common method bias. This was done through Harman's single factor test. All items were constrained to one factor and the results of the analysis showed that the total variance explained was 25.68%, less than the recommended value of not more than 50.0%. The results suggest that the questionnaire used in this study was free from the problem of common method bias.

4.2 Profiles of Respondents

Table 2 depicts the profiles of the respondents. In terms of gender, female respondents (73.7%) outnumbered male respondents (26.3%). The majority of the respondents (50%) reported to be aged between 21 and 23 years old while the minority indicated to be aged between 27 and above (7.8%).

Most of the respondents reported as pursuing Bachelor's degree (77.2%). The respondents enrolled in the Faculty of Business Management had the highest number of participation (39.6%).

Table 2: Profiles of Respondents

		Frequency	Percent
Gender	Male	91	26.3
	Female	255	73.7
Age	Below 20	57	16.5
	21 - 23	173	50.0
	24 - 26	89	25.7
	27 and above	27	7.8
Program	Diploma	15	4.3
	Degree	267	77.2
	Master	53	15.3
	Others	11	3.2
Faculty	Faculty of Architecture, Planning And Surveying	23	6.6
	Faculty of Art And Design	17	4.9
	Faculty of Business Management	137	39.6
	Faculty of Education	36	10.4
	Faculty of Health Science	37	10.7
	Faculty of Hotel And Tourism Management	16	4.6
	Faculty of Pharmacy	16	4.6
	Faculty of Accountancy	64	18.5

4.3 Measurement Model

To address the validity and reliability requirements of the scales, the assessment of the measurement model was done. Figure 2 illustrates the SmartPLS output of the measurement model assessment. The corresponding factor loadings for each item as well as the Cronbach's alpha, the composite reliability and the Average Variance Extracted for each construct are shown in Table 3. The results suggest that the scales used are highly reliable because the factor loading for every items surpassed 0.7 requirements; the Cronbach's Alpha for each construct surpassed 0.7 requirement; the composite reliability exceeded the 0.7 requirement; and the Average Variance Extracted also exceeded the 0.5 requirement (Hair *et al.*, 2011).

Table 3: Cronbach's Alpha, Composite Reliability & Average Variance Extracted

			Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Media Influence (MEI)	MEI2	0.771	0.893	0.921	0.7
	MEI3	0.825			
	MEI4	0.858			
	MEI5	0.875			
	MEI6	0.851			
People Influence (PEI)	PEI4	0.797	0.88	0.912	0.675
	PEI5	0.864			
	PEI6	0.836			
	PEI8	0.803			
	PEI9	0.806			
Perceived Ease of Use (PEU)	PEU3	0.909	0.84	0.904	0.76
	PEU4	0.919			
	PEU5	0.779			
Perceived Probability (PEP)	PEP3	0.822	0.873	0.909	0.715
	PEP4	0.899			
	PEP5	0.801			
	PEP6	0.857			
Perceived Severity (PES)	PES2	0.855	0.94	0.954	0.806
	PES3	0.891			
	PES4	0.917			
	PES5	0.904			
	PES6	0.921			
Perceived Usefulness (PUS)	PUS1	0.740	0.861	0.897	0.637
	PUS2	0.713			
	PUS3	0.824			
	PUS4	0.872			
	PUS5	0.832			
Self Efficacy (SEY)	SEY1	0.704	0.862	0.893	0.627
	SEY2	0.702			
	SEY3	0.890			
	SEY4	0.899			
	SEY5	0.739			
Security Behaviour (SEB)	SEB4	0.894	0.79	0.88	0.714
	SEB5	0.929			
	SEB6	0.690			

Another aspect of validity that needs assessment is discriminant validity, defined as the extent to which a construct is truly distinct from other constructs (Hair *et al.*, 2010). According to Hair *et al.*, (2010) the best approach to assessing the discriminant validity is to compare the square root of each construct AVE to its correlation with other variables. This approach requires that the value of the square root of each construct AVE should be higher than the correlation values among constructs. If this requirement is met, discriminant validity can be assumed. This study also used this approach for assessing the discriminant validity. Table 2 shows that the square root of each construct AVE is higher than the

correlation with other variables. Given these results, a convergent validity and discriminant validity of the instrument can be assumed.

Table 4: Discriminant Validity

	MEI	PEI	PEU	PEP	PES	PUS	SEB	SEY
MEI	0.837							
PEI	0.523	0.821						
PEU	0.284	0.35	0.872					
PEP	0.222	0.217	0.256	0.846				
PES	0.250	0.268	0.318	0.375	0.898			
PUS	0.389	0.282	0.558	0.286	0.479	0.798		
SEB	0.341	0.32	0.549	0.072	0.232	0.507	0.845	
SEY	0.403	0.391	0.521	0.147	0.377	0.494	0.445	0.792

5.4 Structural Model

Using a bootstrapping procedure, the SmartPLS output of the structural model was produced as shown in Figure 2. The guideline used in interpreting the results are accept the hypothesis when $p < 0.01$ ($t > 1.645$) or $p < 0.05$ ($t > 1.96$) or $p < 0.001$ ($t > 2.58$). The results clearly showed that H1, H3, H4, H6 and H7 are accepted while H2 and H5 are not accepted. For a substantial model, Cohen (1988) suggests that R^2 should be about 0.35 or greater, while Falk & Miller (1992) recommended 0.10 or above. In this study the R^2 is 0.405, indicating that the estimated model is substantial.

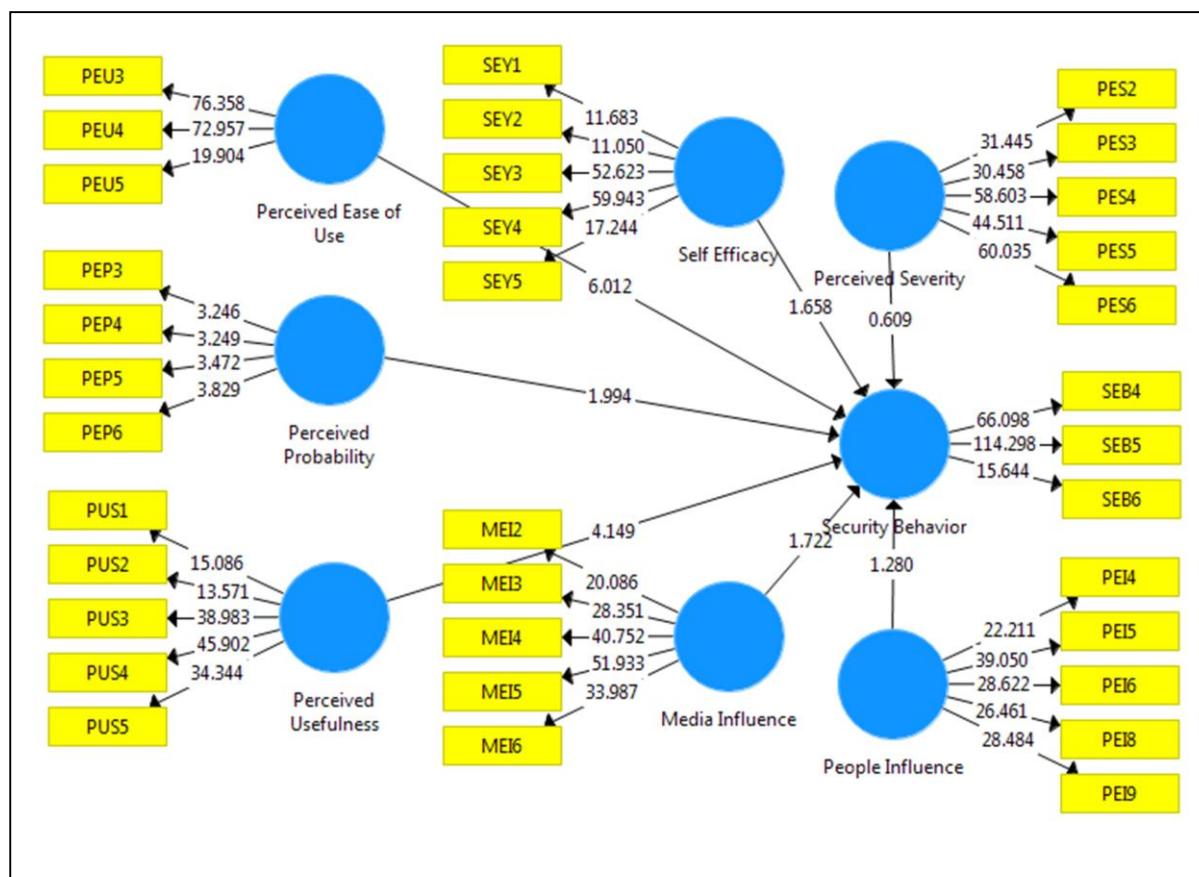


Figure 2. SmartPLS Output of the Structural Model

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	Hypothesis
H1: MEI →SEB	0.102	0.100	0.059	1.722*	Supported
H2: PEI →SEB	0.072	0.069	0.056	1.280	Rejected
H3: PEU →SEB	0.341	0.335	0.057	6.012***	Supported
H4: PEP →SEB	-0.130	-0.112	0.065	1.994*	Rejected
H5: PES →SEB	-0.036	-0.04	0.058	0.609	Rejected
H6: PUS →SEB	0.261	0.258	0.063	4.149***	Supported
H7: SEY →SEB	0.102	0.11	0.062	1.658*	Supported

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

5.4 Predictive Relevance and Effect Size

In analyzing the predictive relevance, the blindfolding procedure was executed using omission distance $D = 7$ as suggested by Hair et al. (2012). According to Hair *et al.* (2014), the calculation of Q^2 value is based on the cross-validated redundancy approach that fits the PLS-SEM analysis perfectly. The results showed that the Q^2 value is 0.267, which is greater than zero, suggesting that the model in this study has predictive relevance for all its endogenous constructs.

Effect size refers to whether the latent independent variable has a considerable effect on the dependent variable. Using the formula $f^2 = R^2 / (1 - R^2)$ by Cohen (1988), the effect size is computed. As exhibited in Table 6, the results showed that the effect is either none or small, based on the value of f^2 , where 0.35 or above is considered large effect, between 0.15 and 0.349 is considered moderate effect while 0.03 or less is considered small effect (Cohen, 1988).

Table 6. Assessment of effect size

Model	Variables Included	Variables Excluded	R Square	Effect size (f^2)	Interpretation
1	PEI, PEU, PEP, PES, PUS, SEY	MEI	0.398	0.0118	None
2	MEI, PEI, PEP, PES, PUS, SEY	PEU	0.338	0.1126	Small
3	MEI, PEI, PEU, PES, PUS, SEY	PEP	0.391	0.0235	Small
4	MEI, PEI, PEU, PES, PEP, SEY	PUS	0.368	0.0622	Small
5	MEI, PEI, PEU, PES, PEP, PUS	SEY	0.399	0.0101	None

6.0 Discussion

The aim of this study is identify factors that could influence smartphone security behaviour. The results of the literature review identified seven factors which are media influence, people influence, perceived ease of use, perceived probability, perceived severity, perceived usefulness and self efficacy. These factors were tested using the data obtained from a field survey involving 346 respondents. Using the PLS-SEM analysis, the effect of these factors on Smartphone security behavior was examined.

The first hypothesis, H1, examined the effect of media influence on smartphone security behavior. The results showed a significant relationship does exist ($\beta = 0.10$, $p < 0.05$). The higher is the exposure to the media campaigning on security, the higher is the likelihood of the user to practice smartphone security. This finding falls in line with that of Ng & Rahim (2005). Mass media has been well acknowledged as the “change agent” or as a “reinforcing agent”, that is, media may function in such a way as to change knowledge, attitudes and behavior” (Robertson & Wortzel, 1978). It is because of this reason, as shown in the findings, a positive and significant relationship exists between media influence and Smartphone security behaviour.

The second hypothesis, H2, investigated the relationship between people influence and Smartphone security behaviour. People influence, termed as social norm by Ajzen (1991) refers to “an individual’s perception that most people who are important to her think she should (or should not) perform a particular behaviour”. Contrary to our expectation, this study did not find any relationship between people influence and Smartphone security behaviour. However, our finding is consistent to that of Das et al. (2015). Their study concluded that the effect of people influence on the likelihood of adopting a security feature “varies based on the observability of the feature”. According to Herley (2009), the use of security features may be uniquely affected by people influence given that security feature usage is often invisible, rarely communicated, and generally undesired.

Majority of the research using the Technology Acceptance Model (TAM) showed a direct effect of perceived ease of use on actual use (Scheepers & Wetzels, 2007). In the context of individual security practices, studies by Shropshire, Warkentin & Sharma (2015) and Uffen, Kaemmerer & Breitner (2013) showed that perceived ease of use has a significant relationship with intention to use Smartphone security features. However, the results of this study showed that perceived ease of use is a significant predictor of Smartphone security behavior ($\beta = 0.341$, $p < 0.05$). The finding suggests that when security features of the Smartphone, either software or hardware related, are easy to use, then likelihood of the users to adopt and practice information security will be high.

The relationship between perceived probability and Smartphone security behavior is the fourth hypothesis tested in this study (H4). The results showed that perceived probability has a negative significant effect on Smartphone security behavior ($\beta = -0.130$, $p < 0.05$). Hence, H4 is not supported in the context of this research setting. The possible explanation is the reciprocal interdependence between satisfaction and use in the Information Systems Success Model (Delone & Mclean, 1992). While satisfaction influences use behavior, it is also influenced by the use behavior itself. In our case, it seems that those who highly practiced Smartphone security, became more doubtful of the probability that there would a security breach or risk on their Smartphone.

Tu & Yuan (2012) stated that “perceived severity of threat will lead users to behave in a more cautious manner if their perceptions of the damage or danger increase”. In contrast, when the user perceives that the severity of the threat has weakened, he or she will behave in a less cautious manner (Tu & Yuan 2012). In this study, the relationship between perceived severity and Smartphone security behaviour was found to be insignificant, thus H5 is rejected. One possible explanation is that the respondents of this study were students and the use of cheap Smartphone is very likely. According to Tu & Yuan (2012). People using cheap cell phones normally feel insignificant severity if their cell phones are lost or stolen.

In the domain of Smartphone security behaviour studies, Ng & Rahim (2005) and Uffen, Kaemmerer & Breitner (2013) found that perceived usefulness is a significant predictor of Smartphone security behaviour. However, in other context, past studies have also demonstrated that perceived usefulness was a significant predictor of use behaviour (Kim, Mannino & Nieschwietz, 2009; Anandarajan *et al.*, 2010; Godoe & Johansen 2012). To that effect this study developed the sixth hypothesis (H7), and the findings indicate that this hypothesis is supported ($\beta = 0.261$, $p < 0.05$).

The seventh hypothesis (H7) tested in the study is between self efficacy and Smartphone security behaviour. Consistent with our expectation, a significant relationship could be observed between these two constructs ($\beta = 0.102$, $p < 0.10$). The findings suggest, one unit increase in self efficacy will result in 10.2% increment in Smartphone security behaviour. Self-efficacy is concerned with the skills and abilities required to accomplish a goal. As illustrated in this study, when the respondents are highly confident in their ability to conduct a recommended action and they do not feel the action is difficult or cumbersome, they are more likely to take the action, i.e. implementing Smartphone security.

7.0 Conclusion

This study addresses a very important behavioural issue of mobile security from a specific perspective. It has significantly contributed to the body of knowledge and should capture the interest of both academics and management practice. Theoretically, this study developed a theoretical model of factors affecting user’s Smartphone security behaviour. Practically, the results of this research will assist manufacturers of Smartphone to improve the security features as expected by the users.

Although this study provided interesting insights into the factors Smartphone security behaviour, it has some limitations. Firstly, is the number of factors examined in the study. Secondly, the samples involved in this study were university students and it may not reflect or represent the overall population of Smartphone users. Thirdly, due to the nature of quantitative research, this study relied on self-reports based on subjective perception which may be biased.

Against the aforesaid limitations, the present study can be further extended for future research. Besides the seven factors, there are many other factors that are worth investigating such as personal IT innovativeness, demographic factors, and Smartphone usage experience. In terms of population, future study should consider focusing on the general public and not only university students. Combining both qualitative and quantitative approach in future study would provide better understanding about Smartphone security behaviour.

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MORAL REASONING OF ADOLESCENTS

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ABSTRACT

The paper is focused on finding the stage of moral development of contemporary adolescents. The focus is on the analysis of the way of thinking about moral dilemmas of adolescents. The aim is to find out how they perceive moral dilemmas and what strategies they use to solve them. We used a qualitative research design. The sample consisted of Slovak adolescents (N = 85, 52 females and 33 males) with the average age of 16.8. We created three moral dilemmas which were used to establish the level of moral development of the participants. Their task was to solve the dilemmas. The content analysis discovered that the majority of the participants preferred the solutions on the level of a higher stage of morality (i.e., conventional and post-conventional stage) rather than the pre-conventional stage of morality. Therefore, the resulting findings pointed to the degree of moral reasoning, which is based on the respect for the social rules and common good. The present study is a part of the project VEGA 1/0623/15 "Value Messages Perceived by Pupils in Formal Education".

INTRODUCTION

Morality (lat. mos = will, rules, manners) represents a set of beliefs, values, and underlying judgments about right or wrong behaviour. These moral norms are introduced to the individual during their life, and they act as regulators of behaviour. General moral norms develop during interiorization and are reflected in the behaviour (Cakirpaloglu, 2012; Brunclíková, Cabanová & Ďurišová, 2016; Hamranová, 2015; Šramová & Hamranová, 2015). An important role plays the conscience, which is an internalized set of moral values (Craig, 1989). Under moral behaviour of an individual we understand a behaviour that is in line with their conscience.

Looking at contemporary literature on moral development, we find two main concepts explaining the development of moral judgment. According to some authors, moral judgment develops intuitively and the leading roles are played by unconscious processes (Hauser, 2006; Mikhail, 2007; Damasio, 1994). This theory is grounded in the fact that people often cannot find a rational explanation for some of their very strong moral convictions (Hauser et al., 2007). Their moral judgment, therefore, develops under the influence of affective experience and is driven primarily by affective responses (Cushman, Young & Greene, 2010), which is supported by neuroscientific evidence (Damasio, 1994; Koenigs et al., 2007). However, even if the evidence of intuitive solving of moral problems and dilemmas exists, it does not mean that the individual does not employ rationality into the moral judgment. Moral judgment is a product of intuitive as well as rational psychological processes. It is, therefore, a product of affective and cognitive mechanisms. Moreover, evidence shows that intuition is tied to the stage of age development of the individual, as well as to the degree of cognitive development (Kohlberg, 1976; Piaget, 1965). J. Piaget (1965) and L. Kohlberg (1976), socio-cognitive oriented authors, are regarded as the lead representatives of the psychology of morals, and the pioneers of the dominant cognitive development paradigm. According to them, moral judgment is the product of conscious and effortful reasoning. Piaget (1965) connected the degree of cognitive development to the degree of development of moral thinking. He emphasized that while solving the moral problems, the individual decides based on their achieved cognitive abilities, which means that they justify their moral decisions. According to Piaget, cognitive development influences how the individual understands their surroundings, how they understand the differences between good and bad, and how they interpret moral norms. Children, depending on their age (although it is not determinative), use certain rules during their play according to the following stages (Piaget, 1965):

1. *Motoric and individual stage* (until the age of c. 3) is characterized by the child who plays individually, does not follow the rules but their own will and habits.
2. *Egocentric stage* (from the age of c. 3 to 6) is typical of the child trying to mimic the rules, but their interpretation is adjusted to child's own perception.
3. *Beginning of cooperation* is visible in the child at the age of c. 7 to 10. Child wants to have unified rules, but there are some misunderstandings and deviations in their explanation and understanding.
4. *Codification of rules* is apparent from the age of 11. In this stage, the child understands and interprets the rules relatively accurately and demands their observance from the other players, as well.

However, Piaget did not connect the understanding of the rules to their observance. When explaining the moral thinking, he used an interview in addition to an observation of the children. He created 'moral stories' that included questions about lying, punishment, justice, and equality of the authority. Based on the interview where the children were presented with the moral stories, Piaget (1965) found two main types of morality:

1. *Heteronymous morality* (age of 4 to 10) is linked with the respect for the rules established by external authorities, i.e., adults (usually parents). The child passively takes in the moral norms that are untouchable and unchanging. Punishment is understood as the right choice, is determined by the authority, and is the result of noncompliance with the norms.
2. *Autonomous morality* (age of 10 to 20) is based on cooperation. The individual understands, respects, and voluntarily accepts the norms. Moral rules are acquired by interiorization. The individual is not dependent on the evaluation given by the adult authority. They think about various alternative views of the world. Punishment is regarded as a way of fulfilling the ideals.

Moreover, Piaget was interested in the way the individual perceives justice. In this context, he emphasized the influence of social environment on the child's perception and evaluation of what is right and what is wrong in the perception of justice, the following stages can be found (Piaget, in Heidbrink, 1997):

1. *Fair and right is what the adults expect*. This is a period between the age of 3 to 8, and it corresponds to the heteronymous stage of morality. The child is subjected to the rules established by the authority that are valid without a doubt. Thus, what is 'just' is given by the adult. The child is in the egocentric phase of morality development until the age of c. 8, so the child mechanically judges a guilt based on material damage, not based on intention of the person.
2. *Equality in relation to authority* surfaces in the period between the age of 8 to 11. In this stage, the child wants to be on equal terms with the authority, and is especially sensitive to injustice, as well. The child has doubts about the general validity of the rules and justice.
3. *Feel for justice* starts approximately from the age of 12 and corresponds to the autonomous stage of morality. The equality is relativized and the individual ponders the motives of action and of justice according to the situation.

Another important representative who brought morality back to the front in the developmental psychology research is Kohlberg (1969). His cognitive developmental research program was a certain challenge to the behavioural and social learning views of socialization. Despite the criticism that it is not universally valid across cultures, ages, and genders (Simpson, 1974; Gilligan, 2016), this conception is respected by the professional public. However, it is important to add that recently, the importance of Kohlberg's conception has been decreased, which could be caused by the fact that it was connected to the prestigious and authoritative Piagetian paradigm (Lapsley & Narvaez, 2005), as well as by the fact that alternative models are available in the field of cognitive sciences. Nevertheless, the stages of development formulated by L. Kohlberg (1976) and the methods of morality research using moral dilemmas are still referred by the psychological and pedagogical field. Kohlberg was also of the opinion that cognitive development is a necessary precursor of moral development. That, however, does not mean that achieving the higher cognitive stages is linked to the higher levels of morality. In Kohlberg's theory of stages of moral development, he proposed three main categories of morality development:

1. *Pre-conventional stage of morality* (age of 3 to 6) is based on the exterior events, not on the persons and norms. The norms are regarded as something external. The action is dependent on reward and punishment. The individual wants to evade punishment, so they adjust to the authorities. They also want to satisfy their own interests and needs while respecting the interests of the other people.
2. *Conventional morality* (age of 6 to 12) is based on identifying with the norms that the individual interiorizes. The individual observes the conventions and comes up to expectations of the others. The individual's action is regulated by the fear and concerns about disapproval of others. The individual wants to be in agreement with the others and support the society, groups, and institutions.
3. *Post-conventional morality* (age of 12 to 15) is characterised by the individual being able to accept the norms, and also to evaluate them according to individual's own accepted principles. The individual orients on the lawful behaviour and social contracts, as well as on generally valid ethical principles in society. Identification with the group or influence of the authority is no longer decisive in this stage of morality. Laws and norms are regarded as common good and protection of human rights. One's own conscience and principles are the measures of moral evaluation.

Initially, Kohlberg's co-worker, C. Gilligan, argued that both of the authors mentioned above created *morality of justice* which considers the masculine moral development, but not the feminine. That was her main objection Kohlberg did not agree with. The result was the formation of women's *ethic of care* (Gilligan, 2016). According to Gilligan, women regard the problems with the perspective of the group and family (ethics of care), contrary to men who favour social standpoint (morality of justice). Women's ethics of care has three stages:

1. *Pre-conventional: orientation to self-survival* is characterised by the woman who concentrates on herself and the problems of her survival are her priority. Therefore, the woman orients on individual survival. Transition is from selfishness to responsibility to others where connection to other people comes into foreground.

2. *Conventional: goodness as self-sacrifice* is the mother's morality that is distinguished by the care for the weak and by the suppression of one's own interests and needs. Transition is from goodness to truth where the conflict between egoism and altruism is evaluated by the conventional criteria and by the criteria of the 'truth'.
3. *Postconventional: principle of non-violence* is characterised as a certain synthesis of egoism and altruism, aiming not to hurt oneself and others. It manifests itself by the realization that 'I' as well as the others are dependent on each other.

According to Gilligan (2016), masculine and feminine morality are on the same level, so they are complementary, contrary to Kohlberg's understanding of morality. Kohlberg emphasized mainly autonomy, rules, and lawfulness.

N. Eisenberg (1982) researched moral reasoning in the area of prosocial behaviour, result of which was the *Theory of prosocial moral reasoning*. Her research was focused on finding the way the children solve moral dilemmas, and she identified five main levels of prosocial reasoning:

1. *Hedonistic (self-focused) orientation* (age of 0 to 7) is focused on the self. Any altruistic action is strictly tied to bringing benefit to oneself.
2. *Need of others orientation* (some preschool and primary school children) has the form of the need to help the others, but without the appearance of guilt or self-reflection.
3. *Stereotyped approval-focused orientation* (age of 7 to adolescence) is a level where the individual acts in a prosocial way when the action will impress others and will make the individual liked. They describe their behaviour stereotypically as good or bad.
4. *Empathic orientation* (a few high school children and most secondary school children) when the individual truly feels and expresses empathy, they empathize with the feelings of others. A real sense of guilt is present, or a sympathy when considering their own actions.
- 4.b *Transitional level* (a few secondary school children) is characterised by the individual protecting the dignity and self-esteem of others.
5. *Internalised orientation* (rare in children) is characterised by the internalised norms and principles. The individual has trust in themselves and believes that they can maintain self-respect by behaving with a duty of care towards others. They are motivated by the desire to maintain their own set of principles.

In line with Piaget and Kohlberg, Eisenberg puts emphasis on the cognitive development in the morality development. However, the difference is that Eisenberg believes that moral judgment is influenced by the emotions, and that there is a possibility for the individual to regress to the previous level.

Based on the theories mentioned above, we determined that the aim of our research would be to find the developmental trends in contemporary Slovak adolescents' moral thinking, especially in the judgment-making processes.

METHODS

Participants

The sample consisted of secondary school students, due to the fact that the value system of an individual should be more or less stable around the age of 16. The sample consisted of Slovak adolescents (N = 85) with 52 females and 33 males with the average age of 16.8.

Measures

Qualitative research method was used in order to measure moral reasoning and to look at developmental trends in present-day adolescents. We used the method of moral scenarios. **Moral dilemmas** were designed to examine unique developmental trends in adolescents' moral thinking and decision-making on nine moral dilemmas. These dilemmas were a part of a research aiming to find the value messages perceived by pupils in formal education. The present study introduces partial results from the analysis of the three out of nine presented dilemmas. The dilemmas were a part of a paper-based questionnaire to which the participants responded in writing. Afterwards, the answers were coded. The researcher read all responses on dilemmas and developed a coding system. The final coding system was developed separately for each dilemma to capture the participants' unique moral decisions on each dilemma, regarding the theory developed by L. Kohlberg and N. Gilligan (see Results).

RESULTS

The findings were run through quantitative-qualitative analysis following gender differences. We will now look into how the participants solved the dilemmas.

Dilemma 1:

Ingrid has a very rare blood type. When the school year started, Ingrid was accepted to the basketball team. One day, Ingrid was summoned by a doctor who asked her to donate a substantial amount of blood to a gravely ill girl who needed Ingrid's blood type. Since it is a serious illness, the blood needs to be donated multiple times in the course of several weeks. Therefore, after the agreement to donate her blood, Ingrid would need to go to the hospital for a longer period of time. This could cause Ingrid to feel weak which could potentially lead to losing her spot on the team, as well as falling behind the school work. What should Ingrid do and why?

The first moral dilemma puts individual in the position where they have to choose between a career in sport and a possibility to restore a stranger to health and save their life.

In the analysis of the Dilemma 1, we were looking at the frequencies of adolescents' decisions, which were sorted into the following categories: A/ Donate blood to help and save the life; B/ Donate blood with respect to one's health; C/ Do not donate blood; D/ No decision.

Table 1: The frequencies of participants' decisions by gender in Dilemma 1.

Category	A/ Donate blood to help and save the life	B/ Donate blood with respect to one's health	C/ Do not donate blood	D/ No decision
Females	36	5	6	5
Males	23	5	2	3
Together	59	10	8	8

The content analysis of the decisions to Dilemma 1 showed that the most frequent category was A/ **Donate blood to help and save the life** (69.4%) (Table 1). This category was dominant in girls (42.0%) as well as in boys (27.1%). The explanations similar to the following prevailed: *"Definitely help, even considering the circumstances"* (P21, male); *"She should donate her blood to help and save the girl, she could re-join the club later, but the girl wouldn't get her life back"* (P8, female). The second place belonged to the category B/ **Donate blood with respect to one's health** (11.8%), with equal distribution between the two genders (5.9% each). This category was presented by the explanations like: *"She should donate her blood, but not too much"* (P31, female). Category C/ **Do not donate blood** (9.4%), as well as category D/ **No decision** (9.4%), had identical representation and the decisions were supported by the explanations like: *"There are definitely more people in the world who could donate their blood"* (P45, female); *"I don't know what she should do"* (P20, female).

Dilemma 2:

"Two young men, brothers, got into serious trouble. They wanted to leave the town in secret and needed money. Karol, the elder one, broke into a shop and stole 1 000€. Younger Ján went to a senior who was known to be helping people in town. Ján said to him that he was seriously ill and needed 1 000€ to cover his surgery. He asked him to lend him the money and promised to return it after his recovery. In reality, Ján was not ill and had no intention to return the money. Even though the old man did not know Ján very well, he lent him the money, and so Ján and Karol fled the town with all the money. What is worse? To steel like Karol or like Ján? And why?"

Second moral dilemma aims to find out whether the adolescents favour one of the alternatives of the immoral behaviour, or evaluate the two options identically.

The frequencies of adolescents' decisions are to be found in Table 2. Categories were the following: A/ Larger amount of culpability of deception (Ján's deceit of the senior); B/ Equal amount of culpability of deception and theft; C/ Larger amount of culpability of theft (Karol's breaking in and stealing money from the shop).

Table 2: The frequencies of participants' decisions by gender in Dilemma 2.

Category	A/ Larger amount of culpability of deception	B/ Equal amount of culpability of deception and theft	C/ Larger amount of culpability of theft
Females	47	3	2
Males	31	2	0
Together	78	5	2

The content analysis of the decisions to Dilemma 2 showed the biggest preference of category A/ **Larger amount of culpability of deception** (91.8%) (Table 2). This category dominated in girls (55.3%) as well as in boys (36.5%), and the decision was supported by the following explanations: *"It's worse to lie like Ján, he lied to the old man who sympathized with him"* (P71, female); *"Lie to people, and especially to seniors, is inhuman, indecent, and is worse than when someone is stealing"* (P33, male). The small frequency of the category B/

Equal amount of culpability of deception and theft (5.9%) was accompanied by the explanations like: “Neither was a good solution, karma will get them one day” (P31, female). The least preferred category **C/ Larger amount of culpability of theft** (2.4%) was accompanied by the explanations like: “Karol did a worse thing” (P51, female).

Dilemma 3:

“You are going home from a party and you meet your classmate. He is very drunk and feels terrible. You know that he has strict parents. What do you do?”

In the analysis of Dilemma 3, we looked at the frequency of adolescents’ decisions, which were sorted into the following categories: A/ I take him to my house; B/ I send him to his parents; C/ I call help; D/ I do not help him.

Table 3: The frequencies of participants’ decisions by gender in Dilemma 3.

Category	A/ I take him to my house	B/ I send him to his parents	C/ I call help	D/ I do not help him
Females	22	20	5	5
Males	13	11	1	8
Together	35	31	6	13

The content analysis of the decisions to Dilemma 3 revealed that the most favoured option was the category **A/ I take him to my house** (41,2%) (Table 3). This category was dominant in girls (25.9%) as well as in boys (15.3%) and was supported by the explanations such as: “He will spend the night and I will help him to sober up faster” (P63, female); “I’ll take him home” (P35, male). The second most frequent option chosen by the participants was the category **B/ I send him to his parents** (36.5%). The choice of this category was supported by: “I will send him home and tell his parents not to punish him” (P81, female). The next category was **D/ I do not help him** (15.3%) demonstrated by: “I will continue on my way” (P12, male); “I would like to help him, but unfortunately, I have to go home” (P8, female). The least favoured option was the category **C/ I call help** (7%) and was presented by the explanations like: “I will call the ambulance” (P83, female).

CONCLUSIONS

The present study documents how adolescents perceive moral dilemmas and what strategies they use to solve them. The results showed that most of the participants were thinking on the level of higher degree of morality. The proposed solutions to all three dilemmas were mainly on the level of the conventional and post-conventional stage of development of morality.

In the *conventional stage of morality development*, the participants emphasized the care of the weak and the repression of one’s egoistic interests and needs in favour of other people. They equally stressed the observance of the usual, generally valid norms and social conventions.

In the *post-conventional stage of morality development*, the statements oriented on lawful behaviour and social contracts were dominant. The participants regarded the laws and norms as a common good, despite the criticism of the educational system in schools that lately has been focused more on the pupils’ performance rather than the moral development education.

The *pre-conventional stage of morality* had the smallest representation in the solving of the dilemmas. In this case, participants preferred their own selfishness or their own interests and needs with respect to the interests of other people.

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MORPHOLOGICAL AND CONTEXTUAL CLUES IN GUESSING WORD MEANING FROM CONTEXT IN A FOREIGN LANGUAGE*

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ABSTRACT

Guessing word meaning from context is one of the strategies that language learners frequently use while dealing with unknown words (Fraser, 1999; Paribakht and Wesche, 1999). Language learners tend to use different types of clues including morphological and contextual clues in their attempts to derive word meaning from context (de Bot, Paribakht & Wesche, 1997; Paribakht and Wesche, 1999; Soria, 2001; Nassaji, 2003). The purpose of this study is to investigate whether Turkish EFL learners use morphological clues in their lexical inferencing process and whether they are able to integrate morphological clues with contextual clues while guessing the meaning of an unknown word when they are both present. A vocabulary guessing test was administered to the subjects who were the students attending prep classes at a School of Foreign Languages in Turkey. The results showed that the subjects were more successful in determining the meanings of morphologically complex words. As for the integration of morphological analysis and usage of contextual clues, morphologically complex words were guessed more correctly than simple words in poor context. However, there was not a significant difference between the correct guessing rates of simple and complex words in rich context. The results may be interpreted as support for teaching language learners to infer word meaning through instruction in the principles of morphological and contextual analysis.

Keywords: Guessing Word Meaning, Morphological Complexity, Morphological Clues, Contextual Clues

INTRODUCTION

While reading a text in a foreign language, language learners may come across some unfamiliar words. Encountering a few unfamiliar words may not cause an obstacle to general comprehension of the text. However, the fact that readers are not acquainted with many words or the most essential ones in the text may jeopardize the reading process and their comprehension (Soria, 2001, p. 77). Given the size of the English lexicon (i.e. 114,000 basic words according to an estimate by Goulden, Nation & Read, 1990), EFL learners are likely to encounter new words frequently in the course of their reading. In this case, language learners have different kinds of strategies such as ignoring unknown words, using a dictionary or guessing word meaning from context in order to compensate for their lack of vocabulary knowledge (Fraser, 1999; Harley and Hart, 2000). Fraser (1999) and Paribakht and Wesche (1999) found that lexical inferencing was the most preferred strategy that the language learners attempted to use in order to identify the meanings of unknown words while reading. Guessing word meaning from context (lexical inferencing) “involves making informed guesses as to the meaning of a word in the light of all available linguistic cues in combinations with the learner’s general knowledge of the world, her awareness of context and her relevant linguistic knowledge” (Haastrup, 1991, p. 40).

Studies so far have defined some factors that can affect guessing ability. According to Mondria and Witt-de Boer (1991), there are three main factors affecting the guessing of the words: contextual factors, word factors and learner / reader factors. Contextual factors which influence the guessability of words are redundancy of the context, the occurrence of synonyms and antonyms, and words associated with an unknown word (Mondria and Witt-de Boer, 1991). As for the word factors, they are related to some features such as the part of speech, the degree of concreteness or abstractness, the transparency of the word structure (Mondria and Witt-de Boer, 1991). The factors which are related to learners and readers involve vocabulary knowledge, knowledge of grammar, language proficiency, attention to details, cognitive and mental effort and reader characteristics (Kaivanpanah, and Alavi, 2008). While these factors have been studied independently in previous research, the interaction among them has received relatively little attention. In the present study, the effect of contextual richness and word structure on the successful guessing of word meaning will be investigated in combination.

* This article is based on the first author’s unpublished MA thesis (2003) at Uludag University, Bursa, Turkey.

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BACKGROUND

During the recent decades, researchers have paid an increasing attention to guessing word meaning from context on the basis of contextual clues and morphological analysis. Contextual guessing requires guessing the meanings of unknown words based on interpretation of the relationships among sentence components by consulting or not consulting world knowledge (Parel, 2004). Contextual guessing is a useful and efficient reading strategy in that it does not rely on external sources unlike dictionary look-ups and thus is not disruptive to the reading process. However, not all contexts are equally effective (Beck et al., 1983). Some contexts are better than others. Better contexts are those which offer unambiguous clues and 'direct' the reader to the correct meaning. Successful guessing of a word's meaning largely depends on the availability of such clues. Mondria & Wit-de-Boer (1991) investigated the effect of contextual factors on the guessability of unknown words in isolated sentence contexts by Dutch secondary school learners of French. The learners guessed the meanings of unknown words more successfully in 'pregnant contexts' which offered clues to the meaning of target words than non-pregnant contexts. The presence of multiple clues is also important for a foreign language reader as the provision of a clue in an unfamiliar word might render it unusable to the learner.

Another strategy used to infer the meanings of unknown words is semantic analysis of word morphology based on language learners' knowledge of word roots and affixes. Morphological analysis is defined by Wysocki and Jenkins (1987) as "analysing an unfamiliar word by separating it into its parts (e.g.: prefix, stem, suffix), accessing the meanings of the individual parts, and then attempting to derive the meanings of the whole on the basis of these meanings" (p. 32). Stoller and Grabe (1995) point out that if language learners are familiar with a few stems, prefixes and suffixes, they are able to recognize the meanings of a lot of words. In other words, it can be stated that language learners' knowledge of the meanings of morphemic constituents may enable them to arrive at the meaning of an unknown word by combining the meanings of each part of an unknown word.

Various studies showed that morphological analysis is an important knowledge source that language learners use to make informed guesses about meanings of unknown words. In a study by Paribakht and Wesche (1999), the learners tried to identify the meanings of target words by using certain knowledge sources. The learners made use of sentence-level grammar knowledge most frequently when attempting to infer the meanings of unfamiliar words. The study also found word morphology to be one of the most frequent knowledge sources that the language learners used in order to unlock the meanings of unfamiliar words in the inferencing process. Soria (2001) used think-aloud protocols to describe and understand what knowledge sources Ilokano language learners used to arrive at the meanings of unknown Ilokano words in a written text and the study showed that word morphology was the major type of knowledge source utilized by the learners. In the study by Nassaji (2003), the use of strategies and knowledge sources in L2 lexical inferencing was examined by using think-aloud techniques. Of all the knowledge sources, the participants in the study used world knowledge most frequently to make lexical inferences (46.2%). The second type of source preferred by the participants was morphological knowledge (26.9%).

A single source of information may not always enable language learners to infer word meaning accurately. For that reason, the integration of different kinds of knowledge sources such as the integration of morphological complexity and context may facilitate correct guessing. In other words, when the transparency of morphologically complex words and a rich context, which supplies language learners with sufficient contextual clues, are successfully combined, the possibility of successful and effective inference may be greater than the possibility of correct guessing when only one knowledge source is utilized by language learners.

Several studies have shown that learners successfully combined the two knowledge sources (Soria, 2001; Mori and Nagy, 1999; Mori, 2003). One of the findings of the study by Soria (2001), which examined the lexical inferencing procedures used by the Ilokano learners, was that the single most frequent combination of knowledge sources exploited by the subjects was the use of the context and word morphology of the target word. Especially the high level learners of Ilokano were more successful in utilization of the support of the context and morphology of the unknown words. Mori and Nagy (1999) did a study with the aim of determining whether or not English speaking students learning Japanese were able to utilize information from word elements and contextual clues in the process of interpreting novel kanji compounds (words consisting of two or more Chinese characters) and the results showed that when the students were given both morphological and contextual clues, they were capable of combining these two knowledge sources efficiently. Another study (Mori, 2003) showed that the students' guesses based on the combined sources (contextual support and semantic transparency) were much better than their guesses based on a single source.

Several other studies failed to find evidence for successful combination of knowledge sources (Wysocki and Jenkins 1987; Parel, 2004). Wysocki and Jenkins (1987) examined the children's ability to apply morphological analysis to infer unknown words. However, they didn't find evidence that the students combined morphological clues with contextual ones. The students' scores on inferring morphologically transparent words did not differ between strong and weak contexts. Parel (2004) did a study focusing on the sensitivity to the word structure and

the ability to make morphological analysis with contextual guessing and based on the results, Parel (2004: 862) pointed out that if the learners had been able to combine the morphological complexity with the strength of context, their misinterpretation of the target words could have been avoided. The present study aims to investigate whether Turkish EFL learners use morphological clues in their lexical inferencing and whether they are able to integrate morphological complexity with contextual clues while guessing word meaning from context.

THE STUDY

Participants

The participants of the present study were university students attending intensive preessional English classes at a School of Foreign Languages in Turkey. The objective of the institution is to provide the students with a general overall ability of English language. According to their scores in the placement tests administrated to them at the beginning of the academic year, they were placed to intermediate classes. 88 students served as the subjects of the study and their mother tongue was Turkish.

Materials

In order to attain the objective of the study, the researcher prepared and utilized a Vocabulary Guessing Test. The subjects were required to guess the meanings of the target words written in bold and underlined in single sentence contexts and then write the Turkish equivalents of the target words (cf. Appendix).

The target words were presented in single sentence contexts in which all the words apart from the target words were familiar to the subjects. The authenticity of the sentences was checked by two native speakers of English who were both university lecturers. The structures of the sentences were simple. Some sentences included coordinating conjunctions such as “and”, “so” and only two sentences included “because”, which is a subordinating conjunction. The subjects were familiar with these conjunctions and it was thought that they would not add any complication or difficulty to comprehension of the sentences. The sentences were divided into two different groups in terms of contextual richness. 16 of the sentences provided poor context for the subjects to guess the meaning of target words. These sentences included a single clue to reflect the meanings of the target words. The other 16 sentences supplied rich context, i.e., these sentences contained two or more contextual clues supporting the meanings of the target words. The following items from the test illustrate the difference between the two types of contextual support:

The allies are at war. (Poor context)

The table was very heavy, so we had to drag it along the floor. (Rich context)

In the Vocabulary Guessing Test, 32 target words were tested. The words whose frequency was in the 3000 or beyond were selected so as to minimize the possibility of the subjects’ familiarity with the target words. In addition, their teachers were asked if the students had learned the target words before and also the words were checked for not being in their course books. They were selected from four main word categories, namely, nouns, verbs, adjectives and adverbs. The target words were also categorized in terms of their morphological structure as simple and complex words.

Simple words: The total number of the simple words was 16. Eight of them were presented in poor contexts and the others were in rich contexts. None of the simple words in the test took derivational suffixes except adverbs. The adverbs taking “-ly” were used in the test since “-ly” was considered to be the suffix which indicated the word class of adverbs.

Complex words: In the present study, the prefixes “re-, mis-, in-, dis-, im-, un-, pre-, ir-” were taken into consideration and while selecting target complex words, one of the criteria was that the subjects’ familiarity with the stems of the words. The test included 16 morphologically complex words, eight of which were tested in the sentences with poor context and eight of which were presented in the sentences providing rich context.

Table 1: Design of the Vocabulary Guessing Test

Morphological Complexity	Context		Total
	Poor	Rich	
Simple	8	8	16
Complex	8	8	16
Total	16	16	32

Procedure and Scoring

The Vocabulary Guessing Test was administered to the participants during their usual course hours. The instructions were given in both English and Turkish. They were given in English since they were exposed to English instructions in their lessons all the time and they were given in Turkish so that the subjects could understand the instructions correctly. The average time spent for the test was 30 minutes. To determine the degree to which learners were successful in guessing word meaning, a 3-point scale was used. For each item in the Vocabulary Guessing Test, different points were assigned for correct, partially correct (acceptable) and incorrect responses. Two points were given for the exact translation equivalent of the target words. When the subjects gave the near synonym of the word or a related word, this answer deserved one point. Finally, incorrect guessing which has no relation with the meaning of the target word was scored as zero. The maximum total score each subject could get for the Vocabulary Guessing Test was 64.

RESULTS

Morphological Complexity and Guessing

In analysis the percentage of responses in each category was computed by taking the ratio of the actual frequency of answers in a given category to the maximum possible frequency. Table 2 shows the scores of the morphologically simple and complex words in the Vocabulary Guessing Test. The simple words were guessed correctly at 28.62 % of the time. As for the morphologically complex words, they were guessed correctly at 42.75% of the time.

Table 2: Simple and Complex Word Scores

	Correct	Partially correct	Incorrect
Simple Words	403 28.62%	123 8.74%	882 62.64
Complex Words	602 42.75%	241 17.12%	565 40.13%

Figure 1 displays the combined scores of correct and partially correct guessing of the morphologically simple and complex words. As it is seen visually in Figure 1, complex words were guessed more successfully than simple words by the subjects. The difference between the percentages of the scores of these two different types of words is 22.51%. This difference is significant at .05 level [$\chi^2 (1, n= 88) = 8.078, p< .05$].

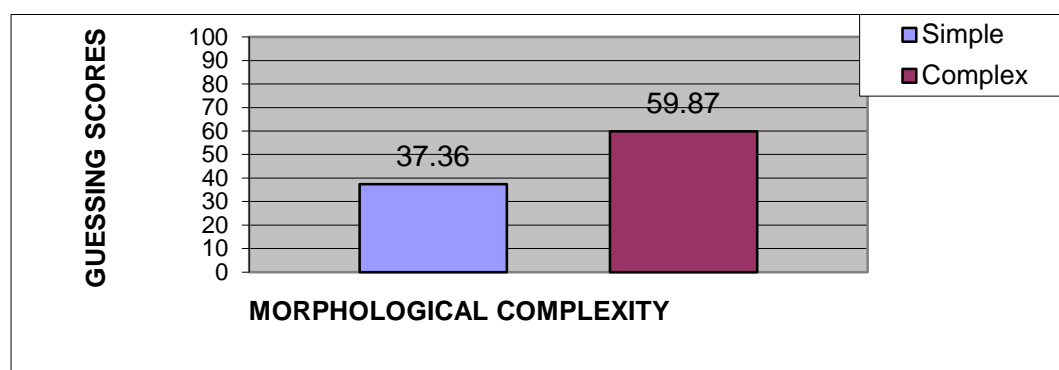


Figure 1: Simple and Complex Word Scores

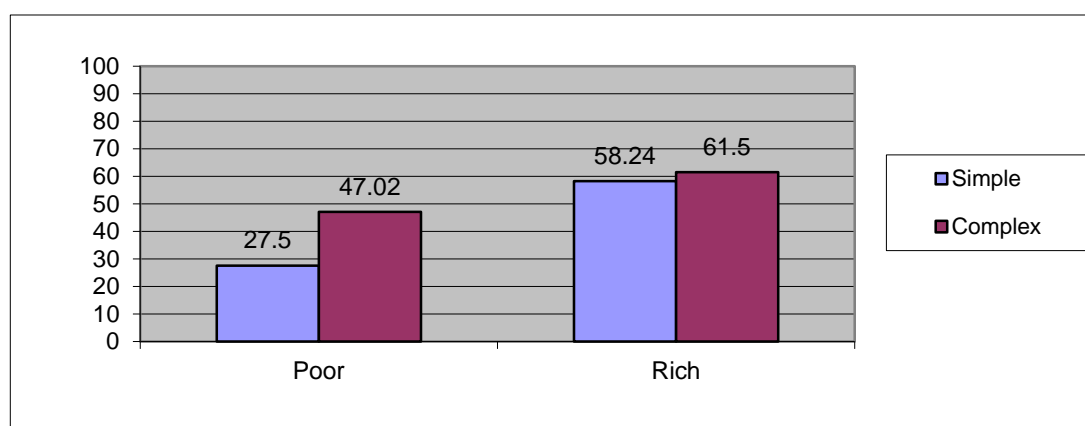
Context and Morphological Complexity

The Turkish equivalents of the morphologically complex words in poor context were given correctly at 42.33% of the time, whereas the morphologically simple target words were guessed at 14.92% (Table 3). As for the guessing scores in rich context, the percentage of the correct answers for simple words is 47.16% and it is 38.35% for complex words.

Table 3: *Guessing Scores of Simple and Complex Words in Poor and Rich Contexts*

	<u>Correct</u>		<u>Partially correct</u>		<u>Incorrect</u>	
	Simple	Complex	Simple	Complex	Simple	Complex
Poor Context	105 14.92%	298 42.33%	90 12.78%	33 4.69%	509 72.30%	373 52.98%
Rich Context	332 47.16%	270 38.35%	78 11.08%	163 23.15%	294 41.76%	271 38.50%

The combined scores of simple and complex words in poor context and rich context can be seen visually in Figure 2. The subjects were able to guess the complex words in poor context providing insufficient contextual clues more correctly (47.02%) than the morphologically simple ones in poor context (27.5%). The difference between the guessing scores of simple and complex words gets smaller in rich context and this difference is non-significant [$\chi^2(1, n=88) = 0.667, p < .05$].

**Figure 2:** Guessing Scores of Simple and Complex Words in Poor and Rich Contexts

CONCLUSION

The present study set out to explore the effect of morphological complexity on guessing word meaning and whether the integration of contextual and morphological clues leads to correct guessing. As expected, the findings of this study showed that morphologically complex words were guessed more successfully than simple words as a result of morphological analysis. There are some other studies in the literature examining the effect of morphological complexity on guessing word meaning from context and some of these studies have reached the results supporting the hypothesis that the knowledge of word roots and affixes may facilitate inferring the meanings of unfamiliar words in context (Soria, 2001; Nassaji, 2003). The research findings point to the importance of morphological analysis in lexical inferencing. It can be said that language learners apply the strategy of analysing the elements of unknown words in context. Besides, it could be considered that morphological complexity is a facilitative and powerful tool for language learners in the process of arriving at the meaning of unknown words as long as all the constituents in the words are known by language learners.

In the matter of the integration of contextual clues and morphological complexity, it was found that the subjects were more successful in guessing the meanings of the morphologically complex words than simple ones in poor context. However, there was hardly any difference between the guessing rates of simple and complex words in rich context.

As Mori and Nagy (1999) point out, when morphological clues and sufficient contextual clues are presented together in a context, language learners are expected to use this integrated information successfully in guessing process. In the present study, this was not achieved by the participants. There was no difference between the guessing rates of simple and complex words in rich context. Several explanations can be offered for the lack of significant difference in guessing scores between simple and complex words in rich contexts: It might be that

when language learners are exposed to more than one kind of information source, namely both morphological complexity and contextual clues, they are not able to utilize both of them in the same sentence or noticing and tackling of two sources may exceed their cognitive capacity, and so they prefer one of the sources. Alternatively, they may not seek morphological clues at all when contexts provide relatively rich information about the meaning of an unknown word or they may consider that contextual clues could enable them to generate at least partially correct guesses (contextually appropriate guesses). Yet another possibility is that learners might have considered context to be the more reliable knowledge source than morphological complexity due to the fact that language learners may be aware of deceptive morphological transparency of many words in English. For that reason, they might have avoided relying on morphological analysis for fear of inferring the meaning of the word incorrectly seeking help from the surrounding context.

In order to succeed in learning to read and comprehend contexts, guessing word meaning is one of the strategies that language learners use. For some language learners, guessing strategies may not arise naturally. For that reason, they may need to be taught how to use guessing strategies effectively. As the present study showed, dedicating some class time to raising students' awareness of morphological analysis while dealing with unknown words in context would be helpful. The knowledge of some basic rules of morphologically complex word structures and the meanings of the most frequent affixes and roots should be taught to language learners as well as the new words themselves (Parel, 2004). The morphologically complex words that language learners come across while reading different types of texts in a foreign language might be comprehensible to them if they know the meanings of the word root and its affixes.

The integration of information of word parts and rich context is another strategy that aids language learners in guessing word meaning better and more correctly since the effects of contextual and morphological clues are generally additive (Mori, 2002). White et al. (1989) and Nagy and Anderson (1984) point out that 20% affixed words are deceptively transparent. When the unknown word is a deceptively transparent word, language learners may not be able to reach its meaning by analyzing its morphological complexity only. In this case, they ought to try to search contextual clues and check their hypotheses on the meaning of the unknown word against the surrounding context so as to avoid incorrect guesses caused by deceptive transparency. Using these strategies effectively does not emerge by itself, either. Allocating significant portions of class time to instruction in teaching how to utilize morphological clues and check and verify their guesses against the existing contextual clues may enable students to increase chances of generating correct inferences (Kieffer and Lesaux, 2007). In this way students can establish a habit of utilizing guessing strategies effectively and become independent learners over time.

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APPENDIX (VOCABULARY GUESSING TEST)

NAME/SURNAME:

NUMBER:

CLASS:

PLEASE GIVE THE TURKISH EQUIVALENT OF THE WORDS UNDERLINED BELOW. TRY TO ANSWER ALL OF THEM. IF YOU DON'T KNOW THE MEANING OF THE WORD, TRY TO GUESS IT.

(AŞAĞIDA ALTI ÇİZİLİ OLAN KELİMELERİN TÜRKÇE KARŞILIĞINI VERİNİZ. HEPSİNİ CEVAPLANDIRINIZ. EĞER KELİMENİN ANLAMINI BİLMİYORSANIZ TAHMİN ETMEYE ÇALIŞINIZ.)

- 1-) You can't park your car in this lane.
-
- 2-) This room was decorated barely because they didn't have enough money to buy furniture.
-
- 3-) He wanted us to give a returnable deposit.
-
- 4-) 'The newspapers misquoted my speech,' complained the president.
-
- 5-) My sweetheart and my father get on splendidly.
-
- 6-) One of the inmates escaped from prison last night.
-
- 7-) I'm thirsty. Do they sell refreshments after the first part of the play?
-
- 8-) Please replace the books on the shelves.
-
- 9-) He shrugged his shoulders.
-
- 10-) You mustn't behave disobediently and you must pay attention to the rules at school.
-

- 11-) I gave a precise description of the thief, so the police were able to find him easily.
-
- 12-) The impersonator is imitating Süleyman Demirel now.
-
- 13-) The people listened to the dictator's speech uncritically.
-
- 14-) Sheila loves you very much. I'm sure she has upset you unintentionally.
-
- 15-) The man was face to face with the undeniable truth.
-
- 16-) They are both keen golfers, so they train every day.
-
- 17-) She displayed good behavior in the playground.
-
- 18-) Officers of the narcotics squad searched the club for drugs.
-
- 19-) The table was very heavy, so we had to drag it along the floor.
-
- 20-) The soldiers fought mightily.
-
- 21-) The allies are at war.
-
- 22-) He had an intense pain in his back.
-
- 23-) After our quarrel, I saw Mary at a party and she gave me an insincere smile.
-
- 24-) The company must tackle this financial problem.
-
- 25-) The baby isn't old enough to eat solid foods yet.
-
- 26-) The bricks for the building will be loaded on this lorry and taken to the building area.
-
- 27-) Third world countries are exploited by the richer nations.
-
- 28-) The teacher treats the students in her class unfairly.
-
- 29-) My son is in a playgroup for preschoolers.
-
- 30-) He never fully regained his health after the accident.
-
- 31-) Computer technology is changing constantly because new programs are being written every day.
-
- 32-) Pizza is my favourite food, so it is an irresistible taste for me.
-

MOTIVATION OF GIFTED PUPILS TOWARDS NEGATIVE SCHOOL PERFORMANCE

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ABSTRACT

The article presents a research survey using the KLIT questionnaire (Climate of the school class). The research group is composed of gifted pupils (n = 208) from lower secondary education (ISCED2) in the Czech Republic. The analysis focuses on one of the areas of the questionnaire, Motivation to negative school performance. The construct validity of this dimension has been verified by exploratory factor analysis, overall results can be considered as reliable. The results show that 15 % of gifted pupils declare a high degree of negative motivation towards school performance. 69 % of gifted pupils agree with the claim that they could have better results at school, but they are hardly going to work regularly. The risk group is primarily pupils who are included in a special school for gifted pupils but who have special educational needs at the same time.

THEORETICAL BACKGROUND

A child which starts school is obliged to conform to the processes of school, class, to his or her teacher, to communicate with classmates and to do school work. In the class, he or she is not an individuality, but cooperates in a fully-fledged way in the creation of class environment as a specific psycho-social environment. In this article, pupils' motives towards negative school performance is understood as one of the dimensions of the class environment. This socio-psychological phenomenon can be viewed from various perspectives, as well as the school environment as such, which is proved by the work of Grecmanová (2008), Čapek (2010), Mareš & Ježek (2012), Kantorová (2015) and other authors which focus on the issue in the specific Czech context. In this article, our conception is based on Lašek (2001), who views the class environments in the context of negative school motivation and self-promotion, besides other things. These are topics which we consider central in the context of research focused on specific group of gifted pupils, in our case so-called underachievers.

Firstly, we think it is necessary to define our conception of giftedness because it creates foundations for other theoretical backgrounds upon which we build our research. The giftedness is an individual's ability in a selected area valued by the socio-cultural environment, which is more developed in terms of both quantity and quality compared with his or her peers (Heward, 2013). In our view, a gifted pupil is a pupil who successfully passed complex diagnostics of intellectual talents at the pedagogical-psychological counselling centre.

Gifted pupils show typical features. T. L Cross (2011) divides these features to endogenous features and their exogenous conditions. Endogenous characteristics are related to the personality of a gifted pupil which includes, for example, asynchronous personality development (disconnectedness between the level of intelligence of an individual and aspects such as motoric and verbal development), perfectionism, multipotenciality, avoiding taking risks, emotional sensibility, intensity and profoundness of experience. Among exogenous conditions of personality development are influences related to culture and its standards, to family, school and peer environment. Also, cognitive features such as high intelligence, rich vocabulary, great memory, etc. impact co-creation of school environment (Davis, Rimm & Siegel 2011).

So, this group is very rich in terms of varieties of types of the gifted included. In its scope, we also encounter a group of gifted pupils called underachievers. The underachievers are gifted individuals who demonstrate exceptionality in tests of intelligence, but whose performance is under the level of their potential (Clark, 2014). Montgomery (2009) divides the causes for underachievement into internal and external. Internal causes include various diseases, specific learning disabilities, problems with personality or another handicap. As far as internal causes, the study of Kuracki, Dłużniewska & Kosewska (2016) showed positive correlation between creative attitudes and dyslexia. External causes that we are interested in, in relation to our article, include in particular conflict of values and lack of support to develop one's talent. Clark (2014) works with external causes of unsuitable pedagogic approaches which motivates the pupil to underachievement. It is putting emphasis on performance and knowledge, using routine tasks, unfair communication from the teacher and placing high or unrealistic demands.

In relation to this, Montgomery (2009) points out that another cause of underachievement, which is labelling and mentions so-called career gifted, who are children who were identified as gifted at young age, became satisfied with this label and avoid any effort on a long-term basis. They usually state that the tasks are uninteresting and too easy for them. The consequences of such approach are remarkable gaps in knowledge, whose level is gradually lowering under the average level of a given class.

Gifted children might lean towards negative school performance because of the effort to become fully-fledged part of the class and do not protrude from the average level. Gifted students have often reported feeling different from peers (Blaas, 2014), particularly in terms of their seriousness about learning and work habits (Cross & col., 2015). Classmates might approach gifted pupils differently after discovering their giftedness. Then, gifted pupils might deny their academic abilities or disparage them intentionally in order to increase their chances to socialize with their peers. If the gifted will hide their talents only because they want to be accepted by their peers, they cannot develop their potential to the fullest. (Cross & col., 2015) According to Blaas (2014), there also are positive correlations between exclusion of a child from the class and school underachievement.

In the scope of underachievers, there is a specific group of gifted girls. Kerr (2000) attributes this phenomena to differences in expectations and attitudes towards the girls and the boys from their families, school and society. In the upbringing in the family, more passivity, submission and avoidance of taking risks is expected from the girls. Similarly, at school, the boys, who get the teacher's attention more easily and thus, are encouraged more, tend to get more attention.

As the research suggests (Senior, 2014), gifted pupils will demonstrate, as a consequence of social experience mentioned above, such as fears and phobias, fears associated with school in particular, for example fear of failure, of expressing one's own actual abilities, fear of taking risks and making decisions, and fear of not being accepted by one's peers. Such social experiences might affect a pupil's self-concept. Conviction of one's own self-conception is one of significant predictors of academic success and thus demonstration of giftedness (Cross & col., 2015). Underachievement is caused by low level of self-concept, which consequently causes academic failure.

In our research, we set a goal to find out what is gifted children's opinion on statements concerned with negative school performance and to find links between gender, age, type of school and existence of specific education need of a gifted individual.

DESIGN OF THE RESEARCH

For the research, we applied KLIT questionnaire which is used to diagnose the climate in education institution class in the Czech environment (Lašek©, Lašek, 2001). It is designed for the level of secondary education in within the scope of its creation, it was tested on more than 3,500 pupils. The questionnaire is composed of 27 items and it is divided into 3 factors: Supportive climate of the class, Motivation to negative school performance and Assertiveness. In this text, we focus on the analysis of the second mentioned factor.

We managed to involve 208 ISCED2 pupils (in 6th to 9th year of elementary school in the Czech educational system) with diagnosed giftedness in this research. There were 75 girls (36%) and 133 boys (64%) in the age from 10 to 16, with the average age being 13. The research sample covers school years as follows: 6th year is represented by 58 pupils (28%), 7th by 58 pupils (28%), 8th by 45 pupils (22%) and 9th by 47 pupils (22%). 161 pupils (77%) is enrolled on an institution which specializes on gifted pupils (8-year grammar school, lyceum or elementary school specialized in education of gifted pupils) and 47 pupils (23%) is enrolled to traditional elementary school. In spite of the inclusive tendencies of the Czech education system, which are legalized as well, the diagnosed pupils are educated in a segregated way at specialized education institutions. Within the

scope of research sample, there were 50 pupils (24%) who stated that (besides to giftedness) they were diagnosed to have one or more special learning needs, in which we generally include, for the purposes of this text, learning disorders, behaviour disorders, long-term illness, other special needs or their combinations.

Given the fact that this is an available selection of respondents, we work with the results on descriptive and explorative level only and they cannot be considered to be general. However, they indicate links which can be used in further researches or in education of gifted pupils in practice.

RESULTS OF THE ANALYSIS

The analysis is focused on the results of the pupils in the field of Motivation to negative school performance which is one of three dimensions of the questionnaire. The structure of nine items falling under this field was subjected to exploratory factor analysis (extraction method: Principal Component Analysis; rotation method: Varimax with Kaiser normalization; rotation converged in 3 iterations; number of components based on eigenvalue; KMO = 0,778; stat. signif. Bartlett's test of sphericity; MSA of all items \geq 0,723). Its results are shown in the table below.

Table 1: Rotated component matrix of Motivation to negative school performance

Items	Components	
	1	2
I14. When I face a task at school, I tend to be scared, I do not dare to do it.	0.723	
I22. I tend to be scared of various obstacles, I hesitate; it is better to avoid failure.	0.696	
I17. Usually, I rather avoid complicated, not easily solvable situations.	0.646	
I24. I know that I tend to cope with situations at school badly, that is why I prefer to be "invisible" at school.	0.634	
I5. It is best not to draw attention to yourself at school, to be rather average.	0.566	
I8. During examinations, I want to pass, I do not care much about the mark.		0.722
I2. I could have better grades at school, but I hardly force myself to work on regular basis.		0.686
I11. The excellent results are not much of a use later in life.		0.664
I20. I often feel like I know less than the others.	0.387	0.560
Total variance explained	26 %	21 %
Cumulative variance explained	26 %	47 %
Cronbach's alpha of all items	0.728	

Note: Factor loadings under 0,3 are not displayed in the table.

The structure of the investigated factor can be generally considered reliable. On the basis of our data, it can be internally divided into 2 components, with item number 20 under component 2 being ambiguous in their context. The first extracted component gathers items focused on fear of failure in particular, the second gathers items focused in particular on underestimating of school result of pupils.

In spite of the fact that factor analysis offers to keep 2 groups of items, we will focus on individual items and overall results altogether in our analysis, in order to compare the results with standards which were set by the author of the questionnaire.

The respondents could choose the answers from the scale of four levels (I strongly agree, I agree, I disagree, I strongly disagree). The table below represents proportion of agreement, the sum of answers of agreement and strong agreement, expressed in percentage with individual items. The results are in ascending order, according to the strength of agreement.

Table 2: Positive answers on individual items in the questionnaire

Items	n	%
I14. When I face a task at school, I tend to be scared, I do not dare to do it.	41	20 %
I8. During examinations, I want to pass, I do not care much about the mark.	52	25 %
I24. I know that I tend to cope with situations at school badly, that is why I prefer to be "invisible" at school.	58	28 %
I20. I often feel like I know less than the others.	76	37 %
I17. Usually, I rather avoid complicated, not easily solvable situations.	86	41 %
I11. The excellent results are not much of a use later in life.	90	43 %
I5. It is best not to draw attention to yourself at school, to be rather average.	99	48 %

122. I tend to be scared of various obstacles, I hesitate; it is better to avoid failure.	115	55 %
12. I could have better grades at school, but I hardly force myself to work on regular basis.	144	69 %

As we can see, more than one third of gifted pupils agrees with the majority of given statements, more than half of positive answers are found in the case of fears of various obstacles and failure. More than two thirds of gifted children agree with the statement that they could have better results at school, but they hardly manage to work on the regular basis.

According to the authors of the questionnaire, we can create a summary index on the basis of answers from the questionnaire (values 1 to 4), which can reach up to scores of 9 to 36 points with 9 items. The pupils from our sample got 15 – 35 points, with 22 in average. When we compare the results with the norms created by the authors of the questionnaire, we will get the following result.

Table 3: The comparison of the results with the norms

Summary index	Interpretation	Occurrence of the pupils according to results (n, %)	
9 - 20	Low occurrence	79	38 %
21 - 25	Normal occurrence	98	47 %
26 - 36	High occurrence	31	15 %
Total		208	100 %

As far as the results outside the norm are concerned, we can see rather low occurrence of negative school motivation in gifted pupils, which can be regarded as a positive finding in the context of school class. But, on the basis of the results, we can also identify small, but not insignificant group of pupils which show high occurrence of the investigated phenomena. On the basis of accessible data about the pupils we gathered during the research, it was possible to compare results of selected group of pupils which is summed up in the following table.

Table 4: The occurrence of negative motivation to school performance in selected groups of pupils

Compared groups		Low occurrence Negative motivation		Normal occurrence of negative motivation		High occurrence of negative motivation	
		n	%	n	%	n	%
Gender	Girls	27	36%	39	52 %	9	12 %
	Boys	67	50 %	48	36 %	18	14 %
Year	6	28	48 %	27	47 %	3	5 %
	7	26	45 %	22	38 %	10	17 %
	8	20	44 %	17	38 %	8	18 %
	9	20	43 %	21	45 %	6	13 %
Education institution	Specialized education institution	68	42 %	68	42 %	25	16 %
	Traditional education institution	26	55 %	19	40 %	2	4 %
Special learning needs	Pupils without special learning needs	76	48 %	65	41 %	17	11 %
	Pupils with special learning needs	18	36 %	22	44 %	10	20 %

When we focus on high occurrence only there is not much difference in terms of gender. So, we cannot agree with Kerr (2000) that the girls stated or showed underachievement. We rather detect negative school performance in higher years of school, especially at institutions specialized in education of gifted pupils (here we can see the most remarkable difference). Because of this, we can judge that children from specialized institutions belong to so-called career gifted and they are subject to labelling (see Montgomery 2009). According to Orosová and Klimková (2016) the experiential education, education teaches through personal experience, positively influences the classroom climate. This means that there is a possibility of long-time experience of gifted pupil with a wrong pedagogical approach which leads him or her to underachievement. In addition, negative school performance is noticed in the group of pupils who state special needs (learning disorders,

behavioral disorders, long-term illness, other problems or their combinations). According to Montgomery (2009), these are typical internal causes of underachievement.

On the contrary, if we focus on low occurrence of investigated phenomena, the interesting thing is that it concerns up to 50% of the boys. It is rather detected in lower years of school, in traditional education institutions and in pupils who do not state any special learning needs.

On the basis of our research, we can identify all four variables presented in Table 4 as having potentially factually low occurrence of the negative school motivation. In general, the results show that a group with inclination of negative school motivation is created in particular by pupils who are, on one hand put in an institution specialized in gifted pupils, but on the other hand, they demonstrate special needs altogether with giftedness. There are 43 (21%) of such pupils in our research sample. If we look at their results in individual items, we can see with which they agree the most, and thus they are problematic in terms of negative motivation.

Table 5: Percentage of positive answers in the group of pupils from specialized education institutions who demonstrate special learning needs

Items	n	%
I14. When I face a task at school, I tend to be scared, I do not dare to do it.	11	26 %
I8. During examinations, I want to pass, I do not care much about the mark.	15	35 %
I24. I know that I tend to cope with situations at school badly, that is why I prefer to be "invisible" at school.	18	42 %
I5. It is best not to draw attention to yourself at school, to be rather average.	20	47 %
I20. I often feel like I know less than the others.	21	49 %
I11. The excellent results are not much of a use later in life.	22	51 %
I22. I tend to be scared of various obstacles, I hesitate; it is better to avoid failure.	22	51 %
I17. Usually, I rather avoid complicated, not easily solvable situations.	25	58 %
I2. I could have better grades at school, but I hardly force myself to work on regular basis.	34	79 %

More than half of these pupils agrees with the item saying that the excellent school results are not important later in life. They state that they are scared of obstacles and try to void failure, problems and difficult tasks. What they agree the most with is that they may have had better results at school, but they cannot force themselves to work on the regular basis. Thus, in their positive answers, there are both items focused on fears of failure and items focused on underestimation of school results.

CONCLUSIONS

The article focused on the motivation of gifted pupils towards negative school performance. The negative school performance was defined in relation to class environment which is co-created by the performance. The article pointed out the variables which lead to lowering of a pupil's performance level. These are insufficient study habits, labelling of children in specialized classes of elementary schools and the existence of special learning needs together with giftedness. The practical part presented research which used KLIT questionnaire (Climate of a school class). The research sample was created by 208 pupils with diagnosed giftedness. The analysis was focused on one fields of the questionnaire - namely the Motivation to negative school performance. The results show that 15% of gifted pupils states high levels of negative motivation to school performance. A high-risk group are mainly such pupils who are, on one hand, put in an institution specialized in education of gifted pupils, but at the same time, they have special learning needs altogether with giftedness. These pupils state fears of failure and underestimation of school results as well. In the scope of pedagogical practice, it is important to emphasize that we cannot automatically consider gifted pupils to be internally positively motivated, heading towards success, and performance-oriented. Contrarily, it can happen that these pupils are overwhelmed by fears of their own failure at school, or that they are negatively motivated by the fact that they do not consider the school results to be important and they do not try hard enough in terms of school results. In terms of pedagogical research, this topic proves to be central and suitable to be extended and to be competed with more complex analyses based on, if possible, representative selection. However, such selection is difficult to realize within the group of gifted pupils in the Czech Republic, because of high number of researches by various scientists from various institutions, in which the target group is involved.

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MOTIVATIONAL FACTORS IN HOMEWORK: PARENT'S STRATEGIES

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ABSTRACT

The paper deals with the topic of home preparation for learning from the elementary school pupils' parent's point of view. The aim of the research was to find out the strategies that parents use to motivate a child to cope with homework without stress and negative emotions and whether motivational factors only targeted at homework or parent's involvement in homework is aimed to motivate the child to the future educational and life success. The results of semi-structured interviews with selected Czech parents show that parenting approach to home preparation is mainly linked to the set of rules for homework and the parents choose motivation strategies as action or reward, also use threats and negative emotions. At the same time, it is evident that the child's motivation to manage the home preparation is linked to their parent's responsibility and the ambition of the child's school success.

INTRODUCTION

The family is a system that is influenced by the individual context of different variations of the parent-child relationship with the unique lifestyle. Each family as a specific dynamism is given by a particular autonomy and individuality. Parents play different roles in child's education. Parent's motivation in home preparation, homework, and home learning as an integral part of family life with school aged children become an interesting topic for analysis the motivational strategies to child's processing and finishing these routine activities. It is obvious that homework matter in the everyday life of many schoolchildren and interferes with the emotional climate of many families (Safont-Mottay, Oubrayrie-Roussel, & Lescarret, in Deslandes, 2009, p. 95). In the context of motivation to school, learning cannot omit the concept of home preparation, including different types of homework, for instance, the written or project forms of home tasks. We understand home preparation as a form of learning and as a continuation of the child's schooling. This home preparation includes all the activities the pupil performs at home in order to be ready for schooling, that is, activities which have not been directly instructed by the teacher, but they will facilitate the pupil's school work (preparation and checking the supplements, revision, practice) (Jursová, 2011). Schools often consider homework to be self-evident, unconscious and admitting the possibility that this activity often causes problems in the home environment and often interfere in the family life. Therefore, we consider important to address this issue, especially in the field of child motivation to learn as a predictor of school success and learning achievement.

THE STUDY

Homework is a unique academic task administered at school and then conducted at home (Katz, Kaplan, & Buzukashvily, 2011). Homework assignments are influenced by different factors than any other in-school instructional strategy. Child's ability, motivation, and grade level may influence homework's effect. In addition, there is considerable variation in why, when, and how students complete assignments, as well as the home conditions in which the child works on their assignments. There is tremendous variety in its practices, in the type and amount of work assigned, where and when it is completed. Also the factor of the meanings of homework plays the important role (Corno, 1996; Corno & Xu, 2004; Kohn, 2007; Hutchison, 2011, 2012; Farrell & Danby, 2015), with or without parental involvement, and whether or not it is graded by teachers. All of these factors may be linked to the young pupil's attitudes to homework. Critics say it is questionable whether homework, done at the end of a long day when motivation and concentration are low, has any benefits at all (Coutts, 2004). The previous research was focused on the homework influence from the view of parental involvement (Desforges & Abouchaar, 2003, Epstein, 2011), or the influence on an academic achievement at school was researched (e.g. Cooper, 1989; Walker, Hoover-Dempey, Whetsel, & Green, 2004; Robinson, and Patall, 2008; Dumont, 2011). Overall, assigning homework in early school years is beneficial more for valuable motivational skills it serves to foster in the long term grades (Bempechat, 2004). Some studies of motivational factors in homework focused on the impact on child's academic achievement and study goals (Bempechat, 2004;

Katz, Kaplan, & Buzukashvily, 2011). The parental involvement and quality of parental support affecting the students' emotions during homework were researched by Hoover-Dempsey, Battiato, Walker, Reed, DeJong, Jones (2001); Warton (2001). We focus on the parental strategies in homework with the accent on motivational strategies.

Parental involvement in homework

In the Czech educational environment, the parent's role in the home preparation and parent's involvement in homework is irreplaceable, especially at the beginning of school attendance. In first three school years, the pupils try to learn how to learn, they recognize the meaning of learning (Šulová, 2014). Parent-child interactions during homework are important for the range of attitudes, beliefs, knowledge, skills and behaviour that facilitate learning. Being motivated in the right way is the first step to achieve in homework (Walker, Hoover-Dempsey, Ice, & Whitaker, in Deslandes 2009). Parent's behaviour may be perceived as generally or less supportive of psychological needs. Therefore, parents' influence their children and children also influence their parents' behaviour and educational practices (Figueiredo & Valadão Dias, 2012). A central issue on parent's role in motivation is the individual parenting style and involvement in child's school achievement.

Motivation

In our own work, we have addressed the issue of parent's motivation in homework. Parent's beliefs and motivation to be involved in homework supports the positive atmosphere during homework. Homework has many various effects on student's learning, developing the study and work routines, building positive links between school and home. To improve the success rate of homework completion is necessary to consider that:

- parents have been given to appropriate skills to help support their child at home (Morgan, 2017)
- parents have got the strategies to motivate the child to complete the homework
- parents understand the importance of homework and have the aspirations to goal the child's learning achievement.

The long-term motivation plays a key role in child's lifelong learning, especially at the beginning of school attendance. It is crucial for both teachers and parents, precisely because they create situations in which the child overcomes the short-term motivation. Supporting the child in its achievements, interests and beliefs in the personality transforms this short-term motivation into long-term aspirations for learning a child. The role of parents in home preparation is not straightforward. Parents are responsible not only for the involvement in homework, they are above all the strong initiator that the child is able to deal with all the obstacles or shortcomings together (Franclová, 2013). Parents themselves may be concerned about the increasing amount of learning demands, new changes with graduating years of education and, in the case of failure, with other educational and learning problems. Therefore, parents are the actors in the transfer of his/her own aspirations and motivation for his/her child to achieve the best results not only at school.

The types of motivation

Motivational strategies are differentiated individually and qualitatively in each family. The problem seems to be the parent's negative attitude toward the education of the child and the need to participate in the child's home preparation. The child internalizes the climate of family coexistence, tries to cope with family demands, family morals, interests and goals. The child evaluates his/her speech, performance, and demands to the family in which he/she lives (Helus, 2015). Šulová (2014) puts stress on the positive attitudes to the importance of motivation in child's early school attendance. We recognize external positive motivation (praise, reward), external negative motivation (prohibition of popular activities, dangers, threats or limitations of the child's activity) with tendencies or intentions to get engaged in learning, also indoor motivation (the craving for cognition, after success, the need for social interaction).

Homework can be considered as a reference task for studying the process of volitional child's, the parent's and also the teacher's control (Oettingen, Schrage, & Gollwitzer, in Corno, & Anderman, 2016) and motivation as the energy to pursue the desired future, also the direction that helps to channel this energy. Parental autonomy support is one important avenue of promoting child's autonomous motivation and positive emotions surrounding homework, also a school (Froiland, 2013). The child's motivation should be based on his/her internal needs, not on the basis of incentives and coercion. Effective motivation is seen in a positive approach to learning, stimulating curiosity, desire for knowledge, reward, and relationship with a teacher, while negative motivators are punishments, prohibitions, pressure and conditioning (Šulová, 2014). Parents set rules of behaviour, negotiation, and interactivity during homework. It is the role that instructional parental behaviours play on child's developing motivation (Pasternak, 2014). The strong motive for learning is the sense of success and understanding the meaning of each task. Furthermore, the expectancy of success is considered as the determinant of motivation (Lazarides, Viljaranta, Aunola, Pesu, & Nurmi, 2016). The motivation of pupils is linked to their

emotions. If parents and teachers provide a pleasant atmosphere, peace, and well-being, this leads to an increase in motivation (Šulová, 2014). Only by a constructive attitude to homework can be set the child's positive position for learning, fulfil of consistency, conviction about the importance of studying. An affirmative approach to homework and home preparation certainly affects the family atmosphere eliminating negative moods, disputes, and problems between children and parents. Lokšová & Lokša (1999) describe the main features of the structure of motivation in accent on the monitored topic of the family and its influence on the learning aspirations of elementary school pupils as the activation and purposefulness of behaviour, or the effort to reach the goal, such as will, aspiration, success.

For the purpose of this qualitative research approach, we identified the parents who were considered active and involved in child's home preparation. In the study, the semi-structured interviews were conducted with primary children's parents. Participants consisted of 12 parents (11 female, 1 male) with no family-partners problems or other social or financial difficulties. All of the participant's children were well-being at school or with negligible problems at school. The practical advantage of using the semi-structured interviews is that parents could open the problems, their everyday experience, especially in connection with homework and home preparation for school. Also, the willingness and openness were the factors, which influenced the size of participant sample in a research. The research strategy has tended to focus on parent's motivational strategies in homework involvement rather than on analysing the family background. However, the homework activities were designed as a part of the interviews the questions were focused on the motivational strategies during home preparation.

The interviews with parents were conducted individually in different duration. In order to obtain a data sample, it was necessary to perform a warm-up cycle of questions to remove the initial participant's nervousness. Their openness to the issue is not a matter of course because in most cases the researcher with the participants had no closer relationship or earlier contact. Although a 12-parent sample may seem small, it is not easy to get a relevant picture of the parent's true opinion, attitude, and testimony. All of the participants were with a high or university degree, living in a marriage. Five participants had three children. Other parents had just two children, one of whom was a primary school pupil ranged in age from 7 to 12 years old.

The semi-structured interviews were used for the description parent's motivational strategies during child's homework. The main purpose was to find out and describe the answers to the research questions:

- Which strategies do the parents use to motivate the child do the homework?
- How do the parents describe the positive and negative strategies of motivation?
- What do the parents consider as the most problematic in child's home preparation/homework for school?

The ethical rules of this research have been preserved. Parents in the statements are introduced under the pseudonym letter. Interview questions were constructed so as not to promote preoccupation of a researcher. Through open questions parents fluently talked about their roles in the family environment, relationship with the child and strategies to meet the objectives of home preparation, targeted to homework done by children. Interviews were conducted during four months, each of the interviews spanned approximately 40 minutes in length. As usual in qualitative research, data analysis was an ongoing process throughout transcription, coding and writing processes (McKenna & Millen, 2013).

FINDINGS

In this paper, the results of semi-structured interviews with parents are presented. From the interview codes, we have conducted the categories, dividing into two poles - positive motivation strategies and negative motivation strategies. Firstly, in addition to the research aim, the results show that parents admit that they themselves had to think deeply about "the right strategy" to motivate the child to make the homework more effective. Mother I said: "... but on the other hand, now, say someone is motivated, some are not ... it is questionable what is good, whether to leave or help them ... also chaos is not quite good..."

Parents most often choose strategies in child's home preparation that gradually lead the child to independence from their assistance or help. Participants noted that their endeavour is to keep the child responsible for their own work. On the other hand, parents of children in grades 1 and 2 are convinced that their help with homework is necessary, it is necessary to show the children how to learn and in the course of time, they tend to manage the tasks separately. Mother A asserted: "It's easier for parents to do it and to lead it to independence, and then it's beautiful, but some child does not have the capability at that age, do it alone, but he has to practice it ... The independence is terribly difficult."

Negative motivation - conditional motivation

From the parents' answers follows that children's day is very busy and fulfil not only with school duties but also with after-school activities, music schools or sports activities. This lack of time causes defiance to do homework, children often have little leisure time to spare by themselves. Critics say it is questionable whether homework, done at the end of a long day when motivation and concentration are low, has any benefits at all (Coutts, 2004).

The parent's aspiration to make their children achieve good results at school is obvious. In agreement with (Pospíšilová, 2011), parents with a university degree, like most of our participants, engage in homework because they monitor the educational outcomes of their child and are able adequately to help the child to succeed at school.

Mother Z declared: "Yes, it's the negative motivation, yes, my husband tells her that if she does not get good results at school, we'll take her out of her school to the old one and it works."

Another important construct that has been related to people's emotions and sense of stress is the person's type of motivation for the task (Katz, Buzukashvili, & Feingold, 2012).

Bans, threats

The most common negative parenting motivation strategy has been banning the child from playing a mobile phone, a ban on using the internet or television. However, parents themselves admit that this strategy is not the right strategy, moreover, it is not even motivation. As one mother describes the problematic situation with homework: "...bans are even considered a stress factor in our family. It is the stress of to be banned from a mobile phone. When he brings a comma (typical Czech school punishment for forgotten homework). Means he forgot something. Well, we will disable the computer, the phone will be forbidden for a week. Yeah, he says, but I do not have anything at all, and then in the evening, I remembered now, ...but sometimes he does not remember and gets a comma." Another mother shared the similar negative experience with the conditionality of fulfilling homework by the sons' favorite activity or motivation to accomplish tasks by going for a visit to friends: "They (boys) have the motivation that if you do it, we will go (for a visit), but it does not work each day, then it is not a motivation."

Parental conflicts - Inconsistency of parental strategy

From the response of engaged mother Z, who consider homework as an important task to do every day and confirmed that motivation is the first step to success for her and her children in homework. This mother argued: "It's also the different strategies of parents, and we have a different opinion, sometimes it seems to me that we are only together for that task. My husband does not do anything with them, then he looks after one of the sons for a long time and gets angry at the moment, he screamed the last time everything shuddered, my son wept ..." We found that negative emotions are associated with different parents' approaches to home preparation. From the answers of a mother who is more involved in home preparation than her husband, she is not satisfied with the husband's approach to homework: "Something my husband wants him to do it and he does not know so much because he's not with them all the week, and he's sometimes bad for them, I say, he wants something, you push him for nothing, you leave him, you'll be mad, he'll be angry, you'll be angry. Yelling, waving him somehow, you make it in a wrong way. No, he just says, we need to do it now, it will be."

The child's anger

Mostly all of the participants admit, despite the motivation to do homework, their child gets angry from time to time. Mother L complained: "In home preparation - they have to learn, prepare in the 4th grade, sometimes they do it themselves, sometimes they have to be forced, and occasionally they have a ban (mobile, games, etc.), otherwise without problems. Rather, he leaks out of thoughts, and it takes longer, or it's because he does not want it, sometimes he gets angry, but his husband helps him, he's a little more petulant, but he's trying." Mother E pointed out: "Yeah, he's so angry at everything, we're not gonna come to do it anymore. He's probably such a bad period now." Another mother J added: "And when he can't do it, then he calls me, and I'm angry with him, not to scream at me."

Some parents admit that the days without homework tend to be quieter, without the sense of duty of the day. On the other hand, they recognize that it is right for children to get homework because they are confident in preparing for school. Homework leads children to independence and responsibility and their own work, which can bring habits to their future personal and professional lives. "Mostly it is set up that firstly do your duties and then fun": declared mother S.

Forcing- you have to!

Parent directive instruction (setting goals, giving help, structuring the learning process) without being controlling (criticizing, building up the pressure, making negative remarks) could have more complex effects on student's emotion during homework, depending on students motivation (Knollmann & Wild, 2007). Mother M often tells to her son: "Go - for the first time, the second, the third, the twelfth, and then the mother has a nap, and he's angrily going to do it." Setting the rules basically does not work, parents recede, children try to move borders - the rules are inoperative, and the cycle of problems is constantly being repeated. On the other hand, parents should give the child the opportunity for their own decisions - to generate their own strategies for solving challenges, discussing learning strategies, and avoid the failure (Pasternak, 2014).

Positive motivation

The properly, in time and without negative emotions finished homework is a reward also for the child, who has a leisure time that can be spent on his/her own. Similarly, it is an advantage for the parent who has the opportunity to do other household or their own hobbies. The father O explained the meaning of positive motivation to the homework in time: "Yeah, he can play on Xbox, it's the first one, yeah, you can, do our jobs first (smiling), the reward will be playing on the X-box or going for training or something. Or we change it."

Parent-child relationship

The relationship between parent and a child is connected with the parent's approach to be involved in child's homework. Gonida & Cortina (2014) named different types of parent's practices during homework. Similarly, with our results, the participants preferred the autonomy support and promotion of self-regulation, control, interference, cognitive engagement related to homework. Autonomy-supportive parents promote student motivational development in the form of mastery goals and skills resulting in better school achievement (Gonida & Cortina, 2014).

An interesting note is the parent's remark about the family model. The parent applies patterns of behaviour that she has experienced as a child, knowing that it will also work for her children. In our sample, half of the families were with three children. Naturally, time spent with children in homework has to be divided, the oldest children are already separate, helping younger children with simple homework, or accompanying siblings to school or to the leisure activities. Older siblings can also be motivated by the younger ones - they are an example, successful and have already gained experience that they can pass on to younger siblings. Mother N explained: "I painted it so like this, that the elder will do the job itself, and help the younger. And the youngest one will learn too, we have learned ourselves, I do not know, it was different for us, I expected it to be so."

Forcing the child's beliefs to do it!

The parents' effort to set the ideal conditions for homework is based on the motivation of the child. Excess of monitoring and controlling led children to more negative effects, on the other hand, how researched Katz, Buzukashvili, & Feingold (2012), the students' homework stress measure, as expected, correlated negatively with students' autonomous motivation and positively with students' controlled motivation. Mother N talked about the motivational strategy- to force the child, always to be ready for the praise and help the child as much as she is able to do: "I'm motivating them, yeah ... Always something else, but a reward - like a penny or a coin or something we're going to do, never, in any case, that never happened and there was never a need to reward. It's a compliment to us, you're really good, you are good. If there's something to look for, we do it together, we're looking for it together." Father's role in home preparation differs to the mother's role. Father are most often patient and open for the conversation, as confirmed mother N: "Well, my husband interprets them a lot, as if he talks to them like peers, so they look at him, he tells them, and knows so many things that even before bedtime they still ask, he explains. I have no patience. He does."

The power of school and teacher

Another factor that influences the motivation for learning is the school environment and the teachers' approach to child's ability and competence to succeed. Parents confirm that the great benefit of setting rules and motivational strategies is the quality of the teacher in dealing with the child and with parents. In particular, knowledge of the child, its strengths and strengths helps the child's effectiveness and endeavour to learn, get to know and thus easier to participate in school assignments. One positive experience mother H made note of related idea: "In that new school, the teacher motivates him, gives him additional tasks, he is more satisfied, he is a driving engine ... the teacher gives him more confidence, he wants more, so he can get more out of it, it's better than when someone tells him that he did this wrong."

CONCLUSIONS

The aim of the study was to describe the parent's motivational strategies in child's homework and home preparation. The concluded results shows the tab.1:

POSITIVE MOTIVATION	NEGATIVE MOTIVATION
Parent as a good example	Ban (mobile phone, television)
Praise, reward	The threat of moving to another school
Teacher's pattern	Putting pressure on a child

tab. 1 Strategies of positive and negative motivation

Due to the research methodology and the low number of participants it is not possible to generalize the results to a larger population sample. Moreover, the results are merely the specific views on selected issues with homework in ordinary Czech families. Although parenting is considered to be a matter of course, almost everyday routine, many stressful situations, disputes, or inconsistencies between parents and children arise during homework, requiring consistent and strategic motivation. Motivational factor, especially those positive, have an impact on the child's learning efforts to master homework without any precondition, prohibition, and disagreement with parents.

In agreement with Froiland (2013) parent's response in a positive way to the intervention, such as their children enjoying homework, becoming more over time, and initiating homework without a power struggle. On the other hand, children expect and need to know that their parents believe in their abilities, knowledge, foster and motivate them for the future educational aspiration and academic goals.

We also consider important to pay attention to the importance of parents and their motivational strategies for fulfilling home tasks by the child. Both by the parents' view and from the teacher's perspective, who subsequently teach children in schools, try to help their educational outcomes and communicate with the family as a source of information and partners with the common child's school goals.

ACKNOWLEDGEMENT

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MOTIVATIONAL FACTORS OF ENGINEERING TEACHERS AT TWO-YEAR COLLEGES

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ABSTRACT

Two-year technological colleges constitute learning opportunities for students with a relatively low level of achievement. The training at the college is focused on the practical aspect of the profession and less on its theoretical one. In light of the important role played by teachers in the learning process, the study quantitatively examined the factors motivating instructors to teach electronics at a leading two-year college in Israel. Sixteen electronics teachers took part in the study. The findings indicate that the instructors are primarily driven by interest in teaching electronics (intrinsic motivation). In addition, the teachers are motivated by identifying a value inherent to teaching (identified regulation). A comparison to the motivational factors toward learning electronics among engineering students from the same college reveals a significant difference between the two groups in relation to intrinsic motivation. This gap, in favor of the first, is characterized by a very large effect size.

INTRODUCTION

In view of the central role played by teachers in the learning process (Thoonen, Slegers, Oort, Peetsma, & Geijsel, 2011), it is important to understand the factors that drive instructors to teach (Caprara, Barbaranelli, Steca, & Malone, 2006).

Teacher motivation is defined as the assortment of factors driving the individual to pursue instruction as a career and to persevere in its practice (Sinclair, 2008). Pre-service teacher motivation deals with the initial motivation to choose teaching as a profession and complete the appropriate training, while in-service teacher motivation focuses on the motivation to continue to engage in teaching upon the completion of training (Williams & Burden, 1997).

This paper presents a study which investigated the factors motivating in-service teachers to teach electronics at a leading two-year technological college in Israel. Two-year technological colleges are post-secondary educational institutions that provide practical training in various branches of engineering, such as electronics, chemical engineering, bio-technology, etc. Students at these institutions are usually from the socioeconomic periphery or are with relatively low academic abilities (Gero, Zoabi, & Sabag, 2014).

THEORETICAL BACKGROUND

Self-determination theory (Deci & Ryan, 1985), which is currently one of the leading motivation theories and served as the theoretical framework for this study, puts an emphasis on the importance of “perceived autonomy”. A low level of perceived autonomy originates from constraints (either external or internal), while a high level of perceived autonomy allows the person to attain self-realization. The theory argues that meeting the person’s three innate needs will lead him or her to a higher level of perceived autonomy (Deci & Ryan, 2000). These needs are:

- The need for autonomy – the need to feel that the person’s behavior was not forced on him or her;
- The need for competence – the need to feel that the person is able of meeting challenging goals;
- The need for relatedness – the person’s need to be part of a group.

Moreover, the theory describes the sources of motivation on a continuum (Ryan & Deci, 2000). The motivational factor situated at one end of the spectrum, is external regulation. This factor has the lowest level of perceived autonomy and expresses the desire to attain material compensation for a behavior, or alternatively, the fear of punishment. Introjected regulation, the next factor on the spectrum, represents the wish to receive positive appreciation from others for performing the behavior, or alternatively, the will to avoid feelings of guilt. Identified

regulation, situated further into the continuum, stems from identification of the importance embodied in the behavior. On the opposite end of the spectrum is intrinsic motivation, originating from the interest and pleasure involved in the behavior. This factor has the highest level of perceived autonomy, as shown in Figure 1.

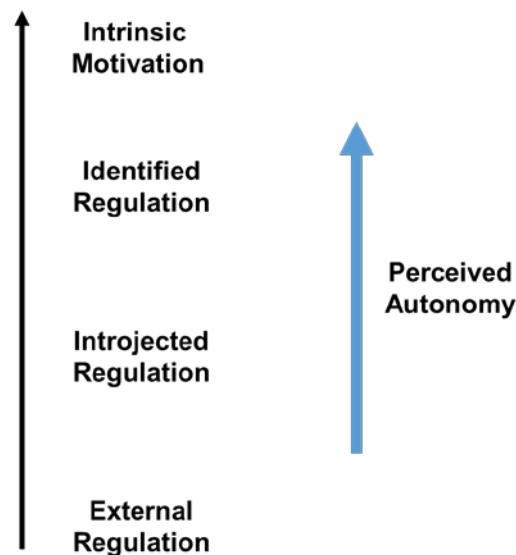


Figure 1: Primary motivational factors (self-determination theory)

GOAL AND METHODOLOGY

The study investigated the factors driving instructors to teach electronics at a leading two-year college in Israel.

Sixteen electronics teachers participated in this study. The teachers, whose average age is approximately fifty years old, have an average teaching experience of ten years. At the very least, the teachers hold a Bachelor's degree in Electrical Engineering or Engineering Education. They teach one or two courses (either theoretical or laboratory courses). The scope of the teaching position is fifteen-thirty weekly hours spanning two-five days a week. It should be emphasized that the teachers are not required to engage in research.

The research participants filled out an anonymous close-ended questionnaire based on the on the SRQ-A (Self-Regulation Questionnaire – Academic) questionnaire (Ryan & Connell, 1989) and the SIMS (Situational Motivation Scale) questionnaire (Guay, Vallerand, & Blanchard, 2000). This five-level Likert-like questionnaire, ranging from “strongly agree” to “strongly disagree”, was comprised of twenty statements which expressed the four motivational factors, defined above. For example, the statement “I teach electronics because it is interesting” reflects intrinsic motivation; the statement “I teach electronics because I think teaching is a good job for me” expresses identified regulation; the statement “I teach electronics because I want people to think I am smart” reflects introjected regulation; and the statement “I teach electronics because I do not have a choice” expresses external regulation. The statements were validated by two experts in engineering education. Cronbach's alphas of the four factors were approximately 0.80, thus indicating good level of internal consistency.

FINDINGS

The analysis reveals that the teachers are primarily motivated by intrinsic motivation ($M=86.56$; $SD=8.11$, where the mean score M is between 20 and 100) and identified regulation ($M=68.13$; $SD=14.50$). Introjected regulation ($M=43.54$; $SD=17.10$) ranks third and external regulation ($M=41.25$; $SD=15.11$) is in the last place, closely following the third place.

A comparison to the motivational factors toward learning electronics in engineering students from the same college (Gero & Mano-Israeli, 2017), shown in Figure 2, reveals a significant difference ($p<0.01$) between the two groups in relation to intrinsic motivation. This gap, in favor of the first, is characterized by a very large effect size ($d=1.24$). No significant differences between the two groups in terms of identified regulation, introjected regulation and external regulation were found. It should be noted that the students completed the same questionnaire the teachers

did, with the exception of the necessary changes, e.g., changing the opening of every statement from “I teach electronics” to “I study electronics”.

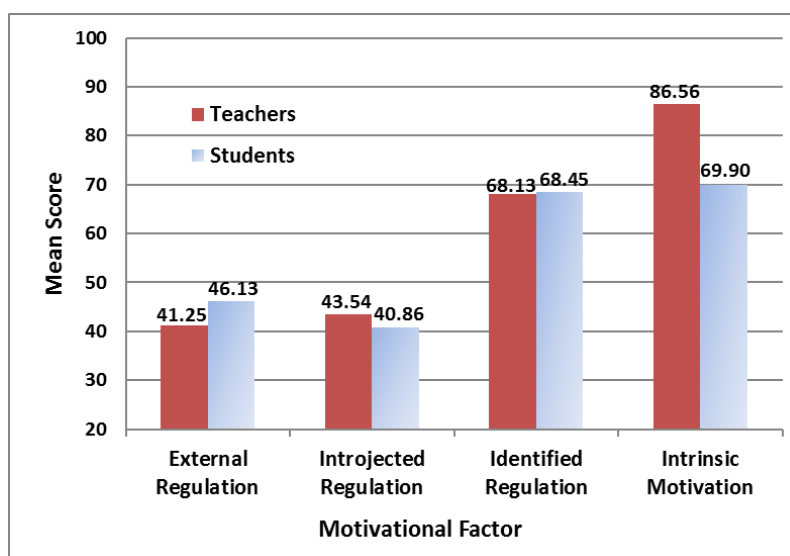


Figure 2: Mean motivational factor scores (electronics teachers and electronics students)

DISCUSSION AND CONCLUSIONS

This study examined the factors driving instructors to teach electronics at a leading two-year technological college in Israel. The study, which made use of quantitative instruments, shows that the teachers are primarily motivated by their interest in teaching (intrinsic motivation) and by identifying its inherent value (identified regulation). In light of self-determination theory, these findings could be possibly explained by the satisfaction of the three innate needs in most of the teachers.

A comparison to the motivational factors toward learning electronics among engineering students from the same college reveals a significant difference between the two groups in relation to intrinsic motivation. This gap, in favor of the first, is characterized by a very large effect size. These findings indicate a relatively low level of perceived autonomy among the students and might provide a possible explanation for the acute shortage of two-year college graduates in Israel, especially in the field of electronics. These results could be relevant in other countries that have a post-secondary technological education system.

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MULTI-DIMENSIONAL EXPANSION OF ALGO-RYTHMICS

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ABSTRACT

In our paper we present the introduction of three new concepts in the AlgoRythmics project (<http://algorythmics.ms.sapientia.ro>). With the introduction of new theoretical, visual and cultural approaches we are increasing the impact of our method in the process of promoting algorithmic thinking. The theoretical element consists in expanding the knowledge base currently containing sorting algorithms with two searching algorithms. Visualization elements are upgraded in the dance performances, using not only linear array structures but also tree representations of arrays, e.g. heap-sorting algorithm of an array. The folk-dances used, which are specific to different Eastern European ethnical communities are extended with flamenco, which has its origins in Southern Spanish folk dance.

OVERVIEW OF THE ALGO-RYTHMICS PROJECT

Main Concepts

The reason behind starting the AlgoRythmics project was to build a multi-sensorial platform for promoting computational (CT) and algorithmic thinking (AT). We will quote from the article that presents the timeline of the project:

“In [...] we focused on how dance can be involved in informatics education (sorting algorithms). The method takes additional multi-sensory elements into the programming-education through arts (dance, music, rhythm, theatrical role-playing). Combining these art forms teachers could create a multi-sensory learning environment that involves almost all the senses: visual, auditory, kinaesthetic and tactile. We invited students who like dancing to collaborate on our project. Each played the roles of the numbers from a sequence to be sorted, each of them wearing the corresponding number on their clothes. The accompanying music pieces were composed on the basis of Michael Flatley’s music. Consulting with the eurhythmics teacher of the faculty we chose real dance-steps for comparing and swapping operations. Once these dance-performances were videotaped we added further graphical elements to the records in order to emphasize that the dancer-numbers are stored in an array, and to highlight the dancer-pair in the focus [...]”. “In [...] we particularly focused on multicultural content integration in informatics education, through art-based pedagogical tools. We initiated collaboration with a professional art institution, and utilised Romanian, Hungarian, German and Gipsy folk-dance choreographies (to illustrate the cultural diversity in Transylvania, Romania) in order to illustrate different sorting algorithms. The fruits of this collaboration are art-science productions that equally promote multiculturalism and informatics education. In order to test the potential that “algorithmic dances” have for promoting intercultural informatics education, we posted them on the YouTube website. Users’ reactions confirmed our expectations. (<http://www.youtube.com/algorythmics>)” “In [...] we presented experimental results revealing that properly calibrated learning tools can effectively promote the algorithmic thinking of both science-oriented and humanities-oriented students. The e-learning environment we developed had been designed to introduce students to the mini-world of sorting algorithms (bubble-sort, insertion-sort, selection-sort, shell-sort, quick-sort and merge-sort). The software tool generates a five-phase learning experience: the algorithm is visualized by a videotaped “sequence of folk dancers” wearing the numbers to be sorted on their clothes (1); the algorithm is animated on a white-box array (storing the number-sequence) (2); followed student reconstructed (3) and orchestrated (4) animations; students are then invited to orchestrate the studied sorting algorithm on a black-box array (being informed about the results of the comparison operations) (5). The application provides an excellent opportunity for a gentle introduction to several algorithm related concepts (best, worst and average case, algorithm complexity, etc).”(Katai, 2014b).

As an official acknowledgement the website of Informatics Europe states: “The evaluation committee praised the originality of the proposal by Zoltan Katai, Laszlo Toth and Alpar Karoly Adorjani: Multi-Sensory Informatics Education. Mixing algorithms learning with sensory experience is a very innovative teaching experiment. The key concept of this proposal is Computer Science education for all, using a creative approach. The committee was impressed and appreciated this approach of abstracting away almost all details that might hinder understanding the idea or principle of an algorithm or a paradigm. The enactments thus not only can be used flexibly in teaching environments irrespective of a particular programming- or spoken-language but can be used as a starting point for the teacher to drill down into more technical concepts. Another particularity of the project is its intercultural character – sorting algorithms illustrated by Central European folk dancing” (Informatics Europe, 2013). The

project was awarded with the “2013 Best Practices in Education Award” (Informatics Europe, 2013).

Online Platform

The platform mentioned in the previous section is online, and can be accessed via <http://algo-rhythmics.ms.sapientia.ro/>.

Measurements

The following measurements were made on the Youtube platform of the AlgoRhythmics channel, taking every dance view in consideration. Since the beginning of the project the most successful algorithm visualizations are the quick sort algorithm (1,197,107 views) and the bubble-sort algorithm (1,244.693 views), but the overall view count is 4,269,180. After the initial period the monthly view count has been normalizing, (Figure 1) is showing that there is a relatively constant average view rate of the uploaded algorithms/dances around 8,117 views per month. The lowest values are every year in the summer (July, August), during holidays, and the highest values are located in the winter/spring exam sessions (November, May).

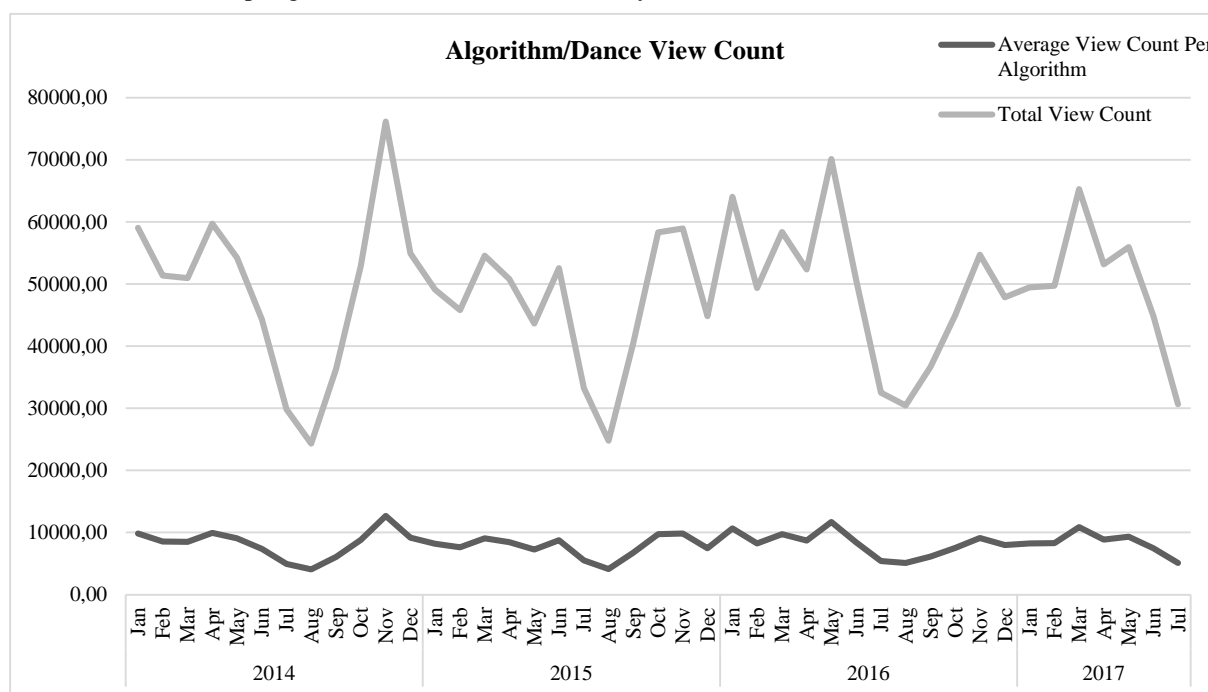


Figure 1. Algorithm/Dance View Count

Although it is constant, the overall view rate is in a slight descent, which can be explained with the age and style of the uploaded media, and the growing number of other aiding visualization materials present on the internet.

The average view percentage of the uploaded media is shown in (Figure 2). We can see, that the average viewing time of the content is about 41.42%. Considering that every dance presented has an artistically executed closing part too (~19.36%/dance), the average viewing percentage of the actual algorithm is about 50.1%. We can observe, that the actual viewing time percentage is in descent.

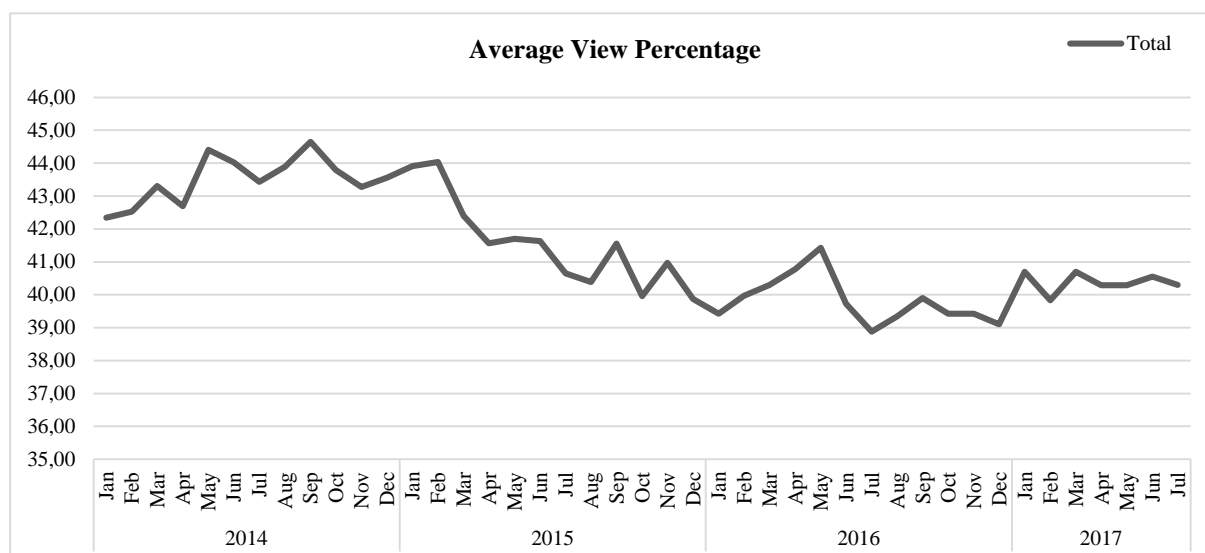


Figure 2. Average View Percentage

EXPANDING ALGO-RYTHMICS

Overviewing to this date the results and comments of the AlgoRythmics project we can see, that there is a sustained trend of using it. We had several feedbacks targeting the development of the specific view through art of AT. The success is visible on the graphs presented above.

Three dimensions have been identified by which the expansion took place. These are following the main concepts of the original idea: promoting AT with multi-sensorial and multi-cultural tools.

1D view to 2D view

When starting the project, four known $O(n^2)$ time complexity sorting algorithms were implemented: bubble sort, insert sort, select sort and shell sort. These have easily comprehensible linear visualizations. The change of the array containing the numbers is visible after each step and the sorting process is performed in a linear manner.

The quick sort and merge sort implementations are somewhat harder to visualize, and it needs more dance views, to find the correct algorithm. Even I Programmer experts claimed that the quicksort algorithm can't be done using folk dances, and even with modern dances it would be a challenge to solve the visualization (I Programmer, 2011). These two sorts in average case have $O(n \log n)$ time complexity, and are considered more optimal than the first four in case of sorting random data. The programming technique used for the quick- and merge sorting algorithms is the so called "divide and conquer": decompose the original array, sort the simpler series, and then combine back the results into a sorted array. The decomposition and the sub-problem solving suggest that these are linearly viewable, as a tree structure is built and traversed depth-first in the sorting process. Although this is true, the visualization of the algorithms is permissive, even if one might not see the solution tree, the method is perfectly understandable from the dance.

There are numerous algorithms, where the array is only the carrier of the series. In the solving process a complex structure is used, which must be seen and understood in order to understand the algorithm. Based on optimality and user requests, we chose the heap sort, which is sorting in $O(n \log n)$ time complexity. The data structure used is the heap, a nearly complete binary tree, where each internal node has a greater (max-heap) or smaller (min-heap) value than any of its children (Cormen, 2009). The array can be "transformed" into a binary tree using the formula: the first element of the array is the root, the child nodes of every internal node i are located (if they exist) in the array at the $[2i]$ and $[2i+1]$ positions. When programming this method, the translation of the array positions into binary tree nodes is straightforward with the given formula. But to present the algorithm for non-programmers one needs a more complex visualization. This suggested the idea of shifting the dances from forward facing view into an upper viewing angle (Figure 3, Figure 4).



Figure 3. Bubble sort



Figure 4. Heap sort

The starting position of the dancers is in the top of the picture, they are representing the array storing the numbers. The initialization of the sorting is the direct transformation of the array into the heap, starting with couple (2) as the root of the tree, then every couple is dancing one after the other towards their place in the heap. Afterwards we set up the heap property for every node. This can be achieved by comparing the two child elements of the internal nodes between each other, choosing the greater/smaller one, and then comparing it with the parent, and switching them by need. From this moment on the sorting algorithm can be seen as it is: the root couple represents the largest element present in the tree (heap property), switch them with the last leaf of the tree, so they get to their final place, “take them out” of the active structure, restore the heap property of the remaining elements, and repeat these steps until the tree has only one element. After completing the algorithm, the dancers are in the correct order in the tree (Figure 5).



Figure 5. Heap sorting is complete, every couple is on its final place

To restore the array, the couples will dance back into their corresponding place in the array.

The dance the couples are dancing is the “kalotaszegi” Hungarian folk dance from Transylvania, and, as an addition to the project this is the first algorithm performed with paired dancing.

The upper viewing angle allows the person watching this demonstration to follow the buildup and the change of the tree, the comparisons, the switches, the cutback of the tree (couples kneeling down) as the numbers reach their final location and finally the restoration into the array form. In our opinion this sorting algorithm is much more understandable in this 2D view as it were with the previous visualization style.

Cultural expansion

Based on the large number of foreign views (other regions than Transylvania), we decided to internationalize the music and the choreography of the demonstrative dances. This way a new style was introduced, where algorithm visualizations make use of the rhythm and style of the well-known southern Spanish flamenco. It can be considered that there was a dual change as flamenco is not exactly a folk dance, and it is from a different region. As until now, the choreographies are performed by professional dancers.

Expanding algorithm knowledge base

As sorting algorithms are covered by the previous project components, the next expansion dimension is in the direction of another very commonly used and easily understandable algorithm family, the searching algorithms. We considered that as the sorting methods were built from easy to hard, the searching algorithms should follow the same pattern. In both of the visualizations numbers are not seen by the participants, which on one hand increases the credibility of the performance, on the other hand kindly forces the spectator to close on to the “blind computer”, i.e. not to skip steps in the algorithm, because of the obvious answer (Kátai, 2014a).

Linear or sequential searching is a commonly used method as the most straightforward way to find an element in an array for beginners. It is also used to teach loops, iterating over all elements of a series, exiting the loop on a given condition, in this case when the searched element is found or on reaching the end of the array. It's time complexity is $O(n)$. The performed dance, which illustrates the algorithm is flamenco, using primarily the specifically choreographed colorful and rich dancing style of each artist. The central figure is the dancer representing the number one is searching for, while the others are representing a number series to search. The choreography was designed so that every number has different figures to dance, but the identical ones. During each step the next number is matched (=) against the one searched. If the dancing style differs between the two artists, then it isn't a match. When the same dancing style is found the algorithm stops, while the number is identified in the series (Figure 6).

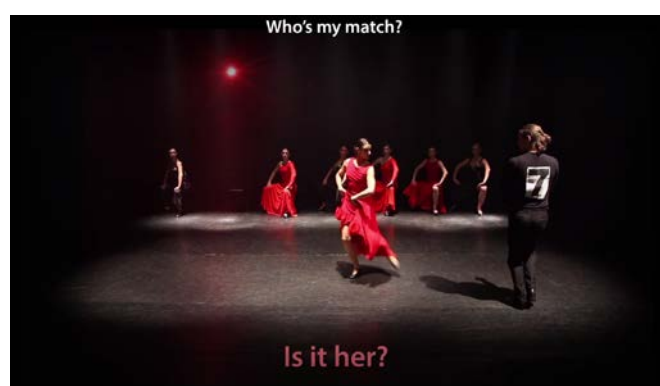


Figure 6. Linear search with flamenco

Binary searching, also known as the method with which one searches in a dictionary or in a phone book, is a widely used general searching algorithm known for finding an element of an ordered array. It consists of matching the searched element against the middle element of the series. If they are identical, it stops, else it shrinks the search space to the first or second half of the original array, based on the comparison made, and starts over. The dance

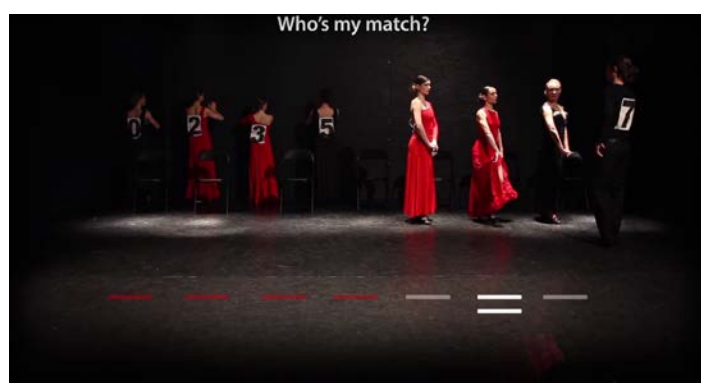


Figure 7. Binary search with flamenco

used to visualize the steps is also flamenco, like in the case of the linear search, but this time the matching criteria is given by the rich rhythm of the dance. The smaller the number, the slower the dance, and the bigger the number, the faster the moves of the dancer. In case of two identical numbers, the rhythm of the moves of the two artists are exactly the same, even if the moves differ. Like in the case of the linear search, the central figure represents the number one is searching for, and the ordered array is composed of other dancers. When the series is halved, only dancers from the active half of the remaining array are illuminated, illustrating, that searching space is reduced

(Figure 7).

CONCLUSIONS

In this study we have presented a three-way expansion of the original AlgoRhythmics project.

Using the more intuitive 2D visualization in the case of the heap sort, we hope that it opens new directions of development. The measurements regarding its viewing and the feedback will be gathered and analyzed over time, but we are confident, that the illustration brings better understanding to the specified algorithm for those using this method on initiation in AT.

Implementing an algorithm with the special touch of flamenco represents a milestone in the project's lifecycle, in our point of view it brings new perspective to it. We are also researching the implementation using other various dance styles.

The knowledge base extension broadens the usability of our material. After understanding the different sorting algorithms, one can also try to familiarize with searching algorithms. In our opinion this was the next algorithm-family that needed to appear in this project.

The integration of these new materials in the AlgoRhythmics's home page is now a work in progress, as is the backtracking search algorithm's implementation.

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MULTIPLE DRUG USE IN ELDERLY AND RESPONSIBILITIES OF NURSES

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ABSTRACT

The ratio of the elderly population, as determined by the World Health Organization (WHO) "65 years and over", was raised in the total population in line with the factors such as the development of economic and socio-cultural conditions, the decrease of the birth rate and the utilization of modern medical facilities, and is still increasing day by day. Therefore, aging of the population is numerically and proportionally one of the most important demographic events in the 21st century.

As the organ functions decrease with aging, the number of chronic diseases start to increase. The increase of chronic diseases in the elderly also increases the need for health care services and the amount of drug use. Drug related side effects and intoxications are common in elderly people due to changes in metabolism and excretion caused by aging, changes in drug use, drug interactions, changes in pharmacokinetics and pharmacodynamics of drugs and cognitive problems such as dementia and comprehension. Multiple drug use and inappropriate usage habits of the elderly decrease the quality of life and increase the risk of drug related morbidity and mortality. Moreover, the use of more than one drug in elderly complicates the treatment, increases the cost, and poses a problem in terms of health-social security systems.

Physicians, nurses and all health professionals have responsibilities in the management of the disease, drug treatment and care of the elderly with chronic disease and multiple drug use. Nurses have important responsibilities and roles such as having knowledge about the pharmacodynamic and pharmacokinetic changes seen in the elderly, giving health education to the patient and the family in order to provide adaptation to drugs used by the elderly and making the necessary follow-up for drug related side effects. While giving care to the elderly individual, the physical, psychological and social changes that develop in the elderly should be taken into consideration; and it should be ensured that these changes are observed and that the elderly is in harmony with the new situation caused by these changes.

Key words: Elderly, Drug, Drug Use, Nursing

INTRODUCTION

Old age is a process that should be evaluated with its physical, psychological and social dimensions. While physiological dimension expresses the changes seen with age; psychological dimension refers to the individual's changes of compliance capacity in terms of perception, learning, psychomotor, problem solving and personality characteristics, as the age progresses. As for the social dimension, old age refers to behaviors expected from a certain age group in a society and the value that society gives to this class (Beğer & Yavuzer, 2012). The increase of the length of life expectancy and the decrease in the fertility rate has caused significant changes in the composition of population. The share of the elderly population, as determined by the World Health Organization (WHO) "65 years of age and over", constitutes 8.5% of the world's population and continues to increase rapidly [WHO], (2015). In Turkey, the elderly population is 6.495.239 according to 2015 data, and constitutes 8.2% of the total population. Turkey Statistical Institute estimates that the life expectancy in Turkey is 80.7 years for

women and 75.3 years for men in 2015; and that this ratio will increase by 10.2% for men and women in 2023 [TUIK], (2016).

Many systems in the organism are being affected by aging; thereby cell, tissue, organ and system functions begin to slow down and deteriorate. Due to these changes, the body's resistance to diseases attenuate; and therefore the number of chronic diseases increases (Tiftik, Kayış, Inanır, 2012; Marengoni, Winblad, Karp, Fratiglioni, 2008; Pehlivan & Karadakovan, 2013). It is reported that 70-90% of the elderly population have one or more chronic diseases (Unsal, Demir, Ozkan and Aslan, 2011; Kısa, 2012).

The need for healthcare services and the use of multiple drugs are also increasing in line of the prevalence of chronic disease in the elderly. Although there is no consensus on the definition of "Polypharmacy", which is accounting for multiple drug use in the elderly; it refers the use of multiple drugs for multiple indications at the same time (Wyles & Rehman, 2005). However, there are many different definitions of polypharmacy in literature. These definitions include: (Veehof, Steward, Haaijer-Ruskamp, Jong 2000; Bjerrum, Sogaard, Hallas, Kragstrup, 1998; Linjakumpu et al., 2002; Assembly, 2005).

- combination of two or more drugs for at least 240 days,
- combination of two or more drugs,
- combination of four or more drugs, as stated by National Service Framework (NSF),
- combination of five or more drugs.

In elderly individuals, there are various changes affecting the pharmacokinetics and pharmacodynamics of drugs; and cognitive problems such as dementia and misunderstanding This causes deterioration in compliance to drug use in the elderly and increases the incidence of drug related side effects and intoxications. Drug related side effects in elderly are reported to be 3-7 times higher than in adolescents (Shi & Klotz 2011).

Nurses are the main source of information and contact for patients. The main responsibility of nurses in drug use is to have knowledge about pharmacodynamic and pharmacokinetic changes, and the effect of aging on the organism. The nurse should know the effects and side effects of the drug used by the elderly person, give health education to patient and family about the subject and make necessary follow-up. The nurse should monitor the elderly person about the drug related side effects, take into consideration that there is a change in response and in side effects of drugs in old age, and be aware of intoxication symptoms and drugs that cause intoxication in the elderly group (Unsal et al., 2011, Pehlivan & Karadakovan, 2013).

Multi-Drug Use in the Elderly

A drug is a chemical or herbal substance that is able to manage the disease by controlling the effect of the disease on the body, stopping the symptoms, relieving pain, or preventing the disease. Chronic diseases, which occur due to old age, are accompanied by long-term and multiple drug use (Kim, Shin Kim, Park, 2014). As elderly people are both old aged and have one or more chronic disease, their drug use ratio is increasing. In developed countries, it is reported that the drug use ratio increases with age; and elderly people use at least three drugs, while in developing countries 85-90% of elderly individuals using at least one drug daily (Veena, Padma, Devma, 2012). In a study conducted by Unsal and his colleagues, it was found that 81.7% of the elderly had at least one chronic disease; and that 75.9% of them were using prescribed drugs, 7.9% were not prescribed, 5.6% were using both prescribed and non-prescribed drugs, and 11.1% were not taking any drugs (Unsal et al, 2011). In a study with a mean age of 71.4, which was conducted in the US-Mexico border area, it was found that 72.4% of the elderly were using five or more drugs and that 46.2% of those were under risk of drug-drug interactions (Loya, González-Stuart, Rivera, 2008). In another study in USA, which enrolled 3005 people, Qato and their friends found that 29% of individuals aged 75-85 years were using at least five or more drugs; 81% of them have used at least one prescribed drug, and 46% of elderly people using prescribed drugs have also used non-prescribed drugs. (Qato et al, 2008).

Pharmacokinetic Factors Affecting Drug Pharmacology in Elderly

The path followed by a drug on the body consists of four steps; named as absorption, distribution, metabolism and excretion (Unsal et al., 2011; Erdinçler, 2010; Ozer et al., 2009).

Absorption: Alterations in the digestive system along with aging (decrease in gastric acid secretion and motility), concomitant diseases (motility change due to heart failure, prolongation of gastric emptying time due to diabetes), and concomitant use of drugs (antacids, proton pump inhibitors) affect drug absorption.

Distribution: As a result of changes in body composition (volume of body water is reduced by 15%, total fat percentage is increased by 30%), the distribution volume of water-soluble drugs decreases; whereas the distribution volume of fat-soluble drugs increases. The amount of albumin, an important plasma protein for the transportation of drugs, is reduced in the elderly due to chronic diseases, impaired liver function and malnutrition; so the amount of free forms of drugs are increased by 200-300%.

Metabolism: The liver is a system in which toxic substances and drugs in the organism are metabolized and rendered harmless, and the blood supply is high due to its vital functions. Along with age; the liver's mass, its blood supply and removal capacity of toxic substances is reduced. Because of the changes of body composition

at older ages, the total amount of water in the organism decreases; while the amount of fat increases. While the distribution of water-soluble drugs in the elderly group is reduced due to changes in the amount of water and fat, the duration of action of fat-soluble drugs increases.

Excretion: Decrease in muscle mass along with aging reduces daily creatine production. Therefore, serum creatinine is not always a good indicator for evaluation of kidney function in old age. If creatinine is <30 ml/min in the elderly, the drug dose should be reduced by 50-60% or the dose interval should be increased by 2-3 fold.

Multidrug Related Side Effects in the Elderly

An unexpected and harmful effect that occurs when a drug is used at normal doses or for therapeutic purposes is referred as "drug related side effect" (Kim et al., 2014; Erdinçler, 2010; Unsal et al., 2011; Erdinçler, 2010; Ozer & Özdemir, 2010). Multidrug related side effects in the elderly are common; due to drug-drug interactions because of multiple drug use, changes in the pharmacokinetics and pharmacodynamics of the drugs and cognitive problems such as dementia and misunderstanding, and are two to three times more frequent than in adolescents (Unsal et al., 2011; Erdinçler, 2010; Ozer & Ozdemir, 2009). It is indicated that the free multimeric drug in the circulation is increased due to the prolongation of elimination half-life in old age, and that drug related side effects and toxicity occur more frequently. The synthesis of vitamin K-dependent clotting factors has decreased in the elderly; therefore, sensitivity to anticoagulant drugs increases and bleeding occurs (Erdinçler, 2010). The hospitalization rates due to multiple drug related side effects are also increased in the elderly (Kim et al., 2014). Multidrug related side effects in the ages cover a wide range from mild concentration failure to serious drug intoxications (Ozer & Özdemir, 2009; Kim et al.;2014, Erdinçler, 2010). The most common multidrug related side effects in the elderly are depression, confusion, restlessness, delirium, falling, memory loss, incontinence and arrhythmia. Central nervous system depressants, analgesics, antibiotics, anticoagulants and antihypertensive drugs are known to produce side effects most frequently (Ozer & Ozdemir, 2009; Erdinçler, 2010; Onar & Kapucu, 2010).

Compliance to Multidrug Treatment in the Elderly

Compliance to multidrug therapy is defined as "the degree to which an individual's behavior overlaps with medical recommendations". This definition covers not only pharmacological treatment compliance, but also compliance with other treatment-related factors (willingness to initiate treatment, adherence to treatment plan, adherence to treatment appointments, etc.). Compliance to treatment is considered to be a factor that affects prognosis and a decreases the cost of treatment. Correct application of multidrug therapy and compliance with medication are the criteria for success of medical treatment (Ahmad et al., 2014). Noncompliance with drug therapy in the elderly ranges from 21 to 55%. The reasons for discordance among the elderly in multidrug treatment are; factors such as excessive number of drugs, forgetting to take the drugs, not taking the drugs due to side effects and increased sensitivity to drugs. Noncompliance to drugs is more common in elderly people who take three or more drugs, use more than one physician's prescription, and live alone. Multiple drugs taken by the elderly could be used at very high/very low doses, at wrong times or could be completely forgotten. Complex treatment regimens, taking three or more drugs within a day, overdose of drugs, visional and auditional problems and especially regression in cognitive and sensory functions make it difficult to the elderly to adopt to treatment (Ozer & Ozdemir, 2009; Erdinçler, 2010; Ahmada et al, 2014 ; Onar & Kapucu, 2010). Correct application of multidrug therapy and compliance to treatment in the elderly is the basis for success of medical treatment (Ahmad A et al., 2014).

The role of the nurse in the use of multiple drugs for the elderly

Nurses are the main source of information and contacts, especially for elderly individuals. Having knowledge about the multiple drugs used by elderly people and teaching them how to use these drugs is a basic responsibility of the nursing in elderly care. The nurses who are able to recognize the elderly person and their environment have the opportunity to prevent mistakes made in using of multiple drugs in elderly individuals, to recognize these mistakes early and to take necessary precautions. Thus, problems related to misuse of drugs in elderly individuals can be reduced/prevented (Solmaz & Akın, 2009).

The nurse should know the effects and side effects of multiple drugs used by the elderly. The nurse should inform the elderly about the drug they are using and inform the elderly about their own health condition and the effects of the drug. The nurse is also responsible for the elderly to use their medication properly and correct their mistakes (difficulty/inability to remember when drugs will be taken and intentionally/ unintentionally misuse of drugs etc.) in drug use (Kaya, 2009; Ozer & Ozdemir, 2009).

An important factor to support treatment and care in the holistic approach to the elderly is the provision of the elderly to perform self-medication and care. For this reason, it is important to control nursing interventions to improve self-medication by defining the treatment and care needs of the elderly. Therefore, health education should be planned by the nurses to increase the elderlies compliance to drug use (Onar & Kapucu, 2010).

Nurses in multidrug use of the elderly should;

- provide simple, clear and precise information on the names, intended use and forms, doses, effects and side effects of drugs used by the elderly, by considering the individual characteristics of the elderly, verbally and in writing;
- convince the elderly individual of the benefits and the need of the drugs they use;
- teach the elderly individual the correct action principles in drug treatment; such as the right drug, right time, correct dose, correct path and correct affect;
- prepare a table for the elderly individual in which the name of the drug, the dose and timing are indicated;
- ensure that the drug and light source is at the appropriate distance from where the elderly sits/sleeps, by paying attention to the vision problems of the elderly who prepare their own drugs or living alone;
- provide a card with information on the names, doses and timing of the drugs used by the elderly person;
- inform the elderly person on keeping their drugs in the right place;
- inform the elderly person that they should not use drugs with the recommendation of their friend/relative and regularly evaluate the elderly's drug use;
- check the drug compliance of the elderly with certain intervals. (Unsal et al., 2011; Ozer & Ozdemir, 2009; Kaya, 2009; Onar & Kapucu, 2010; Solmaz & Akın, 2009).

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MUSEUM-BASED EDUCATION AS A PART OF SCHOOL EDUCATION

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ABSTRACT

The aim of the paper is to present the results of the research project titled: Regional or trans-regional cultural education using the example of museums. In the frame of the project there were prepared: Qualitative and quantitative analysis of the level of schools' use of museum programs in the period 2010-2015; Qualitative and quantitative analysis of interprovincial co-operation between schools and cultural institutions; interviewed and questionnaires. That was a research materials. Informal education may include classes that use visual culture - museum lessons. The paper will examine what range of programs is offered schools by the museums. On the basis of the conducted analysis, the paper will verify what kind of education is museum-based education programs addressing the schools are directly coincided. The paper answers the question is the museum-based education the part of school education, the teaching parallel or a separate category of teaching.

Key words: Culture, Education, Museum,

INTRODUCTION

Museum education is accompanied by a change in the perception of the principles of education and, as many experts in the field of contemporary pedagogy say, the loss of monopoly of knowledge by schools. The school has ceased to be the only, and even the primary center of learning. The function of teaching is taken over by various cultural institutions - museums, art galleries, cinemas, theaters, cultural houses etc. According to the authors of the study titled, *Educational strategies implemented in science centers, experimental laboratories and interactive museums* conducted in 2007-2009 on behalf of the Ministry of Science and Higher Education, referring to the *OECD 2011 study*, the total number of school hours for pupils aged seven to fourteen in Poland is drastically smaller than in other European countries, giving rise to the need for additional didactic activities outside of school (Karwasz, Kruk, 2012). In addition, the school is treated as a base, providing a core curriculum, preparing for tests, but does not believe in its developmental function. The school is curriculum-oriented but does not shape. Grzegorz Karwasz and Jolanta Kruk also point to the lower level of teaching in Poland, which leads to teaching gaps. And emphasizing that "it is unrealistic that teaching gaps, not only in mathematical and natural subjects, be filled in by the school's own actions. They do not allow significant teaching loads resulting from the shortening of the teaching syllabus, the lability of the content of teaching in the context of constant program changes, the numerous organizational obligations that lie on the school and the requirements for the continuous training of the teaching staff. Help should be sought in complementary and supportive activities of non-school institutions." (Karwasz, Kruk, 2012, p. 32) In the Polish education system, as indicated by the numerous studies, the soft competences of the participants are not raised in the teaching process. Besides, as the authors of the *Ideas and realization of an interactive education* report continue, "diverse elements - the lack of compulsory pre-school education, the weakness of early school education and the progressive virtualization of teaching content - create a serious gap in proper intellectual and emotional development. Children and adolescents are beginning to lack practical experience in the process of gaining and consolidating knowledge." (Karwasz, Kruk, 2012, p. 42)

Moreover, the school is not an institution of social trust. On the contrary, its lack - parents are keen to control teachers, believe that they have the right to decide how to teach, negatively comment on any behavior of the teacher. They impose their way of thinking; expect that they will be treated as co-creators of everyday life, forgetting that they have neither the knowledge nor the skills. And that they do not defend the level of education, but instead, try to manipulate school life to be able to control their children more fully. Such behavior is also accompanied by the decline of the prestige of the role undertaken by the teacher. Parents allow themselves to evaluate teaching methods, the program, and the teachers with the pupils, without constructing a respectful attitude towards the teacher. Increasingly, school education is considered compulsory, developmental, and raising competencies is described as extracurricular education, informal. A recommendation, that is not strictly about museum education, but certainly about education, is self-evident - parents should limit their ability to intervene in school life. They should not believe that they can control the

school and feel that it is another area of their child's education. They should focus on raising a child at home. The responsibility for educating pupils from home to school and home-school or pseudo-educational institutions is not to serve either for the development of pupils or the level of their knowledge and the development of their competence. Another recommendation that is related to the above is the suggested change in the education system - not to introduce a new division of teaching but to change teaching system that is directed toward a test-based system, to teach understanding, interpreting, and sharing responsibility for the world. In modern education, it also places itself on self-education and is a trend worthy of imitation. It would only need to elevate the prestige of knowledge, show young people that knowledge is the key to self-realization. As Karwasz and Raven point out the problems of the contemporary cultural system in the world, which include lowering the role of formal teaching in favor of other channels of information: "The school therefore ceases to be the only source of knowledge, especially in the early stages of teaching. Sightseeing, nature, popular science provides very detailed knowledge even at preschool age. The teacher is increasingly struggling to attract new learners with new content and teaching methods. Hence, his authority is easily eroded, and cases of reprehensible behavior become more and more common at different stages of teaching. On the other hand, the interaction of children from birth with television and the virtual world of computer events result in a loss of sense of reality. Hence, it is difficult to achieve the expected teaching effectiveness by means of a traditional textbook, even richly illustrated and using multimedia. And they continue, "These diverse elements - the lack of compulsory pre-school education, the weakness of early school education, and the progressive virtualization of teaching content - create a serious gap in intellectual and emotional development. Children and adolescents are beginning to lack practical experience in the process of gaining and consolidating knowledge"(Karwasz, Kruk, 2012, p. 41-21).

METHODOLOGY

In the project there were used qualitative methods, which, according to Mieczysław Łobocki who deals with pedagogical methods - in contrast to quantitative methods – are characterized by the fact that they relate to the description and analysis of the studied phenomena without resorting to any means of measurement. There were organized study visits in order to perform queries and interviews with staff from internal department /division of education, managers, educators (some museums still do not have a department dealing with education), or museum management. In some cases, what took place was only an individual conversation with one person, sometimes a collective of several people from the department at the same time. As noted by Łobocki: "A considerable role in educational research meet (...) conversation and interview. Cognitive value of these methods is undoubtedly higher than (...) surveys and questionnaires. (...) Conversation and interview methods are more complex, also requiring - in addition to asking questions - a considerable personal commitment and sometimes subtle approach to the subjects." (Łobocki, 1978, p. 286) He further writes: "Conversation and interview as the research methods are not ways to communicate that take place every day (...). They represent respectively oriented process of interaction, relies on the free exchange of verbal expression between the person conducting the interview with the targeted subject, or informing about the targeted subject." (Łobocki, 1978, p. 286) Observations made by the researcher became the keynote of this part of the study. The conversation was conducted in a transparent manner, and therefore informed the respondent of the primary aim to establish mutual contact. Their answers were subsequently recorded in an precise manner. During the preliminary interview, and then in-depth interview, or rather an in-depth conversation - and since then direct contact with the person who represents the focal point of the research was established, rather than, as in the case of establishing direct contact with people serve as intermediaries who only inform about the individuals about the research targets-, particular care was taken to ensure that all chat functions of the interview have been preserved. Therefore, attention was paid to compliance with regards to the exact statement uttered by the subject, ensuring that expression of what actually they wanted to convey (communication function) was preserved, while assuming the sincerity of expression (expressive function) and the cognitive value of the information received (function information). Then there were made CAWI survey among museum educators invited to the project. At the request of educators, it was decided to study on-line. Initially a paper survey was conducted, but educators in some centers did not agree to the fulfillment of such surveys. For them, anonymity was important. CAWI method. In some centers the questionnaires were filled individually, others in groups, on the assumption that the answers of the employees of a particular department will be the same. Due to the difficulty in the verification process, employees, institutions which have completed the survey, and in order to reach the widest possible group of respondents and to acquire the opinion of many, educators from Museum Educators Forum were invited to cooperate, and subsequently published the survey on their fan asking for its fulfillment. This has increased the range of responses and the

overall scale survey. As Łobocki noted that a survey are never an end in itself, but are subordinated to specific research targets. The surveys incorporated closed, open and semi-open questions, alternative, disjunctive and conjunctive questions, filtering and control. And as the last CAWI survey among teachers of the schools invited to the project. In some cases, teachers answered questions on-line, others asked to provide questionnaires to schools. They were filled during an official meeting of the school Council, followed by a member of the research team moved to the on-line surveys to facilitate the counting rates and plotting graphs. The teachers, similar to educators, requested anonymity.

INFORMAL EDUCATION

The above observations lead to the conclusion that teaching is more and more about informal education. Informal education and self-education often include museum education, but only in the case of education at museums in science centers, where education promotes activity, stimulates curiosity, and makes the audience critics and creators. The mission of the museum is increasingly defined as participation in the education process. Furthermore, many educators stress that museums are a great place to realize *lifelong learning*. It is education that speaks in a direct language and is accessible to everyone. It refers not only to dry facts, but speaks to the senses, puts on the development of imagination. The methods and effects of museum education are more like non-formal education. Non-formal education, however, is often described in opposition to formalism. Many educators believe that this is a completely different form of education than formal. Among other things, Alan Rogers (2004) writes that the terminological differences reflect structural differences in this case. Out-of-school education is perceived as a process of shaping attitudes, values, skills, and knowledge based on experience and the impact of the environment. Informal education has many functions ranging from recreation, development and education through socialization and cultural up to cognitive-intellectual. This education aims to help pupils cope with school failure and social exclusion, organize free time, improve their skills, but also help them transition from adolescence to adulthood. Despite its non-formal character, it is a professional job. However, it is important to emphasize that there are significant differences in out-of-school settings in European countries, according to René Clarijs (2001), the president of the European Association for Children and Youth and Researcher. In some countries, it has the same public and political status as formal education. According to some laws, it has the same powers as formal education. Different European countries have different visions of its role and significance. It also wears various names: leisure education, extracurricular, non-school, informal, extracurricular, unregistered, without certificates. However, the term of informal education is used in the Council of Europe and the European Union and is referred to as the leading way of learning in societies based on knowledge and information.

Informal education is traditionally understood as learning methods that exist outside the formal education system. It is often treated as an opportunity to compensate for inequalities in access to education, knowledge acquisition. It is perceived as complementary education, which uses various forms of transferring knowledge from the traditional message through self-learning models (individual and group) or education through the use of media to the attempt to create new didactic forms. Its key distinctions are the multidimensional nature of the interaction process, the attempt to meet the challenges of everyday life, the dialogue with man and his environment, the demise of the teacher-student relationship, the departure from *ex cathedra* lectures, the exchange of roles - mutual learning of pupils from teachers and teachers from pupils, and group work. The last element distinguishing it from formal education and the only drawback of this education is the lack of recognition of certificates. In return, quasi-diplomas and quasi-certificates are issued, which can in fact be sources of satisfaction only - and their role is basically finished and quasi-examinations are conducted. This education is based on active participation of students and teachers. Informal education therefore stands in opposition to formal education in its four main aspects.

Meanwhile, the situation of museums - the low number of visitors and the need to make statistics and demonstrate the right number of pupils - forces educators to reach for formal education. Museum education is often confused with school education. As museums observe, usually the educational activity of museums is reduced to meeting the expectations of schools, it is part of specific forms of communication and is considered as an educational system (Karamanov, 2006). As pointed out by F. Weidacher (2005, p. 183), museum education is often confused with the educational medium that the school provides. Meanwhile, the museum is not able to carry out school functions as part of its activities. As Andrzej Rottermund (2011), notes, museums use a different style of teaching than the school uses.

This is a creative education that focuses on the direct contact with an exhibit and utilizes the imagination of the students. Developing new teaching methods based on artistic tools, which also serve to promote the idea of sustainable development. As Rottermund emphasizes, this education has increasing influence on the school - it helps to develop a new teaching system in schools and differently builds a relationship between students, pupils and teachers. In a different way, it also refers to time and place. Enables students to engage in educational activities. And the education itself is treated as a process of learning rather than as a realization of three "rules" - "memorize, pass, forget", which the test-based system of learning is based upon.

PARALLEL EDUCATION

Museum educators seek an exit of the unsettled situation of cooperation between the school and museums, the frequent treatment of these two centers as competitive rather than complementary in the new regulation and changing the form of cooperation with schools. In some museums, you can see the relationship between the educator and the teacher, but these relations rather resemble private, personal contact. The educator then informs the teacher, who willingly, often once a year visits the building, about the offer.

Museum educators mentions:

We try to establish contact with teachers. We take great care to nurture this relationship. We want the teachers to come back. Teachers, therefore, try to help, want and try to come back to the museum.

With schools we can work in a variety of ways. We can organize seminars for teachers. We can rent exhibitions to schools, encourage participation in competitions that we organize. The cooperation we have developed is a harmonious co-operation. It does not bring any problems. It is based on pseudo-private relationships. We have a mailing list of teachers who come back to us. We mutually like each other. We inform them about all events.

It would be cool if we (educators and teachers) could work together. It would be a golden middle. We could consult with our ideas. It is not about them creating a museum education program. It's our job. But it would be good to present them with ready-made suggestions. Teachers could relate to them. We could not jointly construct museum classes because of conflicting goals.

The cooperation between the museum and the school should not start and end in the museum. It is primarily an area where further development could take place, before and after, visiting the museum. There, partnership and cooperation with schools should be developed.

But this collaboration cannot be called institutionalized. Such, in museums in the Małopolskie and Silesian regions, practically does not exist. Hence one recommendation is to regulate these relationships. Establish a basis for institutional cooperation; a space for exchange of information, good practices. These may be conferences for educators and museums. Training is very important so that both can understand the nature of the work of the teacher or educator. Many of the problems both the educators and teachers have discussed during various conversations, stem from mutual ignorance of what the job looks like and the conditions of the other. Jolanta Skutnik calls this specific type of cooperation cultural cooperation, or partnership; a tool of cultural co-operation, which promotes the development of all participants, and therefore both pupils and teachers (Skutnik, 2011).

It seems that the key to creating the basis for cooperation is the combination of informal education, which is comprised of a museum class, with formal school education. This seems to be an important element of contemporary museum education. The combination of both is also a reference to the recommendations of the European Commission. Recent guidelines from the European Commission enthusiastically recommend the combining of formal and informal education. As noted by Manuela du Bois-Reymond, from the Center for the Study of Youth in the study of the relationship between formal and informal education prepared at the request of the Secretary General of the Council of Europe. The aim was to further initiate a discussion within and between the European institutions dealing with the problems of education: "The concepts of learning and education, which once were not even subject to any discussion, in the last decade are becoming part of the increasingly hotter disputes, between educators and sociologists, as politicians and practitioners, both in the national context, as well as European" (Baumfield, Butterworth, 2007, p. 412). He goes on to further

emphasize the importance of informal education in the emergence of the shadows, and its importance for the future of the young generation - before completely marginal - is now becoming the most important in the life of every human being. The European Commission's merger of formal and informal education, sees an opportunity to improve the quality of learning. Promote equality opportunities through the recognition of training and skills acquired through non-formal education and to determine how to accept the experience and Bodies gained in this way ". In order to paint a clear picture of what non-formal education at European level should be: in the sense of the process of learning outside The school curricula, leading to some form of recognized certificate" (du Bois-Reymond, 2005, p. 33).

As part of the "Europe 2020" strategy, informal education of young people is supported, by improving quality, recognizing its outcomes, and combining it with formal education. The White Paper also emphasizes the combination of formal, informal and incidental education and emphasizes its complementary nature. Informal education is well understood as education through practice, and is committed to the primary goal of shaping and developing interest and abilities of children and youth. Meanwhile, according to Zaid Al-Shammari and Thomas Yawkey (2011), who argue that the systematic teaching is the attitude and/or the results achieved within the framework of activities extended over the *longue durée* and divided into different levels of difficulty that lead to outstanding achievements, define formal learning as being "systematic teaching [that] is non-observable, internal, individual learning process that leads to the acquisition of new knowledge and new, creative activity and creative ways to solve problems" (p. 280). Increasingly, in the discourse on education, various statements appear by known academic reformers who believed that education is not only training in a traditional sense, but also a formation, or shaping of. And is this last opinion that brings informal and formal education closer together. As Harold J. Noah and Max A. Eckstein (2004) have noted, informal education can be also successfully used in formal education.

In combined education, both formal and informal education are incorporated. As Bois-Reymond writes, boundaries begin to blur between the time spent learning, working and relaxing. There are new concepts of science, combining science with work, theory and practice. There are significant changes in the relationships between students and teachers / trainers. These two become not so much lecturers as helpers and participants in the learning process. This new model of education favors more civil society building and the involvement of participants in the education process in acquiring knowledge. An important element of this education is commitment and active participation. Moreover, as the authors note Training Package issued by the Council of Europe: "Informal education should be an instrument of integration for all." (Guedens, 2000). According to Bois-Reymond, "The purpose of education is to educate in general: " The sense of informal education, by definition, also means discussing issues related to formal education. All instruments and methods used in informal education will have a long-term impact on formal education and vice versa. Educating the population of Europe requires active conquerors of knowledge who will build their own educational - professional CVs and participate in the life of the local community, the country and Europe "(du Bois-Reymond, 2005, p. 27).

CONCLUSIONS

Museum education, which in my opinion is an example of education combining informal teaching with formal education, is to spread knowledge. Aleks Karamanov (Karamanov, 2011) emphasizing the role of such education points to a number of its obligations. It is intended to motivate the student to personal development, to be a condition for the development of the capacity of thinking, intellectual ability and exploration. He also believes that this is a learning system based on problematic, heuristic and reflective technologies. It is therefore parallel education. Its space, which mentions Renata Pater, is "broadly area of informal education, cross the field of socio-educational activities and formal education system" (Pater, 2015, p. 21). Therefore, it is recommended to include cultural education, which disappears due to the fall of humanitarian values and the depreciation of the humanities, into the school education program. Teachers should not have problems going out of school to pursue parallel education in a cultural institution; they should not seek excuses to be able to show a part of the culture to students in reference to the core curriculum, instead proving that the entrance to the museum is included in the curriculum and that the museum will serve as a venue where a course on a given subject will be implemented. They should have the obligation to leave at least once a semester to cultural institutions with pupils, pursuing cultural parallel education. It seems unacceptable that - unfortunately often enough - students admit that they have never been to a museum or theater. They did not know how to behave in the institutions of culture; they could not creatively relate to the

contents conveyed there. Meanwhile, one of the aims of museum and cultural education is to prepare young people from participation in culture, appreciate a direct contact with art disciplines, and in the case of science centers and technical museums, learn how to interact with science and technology. Adopting art promotes social and moral development; activates dialogue of participants rather than a monologue, contributing to the perception process of art and the world. Karwasz and Raven in the museum pedagogy see a way to solve the above problems. They write: "Museum pedagogues have an important role to play in determining the educational value of an institution's resources and then transforming them into an exhibition to stimulate imagination, motivation, and launch a sequence of interactions to create the research field appropriate to the given exhibit " (Karwasz, Kruk, 2012, p. 12).

Privileging cultural education treated as a "learning culture, cultural heritage and as interiorization of content of aesthetic education to encompass the concept of education through art and art education" (Pater 2010:66), to enable its implementation initiates processes and activities aimed at developing the students. It is participatory education, which should not allow passive attitudes of the participant in the learning process, and in return should support his aspirations for self-realization, self-development, tolerance, respect and kindness towards others. Support the attitude of openness to the world and interest in heritage, history and their contemporary connotations. It supports human development, providing knowledge, but also the passing of values (Wysok, Stepnik, 2013). In this way, education that focuses on important aspects of the twenty-first century education, namely: continuity, interactivity and multidimensionality. It is worth noting that the concept of education through art has a very long tradition in Polish pedagogy. Interestingly, most educators asked to point to the inspiration for pedagogical models and theories, if they mentioned anyone, it was John Dewey, Gorges Hein, Jean Piaget, and Montessori, they did not however refer to their theories. Thus, they pointed to concepts of pedagogy of culture, cultural heritage, American constructivist theories, theories of communication or cultural and artistic mediation, bypassing the Polish background of education through art.

The combination of formal and informal education requires the creation of a new definition of education. So the recommendation is the same: education should be treated as a whole. Do not divide it into levels that have mutually nothing in common. This postulate seems to be slowly realized. Ministerial projects are emerging that allow education as a continuous process of learning, shaping and exchanging good practice. The Ministry of Science and Higher Education and the National Center for Research and Development announce projects in which students work with students in the III and IV stages of education (to name the most important and most up-to-date: University of Young Inventors, Copernicus Pathways) and 2nd stage of education (Young University explorers). It would also create a large project grant for the implementation of parallel education and above all, enable cultural education program for schools, with the condition that specialists-educators should implement it outside the school building. Every class in humanistic and social subjects should go to theater, cinema or museum, and within science-based learning, excursions to research centers and museums of technology and science. Only the sanctioning of such exits will allow teachers to freely use parallel education. In addition, these outputs should be subsidized by the state. It is not uncommon, especially in small towns where, in order for a student to visit a cultural institution, they must travel to a nearby town, an excursion that many parents cannot afford. Many think that if they are obligated to finance a child's excursion to a larger city it is better, in addition to the touring of the old town, he or she would visit a McDonald's or a *Aquapark*, rather than a museum, which is deemed as boring. Such a position of parents is unfortunately very common. Teachers try to counter such beliefs, explaining what a modern narrative museum is and illustrating the many benefits a child can acquire while visiting a cultural institution. Taking into account that much remains to be done about public awareness (such attitudes derive from the privilege of economic sciences and the depreciation of the humanities), combining school education with parallelism and subsidizing trips seems to be a necessity. In addition, it is possible to revive the education program through art, which has since been abandoned in Poland.

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NARRATING THE PAST TO (RE) BUILD THE PRESENT OF METROPOLIS: MIAMI AND NEW YORK.

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The analysis of the tax and communication system implemented in the last fifteen years by some administrations of the East coast of the USA (in particular New York and Miami) revealed the centrality of detaxation in favor of products that foresee the targeted use of some urban spaces as sets of TV series (including period dramas). This attempt seems to be in contrast with the natural Californian attractiveness towards TV-film productions (which represent the second industry of the Country), but it is also an investment to mitigate the fear perceived after the 2001 terrorist attacks and, in case of Florida, the fear that - once the "Cuban hazard" is eliminated - the Hispanic community would turn into a criminal and socially exclusion problem. Nonetheless, Florida has blocked this policy as urged by the Koch brothers, just a few months prior to presidential elections and hand-over of the country to the GOP. Therefore, this phase shows a strong contrast not only between globalized metropolises projected towards a transnational model (that was allowing them - before Trump - to govern themselves by referring to other megacities and not to the nationality of their citizens - such to be defined and named "sanctuary cities" - reserving the faculty not to indicate the names of illegal immigrants to authorities) and the declining idea of soft power, in American version (clearly in recession in 2013).

Starting from Serge Noiret's input according to whom "nowadays, making public history does not only mean to teach or diffuse a certain type of history concretely applied to the problems debated [...] in the public arena, aspiring to reach a wide audience [but] it also means making history in direct contact with the evolution of mentality and sense of common belonging of different communities that co-habit within the national territory and worldwide, and promote the study of their identities"¹, I try to link the plots of the three analyzed period dramas to the history of the cities where they are filmed and to political (therefore also cultural and social) evolutions that are distinguishing the larger network of globalized and transnational megacities (with their own aspirations and policies), comparing them (mostly in the USA) to national-state cities.

1) Cities to re-build

Why is it possible to talk about re-building the analyzed metropolises? Because the audiovisual production is useful not only to "rebuild" their past, but also to: 1) implement the metropolitan economy after September 11th attacks and mainly started immediately after the 2007/2008 financial crisis, which became an economic crisis; 2) reclaim part of the social-urban fabric thanks to targeted contributions and by giving visibility to those city areas (in this case) mostly in need and sometimes to 3) re-think and rebuild a history characterized by the inclusion (also through violence) of certain communities that are permanently settled on the territory (also as elite).

The analyzed plots (*Boardwalk Empire*, *The Knick* and *Magic City*) can be seen overall as the (elitist, politicized and "losing") reconstruction of the American history read through non-wasp communities (Cubans, Italians, Irish, Jews and Afro-Americans) that settled (through illegal economy and use of violence but also thanks to their skills and ambitions) in US urban societies. It is not by chance indeed that the reconstructions cover particularly "fluent" periods of the American history: early 20th century, the prohibition years and the period immediately after the victory of the Cuban revolution; years in which the mainstream totters (or seems to totter, therefore it becomes implicitly stronger) and during which the "newcomers" settle on the territory.

The productions taken in consideration are period dramas because they show the intention to shape an idea of the past, more than any other media, and are selected according to the highest price and impact on the metropolises where they were filmed: these productions are *The Knick* and *Boardwalk Empire* for New York City and *Magic City* for Miami (Beach).

The production years of the analyzed seasons (3 for BE and the only 2 for the others) range between 2010-2015; during this five-year period, the detaxation benefited by productions reached record highs, especially with regards to New York: for BE, the millions of dollars refunded to subjects related to filming can be quantified in 19 and 16 TK.

¹ S. Noiret, "Public History" e "Storia Pubblica" nella Rete, in "Ricerche Storiche", 39, 2-3, 2009, p. 275.

The productions in object (premiers broadcasted by HBO, Cinemax and Starz) were realized and anyhow significantly benefited of the policies implemented by the Mayors of New York during that period: above all Michael Bloomberg (2002-2013, independent), whose policies were brought forward by De Blasio's (Democrat, in office since 2014) stern choices, further aiming at narrating minorities and in Miami, Tomas Pedro Regalado's policies (Republican, in office since 2009). The choices made by the governors of the two States in office during the afore-cited five-year period - the governors of New York (David Paterson and above all Andrew Cuomo, in office since 2011), and Florida governor (above all Republican Rick Scott, in office since 2011) – had a significant impact. In particular, Bloomberg created the brand/initiative "Made in NY" aimed not only to detax, but also to provide necessary infrastructures and services for productions, within a business that reached 130,000 workers. In order to be detaxed, productions had to be 75% filmed in NYC, however in reality, the program was also foreseeing a specific degree to get a job as assistant producers; in 2011, Bloomberg eliminated the incentive program which was re-instated later on by Cuomo while De Blasio, who presented himself as "anti Bloomberg", took only this proposal from his colleague's activity, especially prompting to hire unemployed youngsters in the TV series and audiovisual sector. In particular, the Brooklyn's College of Cinema was promoted as follows: "As the first public film school in New York, Feirstein is dedicated to diversity, inclusion and the cultivation of new and emerging voices in cinema". It is not by chance that this cultural approach is underscored, also born in contrast with Californian video-film production academies; indeed the latter embody an opposite philosophy compared to New York philosophy: away from the city (parts of districts are rebuilt in NY to host them), private, extremely pricy, and strictly related to Hollywood studios (which remain a separate industry). According to BCG's report, New York City is one of only three cities in the world with a filming community large enough to enable a production to be made without needing any roles to be brought in from other locations, including cast, crew members, and the creative team. Additionally, a rich real-life history, iconic locations, diverse storytellers and top talent are among the reasons productions choose to film in New York City. State Senator Martin Golden states: "New York has always been central to stories on the big screen, but many times New York City was recreated on a set, because it was too expensive to film here. We changed that and now we see camera crews and actors filming New York scenes right here on the streets of the Big Apple on a regular basis."²

In fact, the "city-state"-like or actual "sanctuary cities" idea is proposed as centre of an independent cultural and employment policy: President Donald J. Trump harshly objected them. The President elected in November 2016, despite coming from NY, strongly criticizes the entertainment industry.

However, changes to the policies concerning immaterial and cultural productions (also in respect to the meaning analyzed herein) were not introduced after the election of the 45th President of the United States: indeed, it is not by chance that Luis Castro, former HBO, has become Commissioner of the Mayor's Office of Media and Entertainment of New York in 2015, and also the choice made in 2016 regarding detaxing in Florida during the primary Presidential elections appears to be equally blatant. In that occasion, Richard Lynn Scott, governor of the South-East State, supported Trump, allowing Florida (the only State with New Jersey) not to offer any longer incentives to the entertainment industry, while New York city offers: 30%, plus 10% for below-the-line wages in select upstate counties for productions over \$500,000 with a minimum spend of \$0, sign of a fluent political situation in line with State policies that have ambiguous outlooks with regards to the federal government.

Indeed, after the election of the new President, former host for broadcaster NBC (in particular at the time when the so called Muslim-bans were introduced), De Blasio further politicized his choice, detaching from Scott who instead declared to fully agree on the objected policy of the new chief-in-commander (even if characterized by some actual islamophobia traits).

1) **The period dramas, the narration of the 20th century and narration sources.**

This paper is not intended to analyze the consistent scientific literature explaining how fictions can be compared to novels/ good literature that shapes the 20th century mainstream; this document aims at reminding that, not by chance, the "actual" directors of the three analyzed period dramas are amongst the most famous directors worldwide: Steven Soderbergh, Martin Scorsese (who is also the producer) and Mitch Glazer (not as famous but equally renowned at professional level).

The plot of these fictions often focuses on the self-made man and his relation with success in different historical periods and fluency in dealing with illegal and/or immoral aspects of social mobility that often recalls (directly or indirectly) the experience (while filming the fictions) of the relation with immigrants, who are disadvantaged by definition.

All three products are not intended to be simply nostalgic tales, but aim at producing and diffusing the cultural myth of the USA through "rebel projects".

² <http://www1.nyc.gov/office-of-the-mayor/news/721-15/mayor-de-blasio-increased-growth-new-york-city-s-entertainment-industry-brings-8-7>

Above all, these fictions are produced by/ and produce "local" history: *Boardwalk Empire*, *The Birth, High Times*, and *Corruption of Atlantic City* is the best seller volume of Nelson Johnson (a lawyer, judge and author) who, as fond protagonist, tells about the recent past of his city, which is also the background of the entire TV series; while *The Knick* was created by Dr. Stanley Burns, founder and CEO of The Burns Archive, who served as the on-set medical adviser on the series, and worked closely with production and the actors to make the hospital scenes realistic and authentic to the period. The Burns Archive is the world's largest private collection of early medical photography and historic photographs, housing over one million photographs. While it primarily contains images related to medical practices, it is also famous for photographs depicting 'the darker side of life'. "The wardrobe, the scenery, and the dialect – all around well done and extremely well-researched [...] to understand the authenticity apparent in this show"³. Moreover, the Burns Archive has contributed images, as well as consulting and advisory services to various feature films, including: *The Others*, *Gangs of New York*, etc.... *The Knick*, in turn, stirred the production of scientific and specific, more complex literatures, while *Magic City* is strongly based on large photo archives of interiors and fashion referring to historical periods, and dedicated to Miami history.

2) Brooklyn and Miami Beach.

Thanks to these period dramas, "Boardwalk Empire Filming Locations" tour is offered in Atlantic City (New Jersey) and also a Boardwalk Empire Tour in New York; the first offers a tour of the "actual" places filmed in the TV series while the second offers a tour of the sets in Manhattan, Queens (particularly interesting because it includes the "Poppenhusen Institute" which collects grants for its causes) and Staten Island where some scenes were filmed; nonetheless, the New York "district" with audience fond of *The Knick* (which natural set is thought to be in Manhattan) and most BETour is Brooklyn.

There is obviously a tour to visit Downtown Miami, especially "aimed" at detaching from the city of *Miami Vice*, *Scarface* etc... meaning the '80s audiovisual productions (that shaped American fantasies on this city) and that attempts to exalt the historic dimension of the city's architecture even if *Magic City*, in this case, did not play a key role because in view of the expectations, the series was accused not to have sufficiently "exploited" the city (for budget reasons?), not to have particularly boosted the economy of Miami "film tourism", and also because it is no longer filmed since 2013 (year in which the detaxing policies concerning sets in Florida were amended).

Nonetheless, according to some commentators, *Magic City* had an impact in selling the image of Miami: indeed, the attempt to remodel the metropolis like "Gateway to Latin America and the Caribbean" was introduced with this series and would have been "successful" only if continued, because the city is still suffering from the image conceived during the second half of the 20th century and exploited for a long time also by the fiction industry, very difficult to overturn. In this respect, critics on the series are all focused on the synergy with memory policies (a "nostalgic operation") shared with the administration.

Miami Beach, 1959: It was a time of mobsters and the mambo, Cuban exiles and the CIA, Sinatra and sun-soaked glamour. This is the world captured in the new Starz series *Magic City*, the latest addition to TV's postwar nostalgia wave. Premiering this week, *Magic City* centers on hotel visionary Ike Evans (Jeffrey Dean Morgan of *Grey's Anatomy* fame) and his silent partner, notorious mobster Ben "The Butcher" Diamond (Danny Huston), who run the fictional Miramar Playa hotel during a politically tense period of social—and architectural—change that forever reshaped the Miami landscape. Much of the show's action takes place in the hotel [...] ⁴.

It is indeed the last statement that paradoxically infers that it was MC to "bet" the most on a "coated effect", linked to citizens' emotions, "which is not surprising when you learn that the father of *Magic City*'s screenwriter Mitch Glazer, an electrical engineer, designed the lighting for both those hotels. It is also similar to the Deauville, where Mitch Glazer worked as a cabana boy while growing up in Miami"⁵.

2)Is Florida "in line" with the Koch brothers and New York...?

The relation between these cities and film sets seems not to have been successful due to different reasons: Brooklyn choices seem to have negatively affected some politicians/ governors with many objections from citizens/ electors of other districts, while Miami Beach was the first to experience the discontent of various stakeholders when the Koch brothers, major GOP's financiers, clearly decided to do lobbying on the State of Florida in order for the latter to cut all incentives through the *Americans for Prosperity Foundation*. The Koch brothers' ultra-conservative lobbying group helped the institution of the Tea Party in 2009 as political movement

³ <http://www.boweryboogie.com/2014/08/first-look-knick-takes-authentic-approach-toward-turn-century-life/>

⁴ <http://www.architecturaldigest.com/story/starz-magic-city-article>

⁵ <http://www.imdb.com/title/tt1832045/faq>

and sponsored actions against Medicare, Medicaid and the idea of climatic change. "Data compiled by the Florida Secretary of State's office shows that over the past three election cycles, Koch Industries has made the maximum allowable campaign contributions to more than 50 members of the Florida House who opposed the incentives, while Americans for Prosperity actively campaigns against those who support tax credits"⁶.

This battle shows how the sets linked to (all) TV series are involved in the fight related to the vision of future US policies; also linked to employment, industrial development of cities (typical or not) and the educational system; indeed, in the latter field, it is important to notice that Florida has introduced school courses to follow New York footsteps immediately after 2013, declaring that "We're educating them [i.e. assistant producers] with our taxpayer money and they're graduating and fleeing to California and Georgia", which anyhow, inconsistently, do not deviate from an opposite view.

The public opinion is also underlying the debate between States and lobbies, which was already divided much earlier than the end of the second mandate of Barack Obama "The only thing that puzzles me is why there are so many liberals who favor tax breaks for the film industry but are against tax breaks for the myriad other industries that get them (for example; textiles, biotech, and of course "big oil")".

In August 2016, Michael Thom, a professor at the USC published a study titled *Lights, Camera and No Action?* that found that state incentives programs aimed at luring productions away from California and New York had "little to no sustained impact on employment or wage growth" in their states. His study found that since 1997, the film and TV industry has received more than \$10 billion in state tax subsidies⁷.

"The incentives are a bad investment," Thom wrote on USC's website. "States pour millions of tax dollars into a program that offers little return. On average, the only benefits were short-term wage gains, mostly to people who already work in the industry. Job growth was almost non-existent. Market share and industry output didn't budge".

We remember that in 2007, Charles Koch published a book called *The Science of Success*, explaining how the system works, which is clearly and harshly against the models expressed by the American liberal-pop culture, even in the choice of the company's headquarters, which was intentionally kept in Wichita, Kansas, away from Silicon Valley and any other US metropolis. Despite the above, and like Trump, David Koch is the richest New York citizen and in 2012, he financed Republican campaigns with 400 million dollars, to prevent Barack Obama's re-election and put pressure on Miami which was the first to break away from "sanctuary cities" regarding immigration, also rejecting Obama's foreign policies concerning Cuba.

In December 2016, one of the great Section 181 lobbyist (Film Federal Tax Incentive) stated: "It was one of the greatest jobs acts we had," but despite this "enthusiasm"⁸, Trump's administration did not extend the law.

The entire debate is an important step in defining the importance of the State (at federal, state and citizen level) as stakeholder-promoter of some industries and markets. And while Florida bets that no incentives will be re-introduced for the cultural industry, Mayor De Blasio promises instead to focus New York fishes on "diversities" represented by an increasingly important entertainment business.

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⁶ D. Robb, *How The Power-Broker Koch Brothers Are Killing The Florida Film Business*, October 21, 2016 in <http://deadline.com/2016/10/koch-brothers-florida-film-industry-tax-incentives-lobbying-1201838246/> and K. O'Connell, *Florida Yells "CUT" on Film Tax Incentives*, in http://msworldlaw.com/lawyer/2016/07/13/Entertainment-Law/Florida-Yells-CUT-on-Film-Tax-Incentives_bl25725.htm. Cfr. D. Ferrante, *Burt Reynolds blames Gov. Rick Scott for Florida's dying film industry*, in <https://www.orlandoweekly.com/Blogs/archives/2017/03/10/burt-reynolds-blames-gov-rick-scott-for-floridas-dying-film-industry>.

⁷ <https://pressroom.usc.edu/lights-camera-and-no-action-how-state-film-subsidies-fail/>

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NATIONAL CULTURAL IDENTITY in TEACHING ENGLISH to KAZAKHSTANI LEARNERS

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ABSTRACT

It's quite evident, that nowadays English language receives the status of international, global language. Quite all countries all over the world stress the need to master this language as an opportunity to integrate into world economy, science, education and culture. The Republic of Kazakhstan is not an exception because of trilingual policy, where English language is included into all education programs from primary schools to higher educational institutions. This is the period of enculturation for young generation and according to some public opinions learners are unconsciously forced to master foreign language and culture, in this way they are put to acculturation in some degree without being aware properly of their national cultural identity. But as the contemporary methodology states the goal of foreign language teaching is to achieve the level of intercultural communicative competence, which means a reflective use of foreign language, based on a learner's ability to analyze a new language and cultural phenomena in comparison with their native one. Thus, the aim of this paper is to analyze the threats to national and cultural identification of students in higher education while learning English language. As an object of research we have chosen the students of linguistic department, those who are mostly forced to achieve foreign language proficiency and in this way are exposed to risk in losing their national cultural identity. In the research the curriculum, the educational materials (English language course books) were analyzed, questionnaire, interview were conducted.

Key words: national and cultural identity, language as means of national and cultural identification, enculturation, acculturation, intercultural communicative competence.

INTRODUCTION

Nowadays we actually face the globalization in all spheres of our life: policy, economy, and culture, reflected in the way of policy making, producing and consuming goods, sharing the same cultural values, and keeping the same life-style. The ability to integrate into global economy, global political system, global education and universal culture is possible to a shared linguistic code, English language, which receives the status of lingua franca (Crystal, 1997), international (Kumaravadivelu, 2008, 2012), global language (Block and Cameron 2002), world language (McCrum, 2010). The prevalence of English language all over the world as a language of education, as a means of professional development and international communication represent it as economic commodity (Heller, 1999) chosen by language learners and by institutions. But, the more globalization penetrates into national cultures the more actively people try to retain national cultural identity, its internal components as language, tradition, religion. Giddens (2000) was right when he asserted that globalization is indeed the reason for the revival of local cultural identities in different parts of the world. Each community strives to protect and preserve its own identity. Whenever there is a real or perceived threat to this identity, social unrest erupts.

But learning English does not mean only getting knowledge of foreign language and culture, and denial the native language, on the contrary, it helps to understand other cultures, compare with his own culture, and develop the skills of interaction with representatives belonging to other culture. According to contemporary methodology the goal of foreign language teaching is to achieve the level of intercultural communicative competence, which means a reflective use of foreign language, based on a learner's ability to analyze a new language and cultural phenomena in comparison with their native one. Intercultural communicative competence concerned with attitudes and values, knowledge, skills of interpreting and relating, skills of discovery and interaction, and critical cultural awareness (Byram, M. 1997).

Nowadays an intercultural communicative competence is defined by scholars as a capability, which allows a language personality to overcome the borders of his native culture and get a quality of cultures mediator without losing his native cultural identity. The more native language and culture proficient is a learner the more successful he will be in the process of developing his intercultural communicative competence while foreign language and culture acquisition.

That's why the question of national and cultural identification which means 'awareness of national and cultural specifics, relevance to a certain group of people' is a very topical issue in the context of globalization. So, there are contradictory opinions toward the impact of English language on national and cultural identity of peoples from other nationalities:

- Intensive spread of English in the social life of the country weakens national and cultural identity of English language learners;
- Learning and use of English as a foreign language may foster national and cultural identity on the base of ability to understand other cultures, to differentiate foreign culture from native culture.

That's why the aim of this paper is to consider whether the English language learning for a long period leads to weakening and enhancing of national and cultural identification by learners in the context of trilingual education in the Republic of Kazakhstan as a case study.

TRILINGUAL EDUCATION IN KAZAKHSTAN – PROS AND CONS

The cultural project "The Language Trinity" was initiated in Kazakhstan in 2007 by the president N. Nazarbayev in his address to Kazakhstani People "New Kazakhstan in a New World" (MES, 2007) according to which Kazakh language was defined as a state language; Russian language as the language of interethnic communication; and English, as a necessary condition for successful integration into global economy. Further this idea was developed in the State Program of Languages Functioning and Development of the Republic of Kazakhstan for 2011-2020 (MES, 2010). On the base of its main issues the State Compulsory Standard of Education (2012) has introduced teaching a foreign language (English) into all programs from kindergarten to higher educational institutions and since the 2013-2014 academic year English language has been taught in the first grade all over the country. Along with teaching English language as a discipline according to a Road Map of Trilingual Education in the Republic of Kazakhstan for 2015-2020 years (MES, 2015) it's going to start to teach some subjects as Biology, Chemistry, Physics and Computer science in English language in high school in the 2019-2020 year. The number of hours dedicated to English language learning and its duration within the system of education in Kazakhstan was significantly increased. But the introduction of trilingual education since the primary school caused a wide resonance from some scholars, writers, social leaders, and representatives of different social communities in the Republic of Kazakhstan (Mamashuly, 2016). It was claimed that it may lead to destroying the Kazakh nation. The primary education, to their mind, should be given in learners' native language (Kazakh/Russian), because this is the intensive period of enculturation for young generation, when they actively master native culture through native language, acquiring specific behavior patterns, learn about native cultural values, customs and traditions. But instead of it they are unconsciously forced to master foreign language and culture, in this way they are put to acculturation in some degree without being aware properly of their national cultural identity. These fears have a reasonable basis, because Kazakh language during Soviet Union period due to some historical, political and economic factors was underestimated, and Russian language dominated during 70 years and even now it continues to be the main means of communication in some regions of the Republic of Kazakhstan in all spheres of social life. Here, we agree with Suleimenova E. who stated: "In those conditions there were also shifts in relation between Kazakh and Russian languages when for a part of the population the ethnic, cultural and language identity has appeared formal and knowledge of a native language, passive; when the falling prestige of a native language has to a certain extent led to the falling prestige of the nation, its stories and culture; when part of Kazakh population began to use Russian for intra-ethnic communication; when the Kazakh language has been forced out of the sphere of public, official and business communication; when the principle of parity proclaimed by an official policy in practice has turned into a decrease of 'functional health' and 'communicative capacity' of the Kazakh language" (Suleimenova E., 2010, 387). The peculiarities of language environment and language functioning due to some historical, political and economic factors in the Republic of Kazakhstan were widely discussed by Kazakhstani scholars: Zharkynbekova Sh., Akynova D., Aimoldina A. (2013), Tamirgaliev, K., Dzhamalieva, G. & Abdrasheva, B. (2014), Syzdykbayeva, R. (2016).

Thus the status of Kazakh language as symbol of national and cultural identification within the trilingual education is a very disputable and topical issue nowadays, which made us to conduct the following small –scale research.

METHODOLOGY

This study, which looks at the effects of learning English within Kazakhstani trilingual education on national cultural identity from the point of undergraduate students, seeks to answer the following research questions:

- How the undergraduates understand the notion "national-cultural identity"?
- How do the undergraduates evaluate their awareness of native culture?
- How do the undergraduates evaluate their ability to be aware of foreign culture?
- How did English learning influence the enhancing or weakening national cultural identity?
- What was the main reason of weakening learners' national cultural identity during their study at higher educational institution?

PARTICIPANTS

The research was conducted with 44 undergraduates of University named after Suleyman Demirel, bachelor program: "Foreign language: two foreign languages". Most of students were Kazakh by nationality; only 4 undergraduates were of other nationality: Turkish, Uighur, Russian, and 1 person from mixed-race family. The undergraduates were of two categories: 25 who graduated from secondary school with Kazakh language of instruction, and other 19 students – Russian language of instruction. The choice of these participants in our research was not accidentally, because the language of instruction: Kazakh or Russian in the secondary school and, the period of learning English may influence on the formation of learners' national cultural identity.

DATA COLLECTION AND ANALYSIS

Data were collected through qualitative study using questionnaire open-ended and multiple choice questions and interview. The paper-based questionnaires were given to undergraduates at the end of their study at the university, after theoretical course on the voluntary base and took about 20 minutes to complete. The questionnaires contained the information concerning the biographical data: the nationality, type of secondary school: Kazakh/Russian, the period of learning English as well as answers to four research questions. The data were analyzed qualitatively through thematic and content analysis.

FINDINGS

The goal and specifics of curriculum of bachelor program on specialty: "5B011900 - Foreign language: two foreign languages" defines the English as a language of instruction at this department—which means studying quite all disciplines in English, except Kazakh/Russian (8 credits), and other second foreign language chosen by students (French, Spanish, Chinese, Turkish, Korean) – 18 credits, in general - 26 credits out of 142 Kazakhstani credits. As a result - the students' academic language is English and they are mostly forced to achieve English language proficiency and in this way they are exposed to risk in weakening their native language proficiency and national cultural identity.

That's why; the first goal of open-ended question in the questionnaire was to reveal how students understand national cultural identity, which is very important for future teachers of foreign language as mediators of intercultural communication in the classrooms. The analysis of answers to this question revealed that the undergraduates (73%) are close to the meaning of this notion, and it's shown by the following students' comments:

- *National cultural identity it's your cultural background, belongings to definite culture, awareness of your own national culture, tolerance toward other cultures.*
- *Ability to speak your native language perfect and be aware of your customs, so you can explain anything, anywhere and anytime...*
- *National Cultural Identity is a part of personality, his ethnic origin, religion, belonging to social class and culture.*
- *National cultural identity it's the thing that differentiate you from other cultures and nationalities.*
- *National cultural identity means a personality with his customs, traditions, and beliefs.*

At the same time 27% of the undergraduates have some difficulty to answer this question; their answers were not concrete and full:

- *Culture, language, name, surname.*
- *It's a unique feature that only our nation has.*
- *It's your beliefs.*

After reflecting the understanding of national cultural identity, the undergraduates were asked to evaluate their self-awareness of native culture and then foreign culture by marking as "Very well", "Good", "Not so good", "Badly". The answers were divided into two groups, depending on the first language of undergraduates: Russian or Kazakh.

Table 1. Awareness of undergraduate students of native language and culture

Self-evaluation	Kazakh school	Russian school
Very well	56%	10 %
Good	36%	47 %
Not so good	8%	42%
Badly	-	3%

As it's shown in the table, more than half of the students from Kazakh school (56%) evaluated their self-awareness of native culture as "Very well", while only 10% of students from Russian school could do so, even they are all

Kazakh by nationality. Unfortunately, 3% of undergraduates from Russian school are badly aware of Kazakh language and culture.

Table 2. Awareness of undergraduate students of foreign language and culture

Self-evaluation	Kazakh school	Russian school
Very well	12 %	5%
Good	56%	52%
Not so good	32%	42%
Badly	-	-

The results of undergraduate from Kazakh school were slightly better than the results from Russian school, only one general thing in both groups that quite the same number evaluated as “Not so good” awareness of foreign culture. This requires a special attention of instructors, who are mostly concentrated on foreign language phenomena, and less on foreign culture specifics.

Consequently, the undergraduates were asked the third question - How did the study at university influence the enhancing or weakening their national cultural identity? Here they were given some statements to choose:

- *I could understand more better the difference between foreign and native culture.*
- *I learnt more about foreign culture and could reflect about my native culture.*
- *I've begun to speak and think more in a foreign language and less in native language.*
- *I express more interest in acquiring foreign language and culture and less interest in the native culture and language.*
- *I've noticed more mistakes in my written and oral speech in native language.*

The graduates of secondary school with Kazakh language instruction marked mostly the first two statements: “*I could understand better the difference between foreign and native culture*”, “*I learnt more about foreign culture and could reflect about my native culture*”. At the same time there were students, who underlined more interest in acquiring foreign language and culture and less interest in the native culture and language, consequently, they noticed more mistakes in written and oral speech in native language. The same with the graduates from secondary school with Russian language instruction, but they marked that they've begun to speak and think more in a foreign language and less in native language.

And, the last research question was oriented to reveal the main reason of weakening national cultural identity? As a reason of less accuracy and fluency in their native language and cultural awareness graduates marked the following:

- *English as a language of instruction (65%);*
- *Absence of disciplines, oriented to improve their native language and culture (25%);*
- *Absence of personal motivation to improve native language and culture during their study at higher education (10%).*

CONCLUSION

So, in this small in scale research we attempted to analyze whether intensive learning English language in higher education in the Republic of Kazakhstan has threats to national and cultural identification of students. As it was shown, it may have more for the Kazakh students graduated from Russian secondary school, thus, who didn't have more native language and cultural environment for enculturation, and, who continued to study English without being involved in such environment while studying at university. Unfortunately, the specifics of study at this department are focused really more on foreign language and culture and less on native language and culture. There are no disciplines, except Kazakh language (6 credits), oriented to improve learners native language and culture. As a result, learners are not motivated to improve native language and culture during their study at higher education. This issue should be taken by curriculum and program designers, administration of the university in future. Those students, who are from Kazakh school, are in better position thanks to their language background, they could reflect about their native culture on the base of advancing their knowledge of foreign language and culture, this means that these undergraduate students have more potential for being a mediator of intercultural communication in the classroom, thus, are able to develop intercultural communicative competence by English language learners. And

here we strongly agree with Smith (1985:6) who advocates that learning English is not aimed at changing one's identity. Student's ethnic, religious, and political backgrounds should remain the same. Students will certainly want to use English well and be acknowledged as doing so, but this does not require them to attempt a change in their identity. There is no need to become more American or British in order to use English well. One's morals or dedication to family traditions need not change at all.

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NEED ASSESSMENT ON TEACHING AND LEARNING ABOUT WATER RESOURCE MANAGEMENT AND WATER DISASTER OF BASIC EDUCATION

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ABSTRACT

This research aimed to examine the needs of teaching and learning about water resource management and water disaster in Thailand Basic Education. Specifically, researchers examined the current status, problems, and needs of teaching and learning related to water resource management and water disaster in order to develop a local curriculum framework. There were two groups of sample involved. The first group was selected using multi-stage random sampling technique, giving a total of 217 teachers and students while the second group was selected utilizing purposive sampling technique, consisted of 21 experts from various specializations such as water management specialists, local intellectual, and curriculum and instruction specialists. Research instruments were questionnaire, in-depth and focus group interviews protocols. Results revealed that the need level of teaching and learning about water resource management and water disaster was high. In addition, results showed that there are seven themes of learning identified as local curriculum content namely water, water resources, water resource management, natural challenges management using proactive approach, local wisdom on water resources management, definition of terms on water resource management, and related water disaster management. Implications of this research are students have to educate in managing their behavior to live sustainably.

Keywords: Need assessment; water disaster; water resource management

INTRODUCTION

Education in Thailand is mainly provided by the Thai government through the Ministry of Education from pre-school to senior high school. A free basic education of twelve years is guaranteed by the constitution, and a minimum of nine years' school attendance is mandatory. Formal education consists of at least twelve years of basic education, and higher education. Basic education is divided into six years of elementary education and six years of secondary education, the latter being further divided into three years of lower- and upper secondary levels. Kindergarten levels of pre-elementary education, also part of the basic education, span 2 to 3 years depending on the locale, and are variably provided. Non-formal education is also supported by the state. Independent schools contribute significantly to the general education infrastructure (Ministry of Education, 2008).

The education system in Thailand is based upon a 6-3-3 model which constitutes a 9-year compulsory education. The 6-3-3 model is 6 years of primary school education from Grade 1-6, 3 years of lower secondary education Grade 7-9 and 3 years of upper secondary education from Grade 10-12. The first 9 years (from Grade 1-9) are covered under the compulsory education act. Originally, primary schools are only conducting classes from Primary 1-6 or Grade 1 to Grade 6. However, actual scenario indicated that many students fail to complete their compulsory education until Secondary 3 or Grade 9, due to the accessibility of secondary schools in more rural settings, the government introduced an extended primary school model. Thus those primary schools which located in rural areas are allowed to conduct classes up to Secondary 3 or Grade 9. This is the effort of the government to ensure more students especially in rural areas have the opportunities to graduate with a primary school certificate (Ministry of Education, 2014).

The upper secondary curriculum has been divided into two basic tracks: general academic and vocational with approximately 57 per cent of students taking the academic track and 43 per cent the vocational. The curriculum of both lower and upper secondary includes four basic elements: Core subjects such as Thai, mathematics, science, and English which must be taken by all students; Prescribed elective subjects, which differ according to local conditions and needs (the special needs of schools in Islamic areas of the south); Free elective subjects depending on the interests of learners; and activities. With the onset of Asean Economic Community (AEC) 2015 and other perceived shortcomings in the education system, particularly in English education, there has been a proliferation of specialised schools in recent years. Within the last 15 years, a plethora of schools has emerged such as bilingual schools, international schools, English Program (EP) schools, mini-EP schools, and World-class schools.

Basic education in Thailand comprised of 8 core subjects namely Thai language, Health and Physical education, Mathematics, Art, Science, Career and Technology, Social Studies, and foreign languages. Additionally, local curriculum consists of local wisdom, locally relevant knowledge. However national curriculum for secondary education including promotion of 21st century skill, critical thinking, creative thinking, problem solving, encourage self-learning strategies, and encourage moral development (Siribodhi, 2014).

There are three level of evaluation and learning measurement like classroom level, educational constitution level, and national level. Key success factors are measured by continuity and sustained efforts, stakeholder participation and collaboration, support mechanisms, learner centre approach, curriculum development, professionalization of educators, quality assurance of educational institutions, and use of ICT in education (Siribodhi, 2014).

Education reform principle in Thailand comprised of education builds the nations, empowers the individuals, and generate employment. The main aim of Thailand education reformation is to provide equal access to life-long learning and training, enabling citizens to acquire knowledge as asset to generate income. Besides, it is also focusing on integration of all aspects of the quality life which including comprehensive and balance of human development. Finally, development knowledge-based society which leads to knowledge-based economy is highly emphasized.

There are four aspects of the reformation namely learning reform, teacher reform, education quality assurance, and reorganizing of administration system. Learning reform is related to promote learner-centred model, emphasis on active learning, emphasis on the utilization of local wisdom and knowledge, and emphasis on a holistic approach. Meanwhile teacher reform covers promote national, master, and lead teachers, approach system of teacher licenses, and promote innovative teacher-learning, with emphasis of site-based training.

According to Belgrade Charter -1975 the goal of education is to develop a world population aware of, and concern about the environment such as water source and its associated problems which has the knowledge, skills, attitudes, motivations and commitment to work individually and collectively towards solutions of current problems and the prevention of new ones. The Charter has suggested the six objectives for teaching environmental education (Parisamvad, 2014).

- Awareness: to create an overall understanding of the impact and effects of behaviours and life styles on both local and national environments and on short term and long term.
- Knowledge: to help individuals and social groups to acquire basic understanding of the total environment and its associated problems.
- Attitude: to help individual and social groups to acquire social values, strong feelings of concern for the environments and motivation to actively participate in its protection and improvement.
- Skill: to help individuals and social groups to acquire the knowledge and skills of solving environmental problems.
- Evaluation ability: to help individual and social groups to evaluate environmental measures and educational programs in term of ecological, political, economical, social, aesthetic, educational factor.
- Participation: to help individual and social groups to develop a sense of responsibility and energy. Regarding environmental problems like water source and water disaster to insure appropriate action for solving the problems.

PROBLEM STATEMENTS

However, Thailand is facing water pollution as the most critical environmental problem. Despite the annual southwest monsoon, Thailand is subject to drought, particularly in northeastern region. The major disasters over the past three years (2011-2013) provided stark reminders of natural disaster risks that would affect human well-being and future development. The trend of increasing exposure and greater losses associated with disaster demands a better understanding of their complex nature and common causes, namely hazards, exposure, vulnerability, and resulting risk. Those occurred disasters had led to loss of life and economic damage in Thailand (ADPC's news, 2014).

According to Pongsasanongkul (2004), one of the serious environmental problems occurred in Thailand was water pollution and water resource management. Pongsasanongkul further explained that Thai people still at a low level of knowledge related to the value of water resources. Owing to the National Economic and Social Development Plan has been implemented for more than 55 years, caused the serious water pollution problems happened particularly in the industrial economic development areas. As a result, environmental education regarding water resource management and water disaster courses are timely to organize in Thailand. It is an effort to teach how natural environments function, and particularly, how human beings can manage behaviour

and ecosystems to live sustainably. This often implies that education within the school system, from primary to post-secondary to educate the learners to be knowledgeable of the water source and water disaster and its associated problems, aware of the solutions to these problems, and motivated to solve them (Tan & Pedretti, 2010).

Thailand's dramatic economic growth is the major source to cause the water pollution, soil erosion, water scarcity, and other environmental problems. According to the World Bank Team (2001), Thai government had called for declaration on the environmental protection as a top priority. Based on the report of a 2004 indicator in Environmental Monitor (2006) indicated that the cost of air and water pollution in Thailand has increased from 1.6 to 2.6 per cent per annum. This is further supported by Runsuk (2011). Runsuk mentioned that Thai government is running out of strategy to solve the water pollution even though the water pollution issue was getting serious due to the industrial waste water and solid waste dumping. This type of contaminated water can cause health problem like diarrhea which has caused 2.2 million deaths each year worldwide according to a World Health Organization report.

Education is a powerful tool in the socio-economic transformation of a society, community, and nation (Parisamvad, 2014). Since the rapid degradation of environmental quality at grass root level needs to control immediately, all these are only possible through teaching water source and water disaster knowledge to develop learners' abilities to manage the problems. Teacher being the agent of social change, play an active role in shaping the attitudes of learners to promote desire to save the environment. Apart from teachers should tell learners the fundamental duties of Thai citizen with regard to water source and water disaster, Thailand's government has to take actions to protect and improve the natural environment including lakes and rivers. Teaching methods used by teachers in a formal system of education integrate water source and water disaster component with the education are role play, discovery method, observation method, dramatization, story telling, games and puzzles, project method, educational visit, and excursion up to secondary stage of education, seminar, symposia, project, group discussion, action research.

RESEARCH AIMS

The main aim of this study was to examine the needs of teaching and learning about water resource management and water disaster in Thailand Basic Education. Specifically, researchers sought to:

- a. Examine the current status, problems, and needs of teaching and learning related to water resource management and water disaster from teachers and learners' perspectives.
- b. Create a local curriculum framework.
- c. Compare the efficiency of created local curriculum framework between teachers who are using created curriculum framework and teachers who are using conventional curriculum framework.
- d. Compare learners' achievement between the experimental group and control group for three different school sizes namely large, medium, and small.

METHOD

A mixed-mode method comprised of philosophical assumptions that steer the way of data collection and analysis as well as the combination of qualitative and quantitative means in two phases in the research process was employed. The research process covered the continuing, planning, searching, discovering, reflection, synthesis, revision, and learning procedure. As a method, it emphasizes on collecting, analyzing, and combining both quantitative and qualitative data in a single study. The essential principle of using mixed-mode method is the use of quantitative and qualitative methods in combination provides a better understanding of research problems than either method alone.

Researchers of this study follow the research and development research procedure relying on participatory action research which consisted of the following phases:

Phase 1: Drafting a local curriculum framework in enhancing learners' understanding on water resource management and water disaster

The curriculum in this study was created based on the four core components of quality curriculum, namely context, content, teaching and facilitating, and process. Context component consisted of materials, learning environment, routines, and schedules. Content component included what learner know, understand and are able to do. Teaching and facilitating component covered teacher's role, relationship and intentional teaching. The final component was process which including how learners learn.

In order to create a local curriculum framework, two methods of data collection were utilized in the first phase.

A survey design was employed to 217 school directors and teachers to investigate teachers and learners' problems and needs regarding water resource management and water disaster during the teaching and learning process. A total of 12 professional scientists who are specializing in the area of water resource management and water disaster and nine teacher educators who are the experts in the field of curriculum and instruction were involved in a focus group discussion. All the informants were selected using purposive sampling technique. They were led through an open discussion by a skilled moderator. All these informants have sufficient knowledge and expertise to generate rich input to develop the local curriculum framework to assist teachers to manage their teaching by integrated the knowledge of water resource management and water disaster.

The created local curriculum framework include a written philosophy statement. This philosophy statement describe the curriculum's educational beliefs and practices, including how curriculum practices align with quality standards. The statement also highlights the curriculum's unique characteristics. Together, the philosophy statement and curriculum framework serve as important resources for teachers as they communicate with learners and also as they design their classroom level curriculum. The created local curriculum framework helps teachers deliver consistent educational services. The instruments used in Phase 1 were questionnaire, semi-structured interview protocol, and a conservational guidebook for reporting data and records..

Phase 2: A trying-out of the created local curriculum framework

The created local curriculum framework was tried out in the normal classroom as a mean to test for its relevance. The try-out procedure was carried out to five groups of secondary education teachers who were teaching these four subjects science, social sciences, religious, and cultures to Grade 9 students under the administration of Khon Kaen Primary Educational Service Area 4 and Secondary Educational Service Area 25.

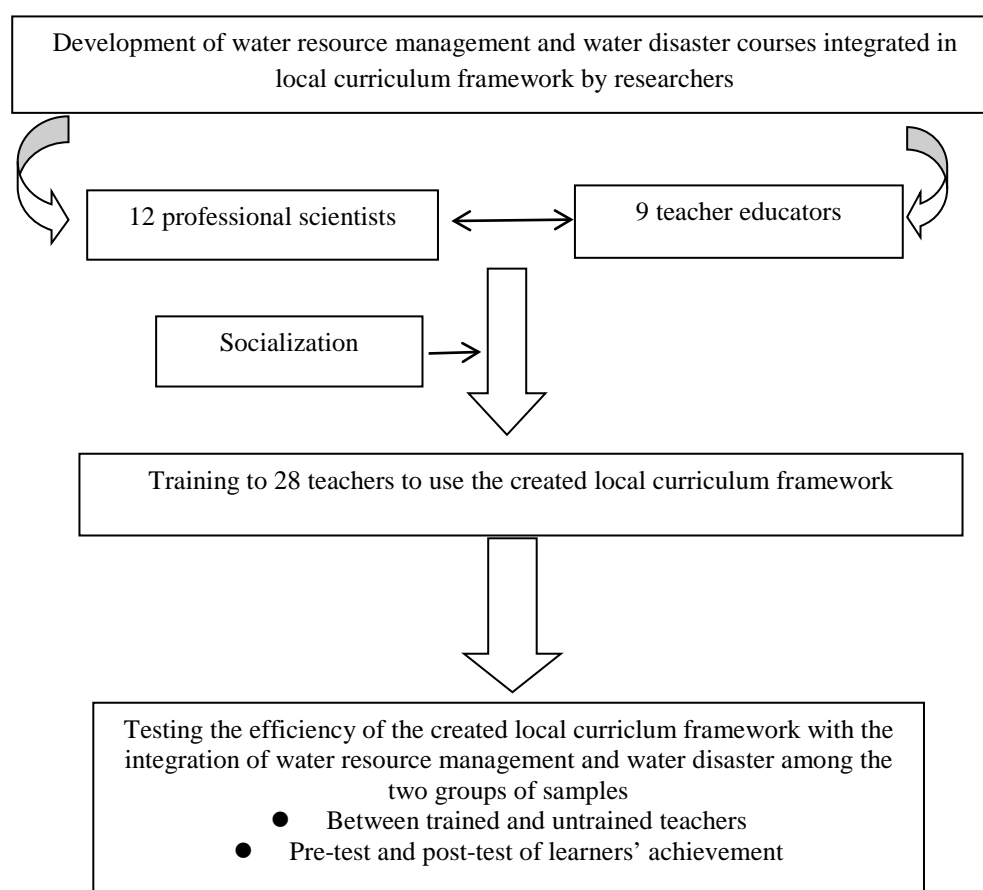


Figure 1. Conceptual framework

Phase 3: Investigation on the efficiency of the created local curriculum framework

There were two groups of sample involved to examine the efficiency of the created local curriculum framework. The first group was selected using multi-stage random sampling technique, giving a total of 56 teachers. They

were equally distributed into experimental and control groups. The second group was 79 Grade 9 learners who were distributed into three classes. The pretest-posttest design was employed to measure learners' achievements before and after the treatment. An assumption is made that differences between pretest and posttest are due to the treatment. Quantitative data from Phase 3 was analyzed by descriptive statistic using the mean score and standard deviation and inferential statistic using paired t-test and One-way ANOVA. Paired t-test was identified to be suitable for this study because all the participants were matched pairs and it was considered as a case-control group. One-way ANOVA was used to examine the differences between the three groups of learner from different school sizes. Figure 1 above shows the developmental process of the local curriculum framework.

RESULTS

Results are presented according to the aim as mentioned above. The results demonstrate in three parts and organized according to quantitative and qualitative methods. The initial results highlight the current status, problems, and needs of teaching and learning related to water resource management and water disaster from the teachers and learners' perspectives. This is followed by development of integrating water resource management and water disaster courses in the local curriculum framework process derived from 12 professional scientists and nine teacher educators from the area of curriculum and instruction through focus group discussions. The results were reported from the feedback of the 21 informants through their ratings. Finally, the efficiency of the created local curriculum framework was evaluated from the two groups of sample namely teachers and learners.

The current status, problems, and needs of teaching and learning related to water resource management and water disaster

Results of the study showed that teachers and learners perceived all the four scales of created local curriculum framework namely school personnel, learning activities with teachers, innovations and learning sources, and assessment and evaluation were at moderate levels. According to teachers' perspective, they indicated that there are too few problems created in the local curriculum framework. However, learners were satisfied with the learning methodologies, instructional technique, teaching and learning process in the created local curriculum framework.

The created local curriculum framework is required participation in sequence steps onto introduction, recapitulation of learning purpose, the seven lesson plans such as water resource, water basin resource, water resource management, natural disaster management and its approach, strategy, and policy, local folk wisdom of water management, specified keywords of water resource and natural disaster management learning groups. The initial finding revealed that quality of learners' outcomes from using the created local curriculum framework of the water resource and natural disaster management has to be transferred to the basic education commission successfully.

On the other hand, the purpose of the teacher training curriculum training is planned to develop the knowledge and ability of teachers to plan a learning unit on the water resource and natural disaster management. Researchers utilized an experimental practice and plan theory training over the three days training sessions. Training instruments were composed of training curriculum documents including a guide book, a trainee document, learning unit sampling, pre- and post-assessing tests, teachers' satisfaction questionnaire, and the quality of learning units' assessments. Results from teachers' perceptions revealed that all the index of item-objective congruence values (IOC) are acceptable. The details of result showed that the guidelines of the created local curriculum framework and IOC of 1.00 and appropriately average values of 1.00 and the quality assessment of learning unit indicating IOC of 0.96, and teacher's achievement throughout the pre- and post-assessment with an IOC of 0.97.

These results implied that the problems of all the four respective scales namely school personnel, learning activities with teachers, innovations and learning sources, and assessment and evaluation have reached the degree of efficiency. Specifically, learning activities and teaching problem scale showed that teachers need to teach at the alternative or high level of water resource and water disaster courses. In other word, teachers have to utilize the high level of format, technique or methodology in order to satisfy their learning unit group. Besides, the created local curriculum framework also includes an introduction, learners' goals for their development, the seven-learning sub-content categories such as water resources, water basin sources, natural disaster administration and its approach or strategy, local folk wisdom in water management, and key words for water and disaster management sub-contents. The important factors of the created local curriculum framework of water resource and disaster content were used for educational institutions.

The created local curriculum framework training is planned to develop learners' knowledge content and abilities through learning units. Researchers utilized the experimental workshop and training contents for learners

through the three days' workshop training. The topics that cover in the workshop are training instruments, training texts, training guidebook, training trainee document, learning unit samples, pre- and post- assessment tests, questionnaire about teachers' satisfaction, and questionnaire about the quality of the curriculum unit. The results showed that the created local curriculum framework conformed to the professional guideline of this curriculum, whereby the IOC was 1.00, appropriately average value was 1.00; quality assessment of learning unit with the IOC as 0.96; teacher's achievement throughout pre- and post- assessment with the IOC value as 0.97, and questionnaire about teachers' satisfaction with IOC value as 0.94.

Investigation on the efficiency of the created local curriculum framework

After the 28 teachers were trained using the created local curriculum framework, they were evaluated based on their abilities to teach water resource management and water disaster courses. Result showed that more than 70 percent of the 28 trained teachers are able to build the learning unit of the water source and natural disaster courses. Out of the 28 trained teachers, five and 23 teachers rated the created local curriculum framework as very high and high quality respectively. In addition, the overall perceptions on their satisfactions indicated as high level too.

In addition, results showed that the learning outcomes and achievements of learners in term of their learning using the learning units of water source and natural disaster content are improved. There was a significant difference between the experimental group and control group at the significant level as 0.01. However, there was no significant difference between the three groups of learners from three different school sizes.

DISCUSSION

Results indicate that teachers and students agreed of problems and needs for developing the created local curriculum framework in accordance with their points of view especially in administering the teaching and learning activities with the intervening informative of students' learning on water source and natural disaster learning units. Teachers have to use the innovations or learning medias and learning source to teach and students outcomes have to be emphasized through their assessments. On top of that, teachers' abilities in their teaching management were reflected from the data of personnel, teaching and learning activities, learning source, assessment and evaluation, and teachers' problems and needs.

Results showed that learners have improved on their knowledge and abilities to manage water resource and water disaster. This enables them to have self-development, educate community, family, and local to be use of the water resource management and water disaster knowledge in their lives forever. As a result, Thai's government should introduce water resource management and water disaster content into the basic curriculum at the lower secondary of basic education. This is because Thailand is located at monsoon continent and is likely to face with continuing floods and water disaster almost every year. The most recent serious flood was occurred in the year 2011.

According to the comments given by the professional scientists and teacher educators, revealed that there are a few areas need to improve. For example, the uprightness and accuracy crisis, learners' abilities in learning crisis, importance content and concerning about crisis (Utthanan, 2009). This created local curriculum framework is the first curriculum framework that satisfy the basic education learners from Grade 1 to 12. It is found to be suitable to apply and develop teaching and learning management that covering contexts, problems of students' needs, communities, and local wisdom. This result was found to be in line with Padsin's (2008) study. Padsin studied on the development of a learning unit on Lam Pao Flood Plain Environment school group.

This research has two major contributions. The first contribution is to build the capacity of Thai communities to address and solve problems related to water source and water disaster. The second contribution is to change the teaching and learning process in order to build a generation of community members aware of environmental issues. This research utilizes water source and water disaster awareness as an entry point for a new way of teaching and learning that enables learners to 'construct their own knowledge'. Anticipated outcomes cover new teaching strategies, renewed focus on curriculum concepts, an increase in teachers' comfort levels within the communities, improved learners attitudes about learning, and increased willingness by the local wisdoms to share information and ideas. Ultimately, the researchers expected to create a new school-community partnerships focused on sustainable water resource management.

CONCLUSION

Tackling the serious water disaster risks, at national or local levels of Thailand, systematic approaches would be geared towards a large-scale implementation, with the kind of commitment and sustained actions described in the created local curriculum framework. These requires management by the Ministry of Education, national

society, commitment, political will, and a long-term perspective. This created local curriculum framework will serve to help those planning focused public awareness and public-education efforts for disaster risk reduction.

The created local curriculum framework synthesizes the range of approaches taken across the teaching and learning movement, to provide an overview of what works and what does not, backed up by research evidence where possible. This will help the Ministry of Education to make an informed choice about the most appropriate approaches, and to draw on existing resources wherever possible, to create a system that is more efficient and effective. Besides, it set out approaches and tools for public awareness and public education in disaster risk reduction which are widely in use by national societies. Education is the sharpest weapon because it pulls together a range of research on risk communications and public education for behaviour change, and practitioners' own discoveries in applying these.

The future steps should focus on four key approaches such as campaigns, participatory learning, informal education, and formal school-based interventions. It should consider the following tools for implementing these approaches including publications, curricula, modules, and presentations, e-learning, audio and video materials, web pages and activities, and social media and telecommunications. It then explains how to ensure that these tools are high quality, focusing on powerful images and well-crafted messages that are engaging, proven, adapted, and localized. It also highlights the principles needed to apply these effectively. This is to ensure legitimacy and credibility, consistency and standard messaging, scalability, and sustainability.

The future of the water source and water disaster research looks promising. After disseminating of research results, researchers hope that Ministry of Education, Thailand will expand the results to neighboring schools. The main principles will be incorporated into the next five-year education plan, thus expanding them to other parts of Thailand. In this way the research will have a real impact on the future of the Thai education system.

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NEEDS ASSESSMENT ON KNOWLEDGE REGARDING THE USE OF ICT NETWORK OF THE COMMUNITY MEMBERS FOR SELF-DEVELOPMENT

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ABSTRACT

The purposes of this study were 1) to assess needs in knowledge regarding the use of ICT networks of community members for self-development, 2) to prioritize needs in knowledge regarding the use of ICT network of the community for self-development, and 3) to compare the difference of needs in knowledge regarding the use of ICT networks of the community members when classified by economic and social status. The sample used in this study was 100 people in Phadaeng municipality, Chartrakarn district, Phitsanulok province who were pleased to give in-depth data. The research found when determined needs in using ICT networks of the community members for self-development with $PNI_{modified}$ that the overall picture of needs for using ICT network of the community members was low ($PNI_{modified} = 0.29$). When prioritizing needs of using with $PNI_{modified}$, it was found that knowledge with the highest index were animation and website development ($PNI_{modified} = 0.58$). The second was the use of statistical and research software packages ($PNI_{modified} = 0.55$), while the third was picture software applications ($PNI_{modified} = 0.52$). When classified the difference of needs with $PNI_{modified}$ by economic and social status, it was found that the group with the monthly income over 50001 baht had the highest needs ($PNI_{modified} = 0.56$). The needs in knowledge about the use of statistical and research software package was the highest ($PNI_{modified} = 0.91$). Suggestions: There should be further study to research and develop guidelines for dissemination of knowledge in using ICT networks to community. Ans there should be further study to manage training for using ICT networks in community nationwide.

Key words: Assessment, ICT, Self-development

INTRODUCTION

Learning process of local people is the important factor to strengthen community as learning process improves critical thinking, problem-solving, decision-making and knowledge transferring skills. The information search ability and analysis ability are vital for life-long learners (Candy, Crebert, and O' Leary, 1994). This type of learning encourages learners to continue searching for knowledge with goal-oriented purpose. Self-motivation learning will lead to better use of knowledge than transmitting knowledge from teachers (Knowles, 1975). Knowles proposes humanistic learning theory which emphasizes self-directed learning. Human beings grow up with the self-directed ability and problem-centered learning. He believes that people want to search for their own needs and learn from their own experience. The intrinsic motivation that leads human beings to learn includes self-esteem, enthusiasm, the wish for success and the satisfaction of success. Knowles (1975) proposes andragogy for adult learners with the belief that learners will learn best when they can manipulate the methods and techniques of learning by themselves (Knowles, 1975).

Needs assessment refers to a process to prioritize the needs of the target group from the most important to the least important factors in order to determine the developmental procedure. It includes the study of actual state and alternatives for the target state. The result of the needs assessment reflects the needs for development which is important for the actual developmental planning (Suwimon Wongwanich, 2012). Therefore, the researcher is interested in studying the needs assessment on knowledge regarding the use of ICT network of the community members for self-development based on the concept that the needs for learning is relevant to society change. As information communication technology is the basic media for learning among community members, knowledge regarding the use of ICT network is the basic tool for them to access the knowledge according to their needs.

OBJECTIVES

- 2.1 To assess the needs on knowledge regarding the use of ICT network of the community members for self-development
- 2.2 To prioritize the needs on knowledge regarding the use of ICT network of the community members for self-development

2.3 To compare the needs on knowledge regarding the use of ICT network of the community members for self-development based on their economic and social status

HYPOTHESIS

Needs on knowledge regarding the use of ICT network of the community members for self-development are at the high level.

INSTRUMENT AND RESEARCH METHODOLOGY

1. Population and sample

The population and sample used in this study was 100 people in Phadaeng municipality, Charttrakarn district, Pihitsanulok province.

2. Instrument of the study

The instrument used in this study was a needs assessment form on knowledge regarding the use of ICT network of the community members for self-development

3. Data collection

The researcher collected the data from 100 people in Phadaeng municipality, Charttrakarn district, Pihitsanulok province who were the sample of the study during January 15-31, 2016. After getting enough forms, the needs assessment was first analyzed according to the data from the first part of the needs assessment form. Percentage was used for the basic information of the informants. For the second part of the needs assessment form, mean, standard deviation and Modified Priority Needs Index ($PNI_{modified}$) were used for data analysis.

FINDINGS

It was found that among the 100 informants, 71 percent were female and 29 percent were male. Most of them (89 percent) were government officials. The rest were students (8 percent) and employees from private sector (3 percent). 90 percent of them work about learning management. Their monthly income was varied: 10,001-30,000 baht (49 percent), 30,001-50,000 baht (25 percent), less than 10,000 baht (17 percent), and more than 50,000 baht (9 percent). Most of them (57 percent) accessed ICT every day, and 46 percent of them spent 1-3 hours daily on ICT. 74 percent of them used smart phones to access ICT. 26 percent of the informants accessed ICT from desktop computers. The result of needs assessment on the use of ICT network of community members for self-development by was low ($PNI_{modified} = 0.29$). When considered in detail, it was found that the needs for animation and website development was the highest ($PNI_{modified} = 0.58$), followed by the use of statistical and research software packages ($PNI_{modified} = 0.55$), the picture software applications ($PNI_{modified} = 0.52$), the use of multimedia ($PNI_{modified} = 0.48$), the application development on Smartphone ($PNI_{modified} = 0.28$), the data storage ($PNI_{modified} = 0.13$), and the use of Microsoft Office and documents ($PNI_{modified} = 0.07$) respectively. The unnecessary knowledge for community members encompassed the search for knowledge for self-development and network communication ($PNI_{modified} = -0.02$) and the use of Google Applications ($PNI_{modified} = -0.01$) respectively. The results of prioritizing the needs by $PNI_{modified}$ were as follows.

Table 1: The result of prioritizing the needs by $PNI_{modified}$ categorized by groups

No.	Needs	$PNI_{modified}$
1	Animation development	0.58
2	Website development	0.58
3	The use of statistical and research software packages	0.55
4	The picture software applications	0.52
5	The use of multimedia	0.48
6	The application development on Smartphone	0.28
7	The data storage	0.13
8	The use of Microsoft Office and documents	0.07
9	The search for knowledge for self-development	0.02
10	The use of Google Applications	(0.01)
11	The communication through ICT networking	(0.02)

From Table 1, the highest needs for knowledge regarding the use of ICT network of the community members for self-development were animation and website development ($PNI_{modified} = 0.58$), followed by the use of statistical and research software packages ($PNI_{modified} = 0.55$), the picture software applications ($PNI_{modified} = 0.52$), the use of

multimedia ($PNI_{\text{modified}}=0.48$), the application development on Smartphone ($PNI_{\text{modified}}=0.28$), the data storage ($PNI_{\text{modified}} = 0.13$), the use of Microsoft Office and documents ($PNI_{\text{modified}}=0.07$), the search for knowledge for self-development ($PNI_{\text{modified}}=0.02$), the use of Google Applications ($PNI_{\text{modified}}= -0.01$), the communication through ICT networking ($PNI_{\text{modified}}=-0.02$) respectively. And when considered needs assessment on the use of ICT network of the community members for self-development by topics of needs, the overall picture can be shown below.

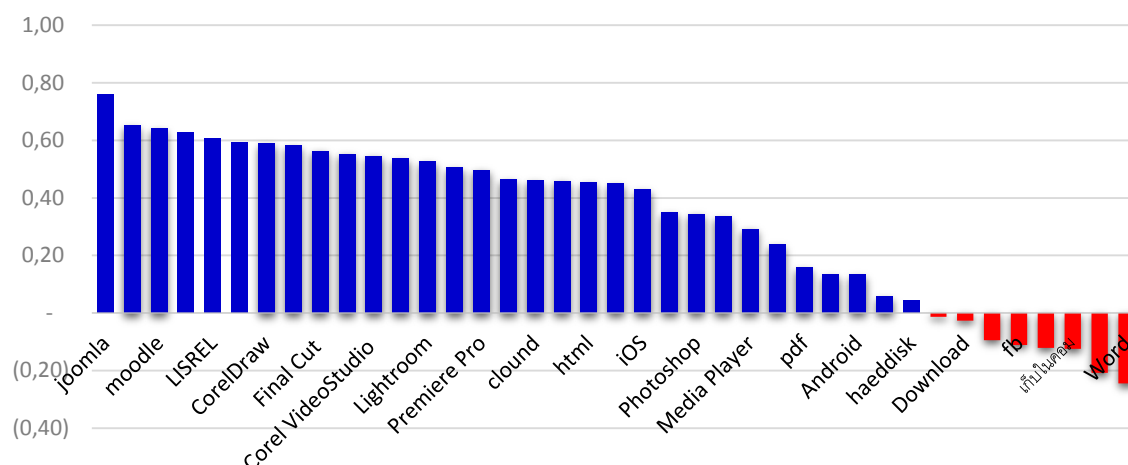


Figure 1. Needs assessment on knowledge regarding the use of ICT network of the community members for self-development

Figure 1 shows that the community members need the knowledge on Joomla website development the most ($PNI_{\text{modified}}=0.76$), followed by those with the needs more than 0.5, for instance, Moodle ($PNI_{\text{modified}}= 0.64$), Maya ($PNI_{\text{modified}}= 0.63$), LISREL MODEL ($PNI_{\text{modified}}=0.61$), CorelDRAW and AutoCAD ($PNI_{\text{modified}}=0.59$), BMDP-PC ($PNI_{\text{modified}}=0.58$), Final Cut ($PNI_{\text{modified}}=0.56$), STATPACK and Corel VideoStudio ($PNI_{\text{modified}}=0.55$), Illustrator ($PNI_{\text{modified}}=0.54$), Lightroom ($PNI_{\text{modified}}= 0.53$), Sony Vegas and Premiere Pro ($PNI_{\text{modified}}=0.50$) respectively.

Table 2: Needs categorized by the groups of monthly income

Needs	PNI_{modified} categorized by the groups of monthly income (baht)			
	Less than 10,000	10,001-30,000	30,001-50,000	From 50,001 or higher
The search for information for self-development	0.17	0.12	0.19	0.20
The data storage	0.21	0.29	0.32	0.26
The communication through ICT networking	0.22	0.16	0.27	0.34
Website development	0.57	0.64	0.74	0.77
The application development on Smartphone	0.40	0.42	0.55	0.40
the use of Google Applications	0.30	0.27	0.21	0.50
the use of Microsoft Office and documents	0.28	0.34	0.33	0.51
the picture software applications	0.35	0.56	0.49	0.71
Animation development	0.39	0.67	0.54	0.88
the use of multimedia	0.47	0.49	0.45	0.72
the use of statistical and research software packages	0.36	0.62	0.49	0.91
Average	0.34	0.42	0.42	0.56

From Table 2, the highest need for knowledge regarding the use of ICT network of the community members for self-development categorized by the groups of monthly income was from the group whose monthly income was from 50,001 baht or higher ($PNI_{\text{modified}} = 0.56$), followed by those whose monthly income was between 10,001-30,000 baht and 30,001-50,000 baht ($PNI_{\text{modified}} = 0.42$), and those whose monthly income was less than 10,000 baht respectively. When considered the knowledge needs regarding the use of ICT network of the community members for self-development categorized by the groups of monthly income, it was found that those whose

monthly income was less than 10,000 baht need the knowledge on website development the most ($PNI_{\text{modified}} = 0.57$). The group of community members whose monthly income was between 10,001-30,000 baht needed the knowledge on the animation development the most ($PNI_{\text{modified}} = 0.67$). The group of community members whose monthly income was between 30,001-50,000 baht needed the knowledge on website development the most ($PNI_{\text{modified}} = 0.74$). The group of community members whose monthly income was from 50,001 baht or higher need the knowledge on website development the most ($PNI_{\text{modified}} = 0.91$).

CONCLUSION

The basic information of the informants who answered the needs assessment form on the knowledge regarding the use of ICT network of community members for self-development was as follows. Among the 100 informants, 71 percent were female and 29 percent were male. Most of them (89 percent) were government officials. The rest were students (8 percent) and employees from private sector (3 percent). 90 percent of them work about learning management. Their monthly income was varied: 10,001-30,000 baht (49 percent), 30,001-50,000 baht (25 percent), less than 10,000 baht (17 percent), and more than 50,000 baht (9 percent). Most of them (57 percent) accessed ICT every day, and 46 percent of them spent 1-3 hours daily on ICT. 74 percent of them used smart phones to access ICT. 12 percent of the informants accessed ICT from desk-top computers.

The result of needs assessment on the use of ICT network of community members for self-development by was low ($PNI_{\text{modified}} = 0.29$). When considered in detail, it was found that the needs for animation and website development was the highest ($PNI_{\text{modified}} = 0.58$), followed by the use of statistical and research software packages ($PNI_{\text{modified}} = 0.55$), the picture software applications ($PNI_{\text{modified}} = 0.52$), the use of multimedia ($PNI_{\text{modified}} = 0.48$), the application development on Smartphone ($PNI_{\text{modified}} = 0.28$), the data storage ($PNI_{\text{modified}} = 0.13$), and the use of Microsoft Office and documents ($PNI_{\text{modified}} = 0.07$) respectively. The unnecessary knowledge for community members encompassed the search for knowledge for self-development and network communication ($PNI_{\text{modified}} = -0.02$) and the use of Google Applications ($PNI_{\text{modified}} = -0.01$) respectively.

The results of prioritizing the needs by PNI_{modified} were as follows. The highest needs for knowledge regarding the use of ICT network of the community members for self-development were animation and website development ($PNI_{\text{modified}} = 0.58$), followed by the use of statistical and research software packages ($PNI_{\text{modified}} = 0.55$), the picture software applications ($PNI_{\text{modified}} = 0.52$), the use of multimedia ($PNI_{\text{modified}} = 0.48$), the application development on Smartphone ($PNI_{\text{modified}} = 0.28$), the data storage ($PNI_{\text{modified}} = 0.13$), the use of Microsoft Office and documents ($PNI_{\text{modified}} = 0.07$), the search for knowledge for self-development ($PNI_{\text{modified}} = 0.02$), the use of Google Applications ($PNI_{\text{modified}} = -0.01$), The communication through ICT networking ($PNI_{\text{modified}} = -0.02$) respectively. The result of the needs assessment on the use of ICT network of the community members for self-development by topics of needs, the overall picture revealed that the community members need the knowledge on Joomla website development the most ($PNI_{\text{modified}} = 0.76$), followed by those with the needs more than 0.5, for instance, Moodle ($PNI_{\text{modified}} = 0.64$), Maya ($PNI_{\text{modified}} = 0.63$), LISREL MODEL ($PNI_{\text{modified}} = 0.61$), CorelDRAW and AutoCAD ($PNI_{\text{modified}} = 0.59$), BMDP-PC ($PNI_{\text{modified}} = 0.58$), Final Cut ($PNI_{\text{modified}} = 0.56$), STATPACK and Corel VideoStudio ($PNI_{\text{modified}} = 0.55$), Illustrator ($PNI_{\text{modified}} = 0.54$), Lightroom ($PNI_{\text{modified}} = 0.53$), Sony Vegas and Premiere Pro ($PNI_{\text{modified}} = 0.50$) respectively.

The result of the difference of needs analyzed by PNI_{modified} and categorized by economic and social status was as follows. The highest need for knowledge regarding the use of ICT network of the community members for self-development categorized by the groups of monthly income was from the group whose monthly income was from 50,001 baht or higher ($PNI_{\text{modified}} = 0.56$), followed by those whose monthly income was between 10,001-30,000 baht and 30,001-50,000 baht ($PNI_{\text{modified}} = 0.42$), and those whose monthly income was less than 10,000 baht respectively. When considered the knowledge needs regarding the use of ICT network of the community members for self-development categorized by the groups of monthly income, it was found that those whose monthly income was less than 10,000 baht need the knowledge on website development the most ($PNI_{\text{modified}} = 0.57$). The group of community members whose monthly income was between 10,001-30,000 baht needed the knowledge on the animation development the most ($PNI_{\text{modified}} = 0.67$). The group of community members whose monthly income was between 30,001-50,000 baht needed the knowledge on website development the most ($PNI_{\text{modified}} = 0.74$). The group of community members whose monthly income was from 50,001 baht or higher need the knowledge on website development the most ($PNI_{\text{modified}} = 0.91$).

DISCUSSION

From the research result, the overall picture of needs for using ICT network of the community members for self-development was low ($PNI_{\text{modified}} = 0.29$) which was not compliance with the research hypothesis that expected

the needs in knowledge regarding the use of ICT network of community members for self-development at the high level. This might be because at the present time, the knowledge regarding the use of ICT network is widely spread among people. Communicating with others, searching for information, and exchanging knowledge can be done freely. For instance, online communication in Thai society has been changed the use of ICT network at the high level, especially, the use of online social network. This is compliance with the study of needs assessment on online society network in teaching and learning for undergraduates which reveals that the undergraduates of universities in the jurisdiction of Ministry of Education are members of online social network 100 percent (Chawin Chukusol, 2013). This reflects the importance of needs on knowledge regarding the use of ICT network that is compliance with the theory of andragogy for adult learners with the belief that learners will learn best when they can manipulate the methods and techniques of learning by themselves (Knowles, 1975) with the advanced technology that leads to ability to access information. Therefore, the community members need knowledge on ICT network and the ability to access information through the advanced technology like smartphone. Smartphone is a portable device (defined as Personal Digital Assistant: PDA) which is very convenient to use. Around 74 percent of people are using smartphone to access varieties of information. As smartphone is used as personal device, it derives from the intrinsic motivation e.g. self-esteem, curiosity, the wish for success and the satisfaction of that success. This leads to the result that needs in knowledge on information search for self-development appears negative ($PNI_{modified} = -0.02$). When considered the prioritizing of importance of needs categorized by groups which found that the highest index of needs goes to animation and website development ($PNI_{modified}=0.58$). When considered by economic and social status, the informants whose monthly income was between 30,001-50,000 baht need the knowledge on website development the most ($PNI_{modified}=0.74$), followed by the use of statistical and research software packages ($PNI_{modified}=0.55$) and the picture software applications ($PNI_{modified}=0.52$). These programs are complicated in use, but essential for the actual practice of working people, therefore, it is challenging and still of the high level needs. Recommendations are (1) Should be further study to research and develop guidelines for dissemination of knowledge in using ICT networks to community. (2) Should be further study to manage training for using ICT networks in community nationwide.

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NEGATIVE EFFECTS OF BARRIERS TO SEEKING PSYCHOLOGICAL HELP AND THEIR ASSOCIATION WITH DEPRESSION, ANXIETY, STRESS, AND SELF-EFFICACY AMONG COLLEGE STUDENTS

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ABSTRACT

Research has consistently shown that barriers to seeking psychological help are multidimensional and negatively associated with formal help-seeking. However, studies examining the negative effects of barriers to seeking psychological help among diverse samples are scarce. Thus, the purpose of this study is to examine the negative effects of barriers to seeking psychological help among Turkish college students, in particular investigating the association between such barriers and depression, anxiety, stress, and self-efficacy. Participants included 529 college students ($M=21.48$, 63% female) recruited from various faculties in a university in the Central Black Sea Region of Turkey. They completed the Depression Anxiety Stress Scale-21, the General Self-Efficacy Scale, the Barriers to Seeking Psychological Help Scale, and a personal information form. One-way multivariate analyses of variance (MANOVA) and hierarchical multiple regression analyses were performed. One-way ANOVA results showed that students who had previously sought psychological help had significantly higher depression, anxiety, and stress scores than other students and male participants had higher general self-efficacy scores than female participants. Hierarchical multiple regression analyses also revealed that the dimensions of barriers to seeking psychological help were positively correlated with depression, anxiety, and stress and negatively correlated with general self-efficacy after controlling for gender and previous help-seeking experience. Reducing barriers related to seeking formal psychological help may help to foster psychological well-being among Turkish college students. **Keywords:** Barriers to seeking psychological help, depression, anxiety, stress, self-efficacy, college students, Turkey.

INTRODUCTION

Research has shown that college students face various mental health problems that may require receiving psychological help (Kessler et al., 2005). Studies investigating help-seeking behaviors among various age groups have also suggested that young people between 18 and 24 years old are less likely to seek psychological help compared to middle aged adults, and generally, the ratio of psychological help seeking was lower among young people, especially in college aged students (Bijl & Ravelli, 2000; Reavley, Cvetkovski, Jorm, & Lubman, 2010; Ryan, Shochet, & Stallman, 2010). These findings indicate that college students may avoid using psychological help services due to certain perceived barriers towards receiving psychological help. Barriers related to seeking psychological help are defined as a general unwillingness to receive psychological help or factors hindering an individual's actual psychological help-seeking behavior (Kuhl, Jarkon-Horlick, & Morrissey, 1997).

A study conducted with 4,027 participants aged between 19 and 64 years old to determine the barriers to seeking psychological help reported that 37% of males and 27% of females had experienced such barriers (Andersson, Moore, Hensing, Krantz, & Staland-Nyman, 2014). Another study conducted on women with antenatal depression stated that 52.9% of the participants, who had no previous psychological help experience, reported at least five significant barriers that prevented them from receiving any psychological help (Fonseca, Gorayeb, & Canavarro, 2015). Similarly, research conducted on college students emphasized that the students perceived various barriers and, therefore, avoided receiving psychological help (Vanheusden et al., 2008). The developmental period of

college students involves significant changes, including starting college life by leaving home, job and occupation selection, academic problems, romantic and emotional issues, etc., which leave college students at risk for mental health problems, such as depression, anxiety, and stress (Blanco et al., 2008). Additionally, anxiety disorders, mood disorders, substance abuse, and non-emotional psychosis often start in adolescence or young adulthood corresponding to the college education years (Kessler et al., 2007). Therefore, it is important to investigate correlates of barriers to receiving psychological help among college students.

Factors affecting receiving psychological help could be explained under behavioral theoretical models with three factors, namely predisposing factors, enabling factors, and perceived need. Predisposing factors are demographical variables and pre-existing factors that contribute to the possibility of receiving psychological help. Enabler factors, which include income, social security, family support, and social resources, could either strengthen or lessen the likelihood of receiving psychological help. Perceived need factors include perceived and actual needs related to using mental health services for psychological stress and psychological diagnosis (Zinzow et al., 2013).

Previous research has shown that there are various barriers related to receiving psychological help among college students. These barriers include, but are not limited to, stigmatization related to receiving psychological help (Shkcmibi, Melonashi, & Fanaj, 2015; Vogel, Wade, & Hackler, 2007), negative attitude towards receiving psychological help (Vanheusden et al., 2008), inability to notice the need for receiving psychological help (Andersson et al., 2013), the individual's belief that he/she can overcome his/her problems without any professional help (Jennings et al., 2015), difficulties related to self-disclosure, anxiety towards the benefits of seeking help from a mental health professional, distrust of the mental health professional (Calloway, Kelly, & Ward-Smith, 2012), and a lack of knowledge about mental health services (Kim, Saw, & Zane, 2015). In addition to the previous research mentioned above, Topkaya, Şahin, and Meydan (2017) found five salient barriers among college students related to receiving psychological help, namely fear of being stigmatized by society, trust in the mental health professional, difficulties in self-disclosure, perceived devaluation, and lack of knowledge.

Self-efficacy could be regarded as one of the barriers to receiving psychological help, as it relates to the beliefs and expectations that some behaviors are necessary to achieve certain outcomes (Bandura, 1997). Self-efficacy determines the tenacity and durability of an individual towards such barriers as well as the effort to overcome them (Bronstein, 2014). Therefore, individuals with higher self-efficacy are more likely to work harder when struggling with various barriers. A study comparing people with high and low self-efficacy found that people with low self-efficacy are more likely to experience mental health problems compared to people with high self-efficacy (Andersson et al., 2014).

Psychological distress is defined as a mental state characterised by anxiety and/or depressive symptoms (Sun et al., 2016). Mental health problems are becoming a significant problem worldwide. According to the predictions of the World Health Organization (WHO), by 2020, depression will become the second most common disease that causes disability in humans (WHO, 2001). Similarly, anxiety and stress are among the most significant psychological problems experienced by many college students (Blanco et al., 2008; Reavley, Cvetkovski, Jorm, & Lubman, 2010). Research has shown that psychological problems, such as depression, anxiety, and stress, lower quality of life and affect socio-economic wellbeing, education, and opportunities for employment (Lund et al., 2010). Therefore, it is important to determine whether there is a significant relationship between the relevant psychological problems and barriers to receiving psychological help. On the other hand, general self-efficacy could be individually significant both in terms of the likelihood of receiving psychological help and for emotional health as self-efficacy requires power and motivation to act, even when the individual experiences psychological problems and disorders (Andersson et al., 2014). Additionally, it is evident that in order to acquire a more comprehensive understanding of why most college students with mental health difficulties prefer not to seek psychological help, prior research has investigated the association between factors regarded as potentially important barriers and help seeking, but there is limited knowledge about whether there is a relationship between self-efficacy and barriers to receiving psychological help. Thus, the objective of this study is to investigate the relationship between barriers to receiving psychological help and self-efficacy, depression, anxiety, and stress levels among college students.

METHOD

Research Design

This correlation study investigated the relationship between the barriers to receiving psychological help and self-efficacy, depression, anxiety, and stress (Barker, Pistrang, & Elliott, 2016).

Participants

Data were initially collected from 567 college students in the different faculties and departments of a university located in the Central Black Sea Region of Turkey. However, participants with any missing data from the socio-demographic variables, except the age variable ($n=12$); participants who did not answer 20% or more on any scale items ($n=18$); and eight multivariate outliers were excluded from the dataset, resulting in a remainder of 529 participants. College students in this study were selected using convenience sampling. There were 332 (62.8%) female and 197 (37.2%) male college students who participated. The students who reported their age ($n=373$)

showed that the ages ranged between 18 and 52, with an average age of 21.48 ($S.D.=3.43$). There were 152 students in freshman year, 97 (18.3%) in sophomore year, 157 (29.7%) in junior year, and 123 (23.3%) in senior year. Most of the students had not received any previous psychological help (81.5%, $n=431$). The students who received previous psychological help rated the help-seeking experience as *It was not helpful at all* (23.5%, $n=23$), *It was helpful a bit* (40.8%, $n=40$), *It was helpful significantly* (29.5%, $n=29$), and *It was extremely helpful* (6.1%, $n=6$).

Scales

Personal Information Form (PIF): A PIF was used to collect information about the students' sociodemographic characteristics. Specifically, they responded to questions about their faculty, department, gender, age, grade level, and whether they had received any psychological help before.

Depression Anxiety Stress Scale-21 (DASS-21): To measure the depression, anxiety, and stress levels of the college students, the DASS developed by Lovibond and Lovibond (1995) was used in this study. The DASS consists of a long form with 42 items and a short form with 21 items. The DASS-42 translation, validity, and reliability study was conducted on the Turkish language version by Bilgel and Bayram (2010). The DASS-21 used in this study derived items from the DASS-42 (Bilgel & Bayram, 2010). The DASS-21 consists of three subscales: depression, anxiety, and stress. Each subscale is comprised of seven items. The validity and reliability of this scale for Turkish college students was determined by the first and second researchers as part of an ongoing research project and will be reported in another study. However, the initial findings of DASS-21 regarding Turkish college students showed that the Turkish form of DASS-21 has a similar factor structure to that in the original form and the reliability of the scale was adequate. More information about the validity and reliability of Turkish DASS-21 can be obtained by request from the first and second researcher. On the scale, participants rated how much each item applied to them in the past week on a 4-point Likert scale, ranging from 1 (Never) to 4 (Almost Always). Possible scores ranged between 0 and 21 for the depression, anxiety, and stress scales. Each subscale's items were summed separately. Higher scores indicated a higher level of depression, anxiety, and stress for each dimension, respectively. Sample items from the depression, anxiety, and stress subscale include "I felt down and blue," "I experienced trembling (e.g., in the hands)," "I tended to over-react to situations."

General Self-Efficacy Scale (GSES): To determine the self-efficacy level of the college students, the GSES developed by Schwarzer and Jerusalem (1995) was used. The GSES measures participants' competence when struggling with new and difficult tasks in different settings. It was originally developed in Germany after twenty years of work and translated into more than 30 languages. The Turkish translation was undertaken by Yeşilay, Jerusalem, and Schwarzer (2017) as part of an international study. The validity and reliability of the GSES was also investigated by İlhan (2005), who found that GSES responses consists of a unidimensional factor structure similar to the original factor structure, and total variance explained by the GSES was 44%. The GSES item factor loadings also ranged between .42 and .75. Additionally, the Cronbach alpha (α) internal consistency coefficient reported by İlhan (2005) was .76. This scale consists of ten items, each item rated on a 4-point Likert type scale ranging from *Not at all true* (1) to *Exactly true* (4). Responses to GSES items were summed to yield a total score that ranged between 10 and 40. Higher scores indicate greater self-efficacy. The internal consistency coefficient (α) of the scale scores calculated in this study was .88. An example item from the scale is "I can solve most problems if I invest the necessary effort."

Barriers to Seeking Psychological Help Scale (BSPHS): The barriers to seeking psychological help perceived by the students were measured with the BSPHS developed by Topkaya et al. (2017). This scale consists of five subscales, namely fear of being stigmatized by society, trust in the mental health professional, difficulties in self-disclosure, perceived devaluation, and lack of knowledge (Topkaya et al., 2017). The validity and reliability for the BSPHS were investigated on college students. Exploratory factor analysis results suggested that the BSPHS had a five-factor structure that explained 66.55% of the total scale variance, and this factor structure was cross-validated with confirmatory factor analysis in a different sample (χ^2/df : 1.269, (CFI), Root Mean Square Error of Approximation (RMSEA): .035, Comparative Fit Index (CFI): .972, Tucker-Lewis Index (TLI): .964, Standardized Root Mean Square Residual (SRMR): .053). Test-retest reliability of this scale across three weeks ranged between .56 (perceived depreciation) and .71 (difficulty of self-disclosure). The internal consistency of the scale for this study was found to be as follows: .79 for the fear of being stigmatized by society (4 items), .78 for trust in the mental health professional (4 items), .74 for difficulties in self-disclosure (3 items), .72 for perceived devaluation (3 items), and .45 for lack of knowledge (3 items). Although the Cronbach alpha internal consistency coefficient for the lack of knowledge subscale was lower, this coefficient was similar to the Cronbach alpha value in Topkaya et al. (2017) (Study 2). Additionally, according to Briggs and Cheek (1986), when the items were limited in a scale, such as the lack of knowledge subscale, the average interitem correlation values of the items should be considered rather than the internal consistency of the scale, and this value should be between .2 and .4. In this study, the average interitem correlation for the lack of knowledge subscale was .22, suggesting that the subscale is adequate for conducting statistical analyses.

Procedure

The data for this study were collected from April 2017 to June 2017. The questionnaires, including the PIF, DASS-21, GSES, and BSPHS, were distributed to students during their regular class hours. The students were informed about the study's purpose, that participation in the study was voluntary, the answers would remain anonymous, and the participants could withdraw from the study without any consequences. Informed consent was obtained from all participants; no student refused to participate. Students completed the questionnaire in approximately thirty minutes.

Statistical Analysis

All statistical analyses were performed using the SPSS 23 program. Before the analyses, the accuracy of the data, missing values, outliers, and assumptions of statistical analysis were checked. First, missing values in the dataset were examined; the missing values on the item level were from 0.0% to 1.1%. Inspection of missing values suggested that they generally occurred in DASS-21 at the end of the scale. This could be related to low concentration levels or tiredness among the participants. In order to handle missing data, we used the expectation maximization (EM) missing data estimation algorithm, a widely recommended approach to estimate missing data in counseling literature as operationalized in SPSS 23. There was no univariate outlier in the dataset. However, eight multivariate outliers were detected using Mahabolinis distances, as suggested by Tabachnick and Fidell (2012), and excluded from dataset. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, homogeneity of variance and covariance matrices, linearity, multicollinearity, and homoscedasticity in appropriate analyses (Ho, 2013; Tabachnick & Fidell, 2012). One-way multivariate analysis of variance (MANOVA) was used to examine differences in depression, anxiety, stress, and general self-efficacy scores with respect to gender and previous help-seeking experience, respectively. Hierarchical Multiple Regression Analysis was used to examine the ability of barriers to seeking psychological help to predict levels of depression, anxiety, stress, and self-efficacy, respectively, after controlling for gender and previous help-seeking experience. The level of statistical significance was set at $p < .05$ in all statistical analyses.

RESULTS

Table 1 reports depression, anxiety, stress scale means, and standard deviations with respect to gender and previous help-seeking experience.

Table 1 Descriptive Statistics

Variable	Depression		Anxiety		Stress		Self-efficacy	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Gender								
Female	5.99	4.57	5.27	3.88	7.51 _a	3.78	26.20 _b	5.57
Male	5.77	4.21	4.85	3.75	6.83 _b	3.89	28.80 _a	5.89
Previous Help-Seeking								
Yes	7.11 _a	4.45	6.49 _a	3.96	8.32 _a	4.02	26.82	6.74
No	5.64 _b	4.39	4.80 _b	3.74	7.01 _b	3.75	27.25	5.60

Note. Each number with a subscript in the means indicates a group difference: $a > b$. There was no difference in the other groups.

A series of MANOVAs was conducted to examine possible mean differences between depression, anxiety, stress, and general self-efficacy scores with respect to the sex of participants and previous help-seeking experience. One-way MANOVA results showed that the multivariate main effects of sex (Wilk's Lambda=.94, $F(4, 524)=7.92$, $p < .001$, partial $\eta^2=.057$) and previous help-seeking experience were significant (Wilk's Lambda=.97, $F(4, 524)=4.05$, $p=.003$, partial $\eta^2=.030$). A series of one-way ANOVAs was performed as a follow-up test to the MANOVA for sex and previous help-seeking experience independent variables. One-way ANOVAs showed that the main effects of depression ($F(1, 527)=.31$, $p=.575$, partial $\eta^2=.001$) and anxiety ($F(1, 527)=1.48$, $p=.225$, partial $\eta^2=.003$) were not significant based on sex. However, stress ($F(1, 527)=3.99$, $p=.046$, partial $\eta^2=.008$) and general self-efficacy scores ($F(1, 527)=25.72$, $p < .001$, partial $\eta^2=.047$) were significantly different. As seen in Table 1, female students had much higher stress scores than male students, and male students had higher general self-efficacy scores than female students. Regarding previous help-seeking experience, one-way ANOVAs showed that depression ($F(1, 527)=8.91$, $p=.003$, partial $\eta^2=.017$), anxiety ($F(1, 527)=15.99$, $p < .001$, partial $\eta^2=.029$), and stress ($F(1, 527)=9.52$, $p=.003$, partial $\eta^2=.018$) scores were significantly different. However, no significant differences were found for general self-efficacy scores ($F(1, 527)=.42$, $p=.517$, partial $\eta^2=.001$). As seen in Table 1, students who previously sought psychological help had significantly higher depression, anxiety, and stress scores than other students.

A series of hierarchical multiple regressions were calculated to assess the ability of barriers to seeking

psychological help to predict levels of depression, anxiety, stress, and general self-efficacy, respectively, after controlling for the influence of sex and previous help-seeking experience. Hierarchical multiple regression analysis results are presented in Table 2 for depression scores, Table 3 for anxiety scores, Table 4 for stress scores, and Table 5 for general self-efficacy scores. Participants' sex and previous help-seeking experience were entered into Step 1 in all analyses.

As seen in Table 2, sex and previous help-seeking experience explained 2% of the variance in depression scores. After entry of the barriers to seeking psychological help subscales in Step 2, the total variance explained by the model was 12% ($F(7, 521)=9.74, p < .001$). Barriers to seeking psychological help subscales explained an additional 10% of the variance in depression scores, after controlling for sex and previous help-seeking experience ($\Delta R^2=.10, \Delta F(5, 521)=11.61, p < .001$). In the final model, previous help-seeking experience ($\beta=-.16, t=-3.75, p < .001$), difficulties in self-disclosure ($\beta=.11, t=2.20, p < .05$), perceived devaluation ($\beta=.15, t=2.20, p < .05$), and lack of knowledge ($\beta=.11, t=2.07, p < .05$) were statistically significant. Students with high scores in difficulties in self-disclosure, perceived devaluation, and lack of knowledge were more likely to experience depressive symptoms after controlling for sex and previous help-seeking experience.

Table 2 Hierarchical multiple regression analysis results for depression

Variable	Step 1					Step 2				
	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>
Constant	8.90	1.07		8.34	.001	4.81	1.16		4.14	.001
Sex	-.23	.94	-.03	-.58	.562	-.39	.39	-.04	-1.00	.316
Prev. help-seeking	-1.47	.49	-.13	-2.99	.003	-1.78	.48	-.16	-3.75	.001
Fear of being stig.						-.048	.08	-.04	-.62	.533
Trust in the mental health						.08	.07	.06	1.13	.258
Self-disclosure						.17	.08	.11	2.20	.028
Perceived devaluation						.27	.11	.15	2.55	.011
Lack of knowledge						.21	.10	.11	2.07	.039
R^2		.02					.12			
Adj R^2		.01					.10			
<i>SE</i>		4.40					4.20			
$F(df_n, df_d)$		2,526					7,521			

Note. *p* values between .011 and .039 were significant at $p < .05$; $p=.003$ value was significant at $p < .01$; $p=.001$ values were significant at $p < .001$.

Table 3 Hierarchical multiple regression analysis results for anxiety

Variable	Step 1					Step 2				
	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>
Constant	8.77	.92		9.58	.001	6.23	1.01		6.18	.001
Sex	-.43	.34	-.05	-1.25	.211	-.70	.34	-.09	-2.06	.040
Prev. help-seeking	-1.70	.42	-.17	-4.01	.001	-2.01	.41	-.20	-4.86	.001
Fear of being stig.						.10	.07	.08	1.49	.136
Trust in the mental health						.00	.06	.00	.01	.992
Self-disclosure						.03	.07	.02	.34	.735
Perceived devaluation						.24	.09	.15	2.59	.010
Lack of knowledge						.15	.09	.09	1.69	.091
R^2		.03					.11			
Adj R^2		.03					.10			
<i>SE</i>		3.78					3.64			
$F(df_n, df_d)$		2,526					7,521			

Note. $p=.040$ value was significant at $p < .05$; $p=.010$ value was significant at $p < .01^{**}$; $p=.001$ values were significant at $p < .001$.

As seen in Table 3, sex and previous help-seeking experience explained 3% of the variance in anxiety scores. After entry of the barriers to seeking psychological help subscales in Step 2, the total variance explained by the model was 11% ($F(7, 521)=9.11, p < .001$). Barriers to seeking psychological help subscales explained an additional 8%

of the variance in anxiety scores, after controlling for sex and previous help-seeking experience ($\Delta R^2=.08$, $\Delta F(5, 521)=8.97$, $p<.001$). In the final model, sex ($\beta=-.09$, $t=-2.06$, $p<.05$), previous help-seeking experience ($\beta=-.20$, $t=-2.06$, $p<.05$), and perceived devaluation ($\beta=.15$, $t=2.59$, $p<.05$) were statistically significant. Although the gender variable was not significant in Step 1, it was significant in the final model, indicating that gender may moderate the relationship between anxiety and some dimensions of barriers to seeking psychological help. Moreover, students who had high scores in perceived devaluation were more likely to experience symptoms of anxiety after controlling for sex and previous help-seeking experience.

Table 4 Hierarchical multiple regression analysis results for stress

Variable	Step 1					Step 2				
	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>
Constant	10.59	.92		11.55	.001	7.45	1.01		7.39	.001
Sex	-.69	.34	-.09	-2.03	.043	-.82	.34	-.10	-2.43	.015
Prev. help-seeking	-1.32	.42	-.13	-3.10	.002	-1.50	.41	-.15	-3.64	.001
Fear of being stig.						-.08	.07	-.07	-1.26	.209
Trust in the mental health						.10	.06	.10	1.72	.086
Self-disclosure						.03	.07	.03	.49	.627
Perceived devaluation						.27	.09	.17	2.90	.004
Lack of knowledge						.20	.09	.12	2.32	.021
R^2		.03					.11			
Adj R^2		.02					.10			
<i>SE</i>		3.79					3.64			
$F(df_n, df_d)$		2,526					7,521			

Note. *p* values from .015 to .043 were significant at $p<.05^*$; *p* values from .002 to .004 were significant at $p<.01$; $p=.001$ values were significant at $p<.001$.

As seen in Table 4, sex and previous help-seeking experience explained 3% of the variance in stress scores entered in Step 1. After entry of the barriers to seeking psychological help subscales in Step 2, the total variance explained by the model was 11% ($F(7, 521)=9.15$, $p<.001$). Barriers to seeking psychological help subscales explained an additional 8% of the variance in anxiety scores, after controlling for sex and previous help-seeking experience ($\Delta R^2=.08$, $\Delta F(5, 521)=9.84$, $p<.001$). In the final model, sex ($\beta=-.10$, $t=-2.43$, $p<.05$), previous help-seeking experience ($\beta=-.20$, $t=-3.64$, $p<.001$), perceived devaluation ($\beta=.17$, $t=2.59$, $p<.05$), and lack of knowledge ($\beta=.12$, $t=2.32$, $p<.05$) were statistically significant. In other words, participants who had high scores in perceived devaluation and lack of knowledge were more likely to experience stress symptoms after controlling for sex and previous help-seeking experience.

Table 5 Hierarchical multiple regression analysis results for general self-efficacy

Variable	Step 1					Step 2				
	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>
Constant	22.81	1.38		16.55	.001	25.20	1.57		16.09	.001
Sex	2.60	.51	.22	5.07	.001	2.50	.52	.21	4.77	.001
Prev. help-seeking	.44	.64	.03	.69	.491	.58	.64	.04	.90	.367
Fear of being stig.						.04	.10	.02	.39	.695
Trust in the mental health						-.06	.09	-.04	-.66	.509
Self-disclosure						-.21	.11	-.10	-1.97	.049
Perceived devaluation						-.17	.14	-.07	-1.20	.229
Lack of knowledge						.09	.13	.04	.67	.502
R^2		.05					.07			
Adj R^2		.04					.06			
<i>SE</i>		5.69					5.65			
$F(df_n, df_d)$		2,526					7,521			

Note. $p=.040$ value was significant at $p<.05$; $p=.010$ value was significant at $p<.01^{**}$; $p=.001$ values were significant at $p<.001$.

Finally, as seen in Table 5, sex and previous help-seeking experience explained 5% of the variance in general

self-efficacy scores entered in Step 1. After entry of the barriers to seeking psychological help subscales in Step 2, the total variance explained by the model was 7% ($F(7, 521)=5.56, p<.001$). Barriers to seeking psychological help subscales explained an additional 2% of the variance in general self-efficacy scores, after controlling for sex and previous help-seeking experience ($\Delta R^2=.02, \Delta F(5, 521)=2.48, p<.05$). In the final model, sex ($\beta=.21, t=4.77, p<.001$) and difficulties in self-disclosure ($\beta=-.10, t=-1.97, p<.05$) were statistically significant. In other words, participants with high scores in difficulties in self-disclosure were more likely to have low self-efficacy after controlling for sex and previous help-seeking experience.

DISCUSSION

The relationship between barriers to seeking psychological help and depression, anxiety, stress, and general self-efficacy in college students was investigated in this study. The results of the present study suggested that female students experienced higher level of stress compared to male students, and male students had higher self-efficacy levels than females. The results of this study were in line with previous non-Western studies showing that self-efficacy levels of male students were generally higher than those of female students (Al Khatib, 2012). Additionally, we found that students who had received previous psychological help had higher depression, anxiety, and stress levels than those who had not received help. However, this result contradicts previous studies showing that receiving counseling and psychological help has numerous benefits for academic, emotional, and psychological problems (Eisenberg, Golberstein, & Gollust, 2007). One of the possible explanations for this result may be that students in this sample generally rated usefulness of help-seeking experience as low. Thus, help-seeking experience may not be enough to reduce their psychological symptoms. An alternative explanation may be that although we collected information about help-seeking experience, we did not collect information about when and how long it lasted. Thus, the effectiveness of help-seeking experience may diminish and psychological symptoms intensify over time. The validity of these explanations can be tested in future investigations.

When we controlled for gender and previous psychological help-seeking experience, we found that students with difficulties in self-disclosure, a high level of perceived devaluation, and a high level of lack of knowledge were more likely to exhibit depressive symptoms. The results of this study support and extend those of previous studies in clinical populations showing that some perceived barriers are common both in individuals diagnosed with mental diseases and healthy individuals. For example, in a study with individuals diagnosed with depression, Andersson et al. (2013) found that stigmatisation and perceived devaluation, lack of knowledge regarding mental illnesses and treatment possibilities, and financial problems were among the most significant barriers in depressed individuals. Fonseca et al.'s (2015) study examining the barriers to receiving psychological help among women with antenatal depression found that barriers related to lack of knowledge were more significant than others.

Study results regarding the anxiety scores also showed that although gender was not a significant predictor of anxiety scores in the first stage of the analysis, it was a significant predictor in the final model. Accordingly, it could be inferred that gender could be a moderator variable in the relationship between anxiety and barriers to receiving psychological help. Additionally, students with high perceived devaluation are more likely to show symptoms of anxiety. Logan, Steel, and Hunt (2016) stated that engagement with mental health professionals directly affects anxiety, as individuals with higher anxiety levels preferred lower levels of interaction in help-seeking processes.

When we controlled for gender and previous psychological help experience, we also found that students with a high level of perceived devaluation and a high level of lack of knowledge were more likely to experience stress symptoms. Such findings are in line with previous research showing that perception of different types of barriers related to psychological help could lead to different types of stress. For example, Calloway et al. (2012) revealed that perception of various barriers to receiving psychological help, such as depreciation and lack of knowledge, may lead to physical and academic stress among college students.

After reviewing the results related to depression, anxiety, and stress scores together, one obvious finding was that perceived devaluation was positively correlated with three different types of negative effects. According to the Modified Labelling Theory (Link, Cullen, Struening, Shrout, & Dohrenwend, 1989), perceived devaluation includes beliefs about the degree to which individuals with mental illness will be reduced in value. An individual who has officially been labelled as having a psychological illness will perceive how others treat those with such diagnoses, leading to higher levels of stress, anxiety, and depression. According to this theory, individuals also internalize society's perception of mentally ill individuals, which tends to label them as dangerous, inadequate, and unpredictable. If individuals internalize these stereotypes, they will believe that if people knew their diagnosis, they would lose their reputation and be subject to discrimination and devaluation. Thus, individuals tend to adopt coping strategies to hide mental illness and withdraw to avoid the negative consequences of the illness and stigmatisation. Thus, it is obvious that perceived devaluation is a barrier to receiving psychological help; therefore, the possibility of experiencing depression, anxiety, and stress symptoms was higher for individuals with perceived devaluation.

Lastly, when we controlled for gender and previous help-seeking experience, the results of the study showed that

students who had difficulty in self-disclosure were more likely to have low self-efficacy levels. This was consistent with previous literature suggesting that individuals with higher self-efficacy levels were more likely to show higher self-disclosure behaviors, as well as be more open to expressing ideas and emotions (Kumar & Lal, 2006). Vogel, Wade, and Hackler (2007) suggested that individuals who experienced stigmatization due to receiving psychological help reflected such stigmatization behaviors back on themselves, and as a result of this stigmatization process, the individuals experienced low self-esteem and self-efficacy. It is well known that perceived self-efficacy plays a protective role in mental health (Bandura, 2012), but this may only be the case in self-disclosing individuals.

Consequently, this study suggests that barriers to receiving psychological help play an important role in depression, anxiety, stress, and general self-efficacy in college students. Reducing barriers related to seeking formal psychological aid may help to foster psychological well-being among Turkish college students. Informing students and society about possible barriers related to seeking psychological help may also help to alleviate the detrimental effects of not seeking such assistance. University counseling centers and institutions should carry out advertising campaigns aimed at increasing students' knowledge concerning the process of seeking psychological help and to ensure that students are aware of the unreasonable stigmas surrounding such aid in order to reduce the barriers related to seeking psychological help.

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NEW APPROACH TO ENTREPRENEURSHIP EDUCATION IN PRIMARY SCHOOLS: THE BGENTL

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ABSTRACT

The European Union is promoting for more than 3 decades the entrepreneurship education in Europe, for all levels of education. One of the main goals is to strengthen the perspective of lifelong learning of the entrepreneurship education. So, the majority of the European countries are in a process of educational reform and are embedding this type of educational offering. Several methodologies are put in practice with different impact on entrepreneurship competences development and focusing in diverse subareas (e.g. creativity or business) and are applied at different levels of education.

The primary level of education has specific characteristics and challenges, therefore different methodologies have to be applied. Early learning is always a motivation for acquiring behaviours and habits since learning modifies behaviour, cognitive, motor, sensory level, integrating changes in our values and attitudes. Mainly because most of the physical, emotional, psychosocial and cognitive changes occur during childhood and adolescence, projecting here, at this stage, the basis for a good self-esteem and self-confidence.

After an experience of implementing different methodologies and developing several projects, using games to promote learning is proven to achieve positive results in several areas of knowledge and behaviour. Therefore the proposal, here of a new methodology in entrepreneurship education for young children, the Board Game Entrepreneurship Learning (BGENTL) to promote entrepreneurship education to this student's target, based on the use of different board games is appealing. Each one of the games has a specific purpose to develop specific areas related and that integrate what is called an entrepreneurship behaviour. In this paper, we'll present the games and its several stages of this new methodology.

KEYWORDS: entrepreneurship education; Berkeley Model of Entrepreneurship; game based learning

INTRODUCTION

It's now common sense in Europe that Entrepreneurship education is a crucial way to develop the mindsets of young children to become innovators and develop social and commercial ventures in the areas in which they live and work (European Commission, 2016). These skills, knowledge, and attitudes are central to develop an entrepreneurial culture, which is supported by the analysis of the Global Entrepreneurship Monitor (GEM) that shows a strong correlation between perceived entrepreneurial capabilities (skills) and the total early stage entrepreneurial activity (GEM, 2014). The current lack of comprehensive learning outcomes related to entrepreneurship education may be identified as one of the main limitations to the development of effective and high-quality entrepreneurship education (European Commission, 2016). Entrepreneurship education

is most commonly taught in upper secondary education, through a variety of approaches, even though is increasingly recognised as a cross-curricular objective in primary education. So it's accepted, for several years now, that entrepreneurship can be taught (Kuratko, 2005), that it's a discipline, that can be learned (Drucker, 1999).

The development of entrepreneurial capabilities, like creativity and auto/self-confidence, could be acquired in earlier ages (pre-schools and primary schools) and is strongly connected to a period of changes in our values and attitudes in the mindset of children. Most of the physical, emotional, psychosocial and cognitive changes occur during this period, thus, the basis for a good auto/self-confidence and a positive attitude could be launch here during this period. It's very important to start with projects that could connect children with this capabilities.

THEORY BACKGROUND

In research different methods of teaching entrepreneurship are pointed out, all of them with different capacities and more or less effective in the competencies development. What is sure is that any method applied is important to be able to create the entrepreneurial mindset in students and for that, an innovative changing in the content of the course as the process of learning in itself has to be also innovative (Shepard, 2004). The use and the potential of games, here, as a pedagogical tool is not well analysed and has a growing application (Verzat et al., 2009).

The Berkeley Method of Entrepreneurship (BMoE) is a holistic teaching and learning approach that has been tested in students of engineering to become more entrepreneurial and is based on the hypothesis that the mindset of an entrepreneur can be characterized by a set of behavioral patterns and that an inductive game-based teaching approach is a successful vehicle for introducing and re-enforcing these. (Sidhu, et al., 200X). Being an inductive method is organized around "learning" and not around "teaching" (not deductive method), so it stresses how the information, experiences, and knowledge is perceived by the student. In this way, the teacher in the classroom presents and exposes the examples and motivate the student to reflect around the examples, how the concept works and the students should demonstrate comprehension of the examples and reinventing it based on their own point of view. An example of an inductive learning approach is game-based learning, something that has received increased attention lately (Verzat et al., 2009).

In research, we may find works in several areas involving games-based learning (Games-in-Education, 2013). To develop more team and group skills, like games goal-oriented; social game environments; non-digital games that are easy to construct and play; games developed expressly for education; and commercial games. Or to stimulate experiences like role-playing and collaborative problem-solving.

With the BMoE (Sidhu, et al., 2014), the students are trained to frame problems and find ways to solve them and then reflect on what they've learned from the process, it's based on five assumptions:

1. You can learn it only while you are trying to do it;
2. Instructors host the environment for students to interact directly with the problem; Students make their own decisions and learn inductively;
3. Behavior training – through games and exercises;
4. De-emphasis of "grades" and refocus on "goals";

5. Leverage real-world competition.

This model incorporates three main elements; infrastructure, mindset, and tactics. The first and third element is common in different entrepreneurial courses but the mindset element, that concerns the student's behavior and attitude toward entrepreneurship are not found in the majority of the curriculums (Sidhu, et al., 2015). Here some the students are exposed to themes related to culture, social psychology, and mindset. The psychology of being an entrepreneur e.g. trusting, risk assessment, communication, overcoming social barriers, rejection therapy, fail training.

Since BMoE is based on the hypothesis that the mindset of an entrepreneur can be described as a list of behavioral patterns, and an inductive game based teaching approach is a successful vehicle to introduce and re-enforce behavioral patterns to students, the model present a set of 10 behavioral patterns and related them to a set of games to promote the develop and reinforce those patterns.

Figure 1 – 10 Behavioral patterns characterizing entrepreneurs

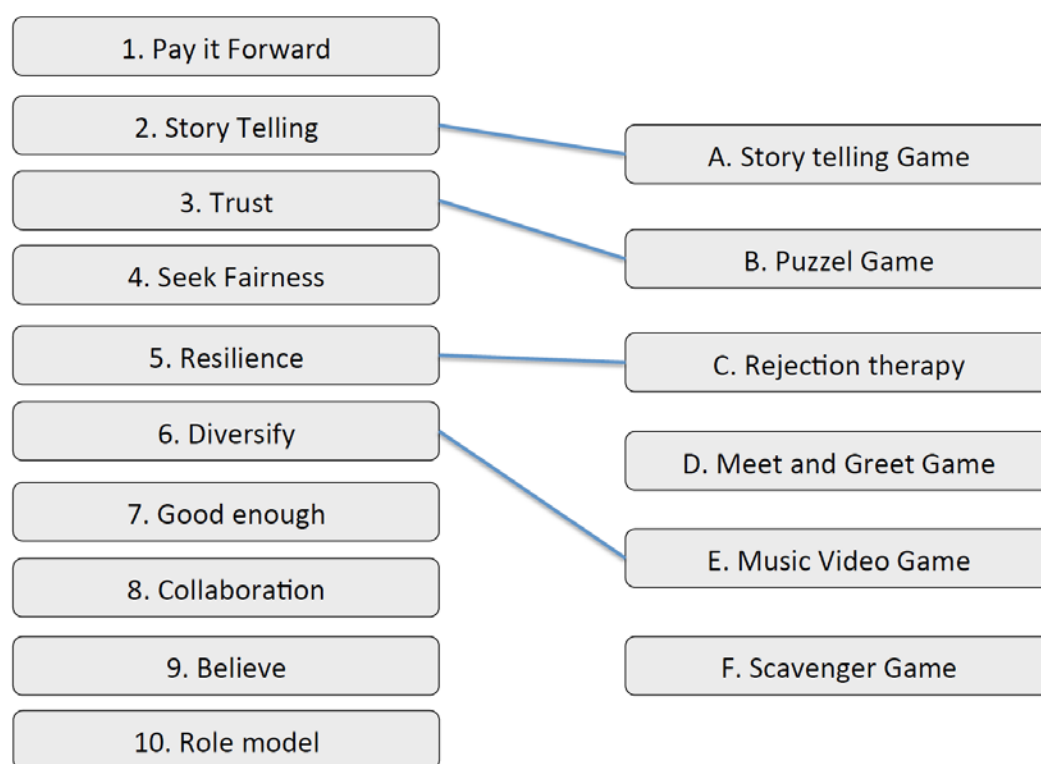
Set of behavioural entrepreneurial patterns	
1	Pay It Forward "Agree that you will get help from others, and pay it forward."
2	Story Telling "Realize a something new by induction, and then learn to communicate the story with a new language."
3	3 Friend or Foe "If you can't tell: Learn to trust others without expecting anything in return."
4	4 Seek Fairness "Make deals that seek fairness (in positive sum transactions), not advantage (in zero sum transactions)."
5	Plan to Fail "It is necessary to be Wrong sometimes. Plan to Experiment. Plan to Fail. (Fail Fast) Analyze, Adapt and repeat. The smarter you think you are, the harder this is going to be."
6	Diversify "Diversify your networks. Connect to people you would not normally, then go and listen. Open Up. And connect them to others."
7	Role Model "Be a role model for other entrepreneurs and innovators."
8	Believe "Believe that you can change the world."
9	Good Enough "Perfection is no good but good enough is perfect."
10	Collaboration "Individual vs team and competitors vs partners"

Fonte: Sidhu, I., Johnsson, C., Singer, K., & Suoranta, M. (2015). A Game-Based Method for Teaching Entrepreneurship. *Applied Innovation Review*, 1(1), 51-65.

As a game-based learning model, BMoE found different games to create the “artificial situation” in which players engage in an artificial conflict against one another or all together against other forces. Games are regulated by rules, which may take the form of procedures, controls, obstacles, or penalties (Verzat et al., 2009). Furthermore, four key components of games are; goals (preset objective, aligned with the teaching objective), rules (limitations on how to achieve the goals), challenges (possibly competition, use of skills, etc. to reinforce behavior), and interaction (a setting for players to interact and communicate and even enjoy the process).

The main objective of this model is to let the games invoke a certain behavior or attitude of the student. After the game, the students should reflect on his/her own behaviour and compare it with that of successful entrepreneurs. The result of the reflection should be a reinforcement of the student’s characteristics in becoming, or not, more entrepreneurs.

Figure 2 – Examples of games to invoke specific behaviors



From: Johnsson, Charlotta (2017). A game-based and mindset focused approach for teaching and learning entrepreneurship. Communication presented in SPACE 2017 International Conference, 26-27 April, Oporto

BGENTL (Board Games)

Following the BMoE model, we have developed a specific model for primary school students in our district.

The experience achieved with the two past editions of Produz@Ideia (Paiva and Tadeu 2015a) combined with the results from project LEGOMATKIND (project to develop Problem Solving skills in Pre-School <http://legomatkind.blogspot.pt/>) aloud the

possibility of gathering an important background related to the use of board games at an earlier stage as an effective tool to develop specific capacities.

Improving students problem solving abilities since earlier ages is important in terms of their adaptation to the real life. While preparing programs, if problem solving takes part in all activities, children's abilities of analysis, synthesis, and multi-directional thinking will improve (Zembat and Unutkan, 2003). The BGENTL (Board Game Entrepreneurship Learning) model intends to use this powerful capacity of board games in such way that they will help to achieved the following behaviours that we consider are the most important in earlier ages:

- Pay it forward (the interaction with other players could grant leverage since you payed that help);
- Story telling (being able to communicate ideas , it's one of the most important aspects of development in earlier ages);
- Resilience (don't be afraid of test your ideas and lose, the capacity of going forward and learn with mistakes);
- Collaboration (the success only comes from colaboration, life it's not spent in an island, team work and partnership play an important role);

To achieve an individual, or group, of behaviours, we present board games that could be use. The process of implementation inside the classroom could split the class in groups or use the total group, according to the board game to be play, the group, and the behaviour to experience.

Presenting the list with their specifications.

TIME'S UP KIDS

From the description in <https://boardgamegeek.com/boardgame/174219/times-kids>:

Time's Up! Kids features the familiar Time's Up! gameplay, with players giving clues as in charades in order to get their teammates to guess a word or phrase. What differs with Time's Up! Kids, however, is that the cards feature only images with no text! The game lasts two rounds with players using the same set of cards in both rounds. In the first round, players can describe the cards in order to give clues to teammates, while in the second round they can only mime clues. Whichever team scores the most points wins!

Figure 3 – TIME'S UP KIDS



From: (<https://boardgamegeek.com/image/2602571/times-kids>)

The purpose of using this board game is to take advantage of the characteristics of the

game itself, the cards allow the change of the normal rules of the game. The elements present on it let to perform a story telling action by shuffling and distributing a group of 10 cards to 10 students from the classroom and ask them to construct a story. They should use the total number of cards to make an understandable story starting always from the previous colleague while repeting the story since the beginning, meaning concentration, attention and respect.

STORY CUBES

From the description in <https://boardgamegeek.com/boardgame/20545/rorys-story-cubes>:

Each jumbo 1" cube has 6 images or icons, with a total of 54 all-different hand-inlaid images that can be mixed in over 10 million ways. You roll all 9 cubes to generate 9 random images and then use these to invent a story that starts with "Once upon a time..." and uses all 9 elements as part of your narrative.

Full instructions include several other ways to use the cubes to solve problems, break up writer's block, enhance your imagination and heighten your ability to find unifying themes among the diverse images. Interpret or get at the meanings of your answers more quickly. It's fun, easy, and mind-stretching.

Figure 4 – STORY CUBES



From: (<https://boardgamegeek.com/image/3415309/rorys-story-cubes>)

This is an excellent opportunity for students to develop the communication area, while they are constructing a story from the 9 images present in the cubes. The student needs to perform an analysis to the 9 cubes, look carefully and decided where to start the story. The reasoning behind this it's powerfull since students need to combine the ideas in a way that make sense while there are under pressure from their colleagues that are also trying to develop paralell stories.

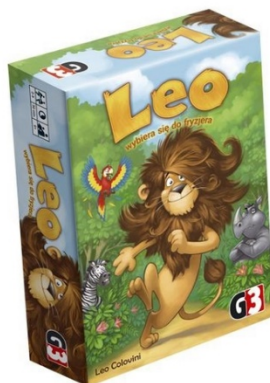
LEO

From the description in <https://boardgamegeek.com/boardgame/191538/leo>:

In Leo, players need to help Leo reach the barber shop before it closes for the day. To set up, place all of the animal tiles face down, shuffle them, then create a track that leads from Leo's bed to Bobo's Barber Shop. Set the clock to 8:00 a.m. Each player starts a number of cards in hand. On a turn, a player plays one card to move Leo ahead 1-4 spaces on the track, then reveals the animal tile on which

Leo landed. If the tile is the same color as the card just played, the clock remains at the same time as it was at the start of the turn; if the tile has a different color, however, the clock moves ahead 1-5 hours depending on the animal depicted. Poor Leo! If the clock reaches 8:00 p.m. before Leo arrives at the barber shop, the round ends and Leo must return home in order to try again the next day. Turn all face-up tiles face down again. If the players manage to get Leo to the barber shop within five days to get him a trim, they win!

Figure 5 – LEO



From: (<https://boardgamegeek.com/image/2943814/leo>)

This is a cooperative board game that could be played in small group or allows to all the classroom participate in a turn to help the lion to reach the goal. It will allow to test ideas, to perform cooperation among students making them more resilience and learn from the mistakes. The success could arise from the mistakes.

CARCASSONNE JUNIOR

From the description in <https://boardgamegeek.com/boardgame/41010/my-first-carcassonne>:

On 14 July, the national holiday in France, the sheep, chickens and cows are set free in the town of Carcassonne. The children have great fun to catch the animals before dusk. The players in turn draw a landscape tile and place it; unlike in normal Carcassonne, they always match. Amongst other features, the tiles show children in the player colors on the roads. Whenever a road is finished, every player places one of his meeples on each appropriate picture. The first player who manages to place all of his meeples wins the game.

This board game allows to small groups of students test and analyse routes while finding the best places for the tiles in order to extend and close the paths for meeples distribution. Every turn it's need to analyse the terrain and check for the best solution in order to fit the goal of closing paths and making distribution.

BGENTL (Method)

The use of each board game is following the structure provided in the table 1.

Table 1 – Using Board Game

Week 1	<ul style="list-style-type: none"> - Play Game with help of teacher (2h) - Discussion and analyse in group (30 m)
Week 2	<ul style="list-style-type: none"> - Play Game without help of teacher (2h) - Teachers analyse the behavior of students and their actions interacting sometimes by making questions (during game) - Discussion and analyse in group (30 m)
Week 3	<ul style="list-style-type: none"> - Play Game without help of teacher (2h) - Teachers analyse the behavior of students and their actions (during game) - Discussion and analyse in group (30 m)

The structure will allow to reflect on the actions taken during the time spent on playing, while using the four games in the year.

In the end of each session, the investigator, that is present in the classroom will draw conclusions on the actions of the students with the help of the classroom teacher.

CONCLUSIONS

Since this is an exploratory project that will be apply, there isn't enough data to allow a direct reflection on the positive and negative aspects that arise from the model. But the experience gather from previous projects lead the investigators to design this structure embedded by the need of open new doors into the future of entrepreneurship in earlier stages like is stated in the Entrepreneurship 2020 Action Plan from European Commission (<http://ec.europa.eu/growth/smes/promoting-entrepreneurship/action-plan/>).

...we need more entrepreneurs. The Entrepreneurship 2020 Action Plan is the Commission's answer to challenges brought by the gravest economic crisis in the last 50 years. It is a blueprint for action to unleash Europe's entrepreneurial potential, remove existing obstacles and revolutionize the culture of entrepreneurship in the EU.

To achieve this goal, EU propose three major areas for immediate intervention, two of them are:

- *The Entrepreneurial Education;*
- *Reigniting the culture of entrepreneurship in Europe and nurturing the new generation of entrepreneurs.*

Our project stands in line with this two orientations and we truly believe in the need of plant the seeds of an entrepreneur culture very earlier.

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NON-PROFIT MANAGEMENT EDUCATION IN KAZAKHSTAN

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In the formation of civil society, a significant role belongs to the non-governmental organizations (NGOs). NGOs in Kazakhstan constitute the country's non-profit sector and the most socially oriented segment of civil society in development. Led by a strong sense of mission and vision, nonprofit organizations play a critical role in the improvement and democratization of society. The official statistics show that there are 18 000 actually functioning NGOs covering different aspects of life in Kazakhstan. However, according to the CIVICUS report conducted by Makhmutova M. and Akhmetova A. in 2011, there are about 8 000 NGOs in Kazakhstan, out of which only 2 000 are active (Makhmutova and Akhmetova, 2011). These active NGO's are especially notable in the fields of education, health care, culture, human rights, environment, gender equality, and the protection of vulnerable social groups. However, the number of active and stable NGOs with a long lifespan and professional staff is rather small.

Nonprofit organizations in Kazakhstan face the problem of sustainability: to be able to sustain themselves over the long term, preserving their ability to fulfill their mission. Sustainability is especially difficult for newly emerging organizations, which do not receive appropriate trainings in areas such as strategic planning and fundraising. Some organizations have been established to take advantage of specific funding opportunities from state, therefore tend to be short term and grant - oriented character. A survey conducted by Civil Alliance of Kazakhstan in 2011 confirmed that a significant number of NGOs have a very short activity experience. From the more than 200 NGOs polled by the Civil Alliance of Kazakhstan, 48.7 percent had been operating for less than five years, a quarter had been working for six to nine years, and only 21.8 percent were established at the end of the 1990s. Moreover, some organizations are passive and exist only on paper (Kabdiyeva A., 2013).

The CSO Sustainability Index, which was developed by United States Agency for International Development, defines the level of development of non-profit sector at the base of a seven-point scale, with 1 representing the highest and 7 the lowest level of sustainability. These levels are clustered into three general stages: Sustainability Enhanced (1 to 3), Sustainability Evolving (3.1 to 5), and Sustainability Impeded (5.1 to 7). A trajectory of Kazakhstan's NGO sustainability from 1999 to 2018 is presented in Table 1 below. In 2015 and 2016, Kazakhstan was not studied by USAID. However, in 2014 the NGO sustainability index for the country was 4.1, indicating a medium level of development (USAID, 2016), which means that a serious work should be done to improve NGO's sustainability in Kazakhstan.

Table 1: Trajectory of Kazakhstan's NGO Sustainability Indicators.

1999	2000	2001	2002	2003	2004/ 2006	2007/ 2010	2011/ 2014	2015	2016
4,8	4,7	4,3	4,1	3,9	4,1	4,0	4,1	N/R	N/R

Source: adapted from USAID (2016).
https://www.usaid.gov/sites/default/files/documents/1866/CSOSI_Report_7-28-17.pdf

The aim of this paper is to discuss new challenges, new trends, new opportunities and perspectives in training for non-profits like as contribution of universities to sustainable development of civil society by providing non-profit management knowledge and skills to leaders of NGO in Kazakhstan. The paper seeks to answer the following questions:

- What kind of challenges do NGOs in Kazakhstan face?
- What are the challenges facing the leaders of NGOs?
- Do leaders of NGOs have enough knowledge and skills to meet these challenges?
- Where can NGO leaders acquire these skills?
- What form of education is most convenient for NGO leaders, considering the vast territory of the country and the cost of transportation?
- What is the role of partnership in empowering NGOs?

The material in this paper comes from case study and focus groups, as well as semi-structured interviews, conducted by the staff of NGO Expert Center in 2016-2017 years with the leaders of NGOs from social and human services, health care, community development, environment and education organizations, university faculty, and alumni of the MBA program "Management in the non-profit sector." In addition, some information used in this paper was collected from secondary sources. The sources reviewed comprise reports published by

international organizations about Kazakhstan, government documents and statistics, and published articles in academic journals.

Many NGO leaders in this study had previously gained practical experience in NGO management, but most of them did not have updated managerial knowledge and competence. When business companies appoint inadequately trained managers to positions of authority, it can be very costly to the bottom line. Poor management is a hidden cost for companies. Promoting managers who are not equipped with basic management and leadership skills can have negative consequences, like non-efficiency, high turnover rate and unhappy customers. Going beyond the basics of business, nonprofit leaders must be highly proficient in advocacy, fundraising, staff management, grant writing and board leadership. The poor management in the nonprofit sector could bring the poor-quality programs and services and as repercussions a loss of stakeholder's credibility.

Today the non-profit leaders face challenges in highly competitive environment with the institutional development of their organizations, such as financial sustainability, sponsor-dependent habit, and absence of professionalism and loyalty of the staff, necessity to fulfil multi-functional roles. The CIVICUS report conducted by Makhmutova M. and Akhmetova A. (2011), revealed some challenges, such as continued donor dependency and lack of alternative funding options, severe human resource deficiencies, minimal use of strategic planning processes, and an overall sense of limited impact on society as a whole. A major challenge, as Kabdieva A. (2015) considers, is the lack of professional and skilled managers, qualified staff and volunteers. The level of salaries in the sector also does not allow receiving additional professional skills. The weak sustainability of human resources can be seen as the result of limited financial opportunities and resources, as well as short-term project-oriented activities (Makhmutova, Akhmetova, 2011).

One of the latest trends in the non-governmental sector of Kazakhstan is that the state is paying for the services rendered by NGOs because there are less and less grants from international organizations, and the state order comes to replace them. In Kazakhstan during the years of independence (1991 – 2017) the legislative framework for the activity of non-profit sector were laid down:

- A status law governing the basic organizational and legal NGO forms;
- A system of tax incentives and preferences for NGO activities;
- The law "On State Social Order" was accepted, amended and widely used in practice.

These in turn brought a following positive change in the development of non-profit sector:

- The ban on public financing was lifted out.
- Funds received by non-governmental organizations under contracts of the state social order are exempt from VAT and corporate income tax.

Non-governmental organizations in Kazakhstan have an opportunity to receive financial resources for the implementation of socially significant projects through social contracting with the government on national and local levels. Since the end of 2015, new forms of state support for non-governmental organizations in the form of grants and bonuses have been introduced. In 2016, eleven state grants were allocated for the implementation of social projects of NGOs. In 2016, a new institution the Civil Initiatives Support Center (CISC) was opened to fulfill Kazakhstan's development programs in accordance with the objectives set by the Head of State in the "Kazakhstan-2050" Strategy, which follows the universal standards of the UN and OECD in this regard. The focus of the CISC's activity is the synergy of cooperation between the NGOs, business, government and the international community to improve the lives of people in need. According to the Chairman of the Board of the CISC, Nurlan Uteshev, the Center aims to create a basis for public confidence in the growth and major funders to their activities and to raise funds for grants from all possible sources: institutional (national and international), corporate, government, from the patrons, as well as through charity events. (Civil Initiatives Support Center presented in Astana. Retrieved from www.strategy2050.kz). However, despite these positive developments, the legislation under which NGOs operate in Kazakhstan remains mostly unfavorable. The functionally limited freedom of choice and action within the framework of the state social order has led to the fact that many NGOs have ceased to seek new forms and methods of work, to introduce innovative technologies. Several competitions for state grants were provided in 2017, which received a critical evaluation among the NGO community for distribution of grants only among a small number of "privileged" pro-governmental NGOs.

There is also a new trend in the non-profit sector development in Kazakhstan - a development of social entrepreneurship, which is an innovative activity, aimed at addressing the social problems on the terms of self-sufficiency and sustainability. Social entrepreneurship activity requires more business approach management, as far as it means independence from permanent external financing, innovativeness, i.e. the application of new approaches, and new ways of solving long-standing social problems. Social entrepreneurship requires an entrepreneurial approach from NGO leaders, i.e. the ability of a social entrepreneur to see empty market niches, find opportunities, accumulate resources, and develop new solutions that have a long-term positive impact on society as a whole. The application of social entrepreneurial principles, including social enterprise activities, can improve the sustainability of the business model of nonprofits while bolstering management capacity and enhancing mission (Lyons, 2010). Social entrepreneurship is located at the intersection of non-profit activity and business, which requires more business skills and proficiency.

All of these challenges require that NGO leaders need to improve their management capacity, as well as to continually update and acquire new knowledge so that the activities of organizations can achieve mission and goals more effectively. The formation of NGO institutes to provide training in managerial, goal setting, fund raising and implementation skills is highly desirable in the NGO sector (Peterson, 2010). NGO leaders should obtain specialized professional knowledge and skills, because few of them have received systematic education in leadership and management. Nonprofit leaders should have more opportunity to improve their professional capacities to make an activity of their organizations more efficient and to increase their impact to their address groups and society. The participants of our focus groups pointed out that non-profit organizations in Kazakhstan face challenges in their institutional development, such as financial sustainability, cross-sector collaboration, lack of developed models of social entrepreneurship, lack of experience how to set up a partnerships with business companies, less opportunities for capacity building for rural NGOs. Many nonprofits simply do not have the business-specific organizational skills, managerial capacity, and appropriate approaches to succeed in social entrepreneurship. According to focus group participants' opinions, a modern NGO leader should have both leadership skills and the broadest professional competencies that will allow effective management of the organization in accordance with current challenges. The leadership of a non-governmental organization today requires high professionalism in various related fields. This is the ability to build relationships of social partnership with the main stakeholders, this is the selection and training of employees who have the necessary competencies to work with the population as a whole and with the focus group of the organization, and this is modern knowledge in project management.

The official duties of an NGO leader (this may be the position of the chairman, the president, or the director of the organization) include not only the management of the organization, but also many other responsibilities that are important in developing and maintaining the sustainability of the organization, as well as in achieving the goals of the organization. It is important that the manager have a good general knowledge and skills in many different areas in order to be a successful and efficient manager. During discussions, NGO representatives expressed their opinions, that NGO leaders should have the ability to build relationships of social partnership with the main stakeholders of the organization, to select and train of employees, and to have a modern knowledge in organization and project management. University faculty in particular underlined the importance of following skills and competencies:

- Analysis of external and internal context
- Design of the mission and vision
- Communication and motivation
- Definition and promotion of the organization's values and culture
- Strategic planning
- Decision-making
- Financial and budgetary management.

Participants of the focus groups agreed that the modern NGO leader should have both leadership skills and the broadest professional competencies that will allow effective management of the organization in accordance with current challenges.

The respond of NGOs representatives for the question about form of education, which is most convenient for NGO leaders, was a distance study. Distance learning has already become one of the most effective and promising forms of obtaining general, higher and additional education in the 21st century. In Kazakhstan, distance-learning forms are not used on a large scale, mainly because of the lack of wide development of new information and telecommunication technologies in nonprofit sector. Nevertheless, there are new trends in non-profit sector human resource empowerment, in form of distance teaching webinars. The NGO Expert Center and Public Foundation "KAMEDA" provides webinars on different issues to NGO's employees and volunteers (www.ngoexpert.kz). Russian NGO development Centers provide webinars and NGOs from Kazakhstan could apply for participation too (<https://te-st.ru/2016/10/17/online-education-for-ngo/>).

Many of the largest international organizations such as UN agencies, OSCE, the World Bank, the United States Agency for International Development (USAID) and its subcontractors (Eurasia Foundation, Counterpart Consortium), Friedrich Ebert Foundation, and Soros Foundation made a significant financial contribution and provided different trainings among NGOs to make civil society in Kazakhstan more sustainable. According to Francis Amagoh and Aliya Kabdiyeva (2012), while international organizations have been providing training programs and technical assistance in such areas as planning and management, much of the training is based on Western standards, and in some cases is not relevant to local tradition and culture. Trainings, which have been provided by different organizations like Eurasia Foundation of Central Asia (EFCA), ARGO, the network of Civil Society Support Centers, Civic Alliance's chapters, aimed at enhancing institutional capacities of NGOs and professionalism of their leaders, are usually limited in time and systemic approach.

That is why it is time for stakeholders, as the international organizations, government, business, and universities, interested in contribution in development of civil society in Kazakhstan, to apply to the experience of other

countries, where universities are already making a significant contribution in capacity building of civil society. They supporting the sustainable development of NGOs by providing professional development trainings and non-profit management knowledge and skills to executive personal, staff and volunteers. Traditionally it is believed that the main purpose of universities is teaching and research, but the socio-economic realities of the 21st century, changes in politics, economics, and science have introduced a new trend in their activities: the emergence of a new, social function of universities. Moreover, here there is a specificity: in universities, there is the development of scientific knowledge, and, therefore, in many respects the basic tendencies of development of a society are defined. There are a tremendous number of colleges and universities in the western countries involved in the education of nonprofit managers. Only in USA 240 universities and colleges provide courses in nonprofit management education (Mirabella, Roseanne, 2007).

Between 2003 and 2016, Seven Civic National Forums took place in Kazakhstan, and the resolutions of each of them underlined the necessity of strengthening of professional skills of NGO leaders. This is a vital problem for the non-profit sector, which still has not found an appropriate solution. There was an attempt by the Civic Alliance of Kazakhstan to introduce such a program based on Academy of Public Administration in Astana, but this initiative was not successful. Factors, contributing to project failure: an inability to pay a tuition by non-profits employees because of their poor salaries and a lack of skills of the project initiator to set up a partnership to involve other partners who could support the socially significant idea.

As a response to this demand, in 2012 the NGO Expert Center of the School of Public Policy at Almaty Management University was opened to empower Kazakhstani NGOs to be stable and efficient. The NGO Expert Center developed a curriculum of MBA program in non-profit sector management based on the study and analysis of curricula of similar programs of western universities and Russia. Their findings were presented to its partners, particularly, to the Eurasian Foundation of Central Asia (EFCA) and Chevron Corporation in Kazakhstan. The idea was supported financially by Chevron in the frame of the project «An initiative of the capacity development of NGOs in Kazakhstan» and in 2015-2016 academic year the MBA "Management in the Nonprofit Sector" was launched. Fourteen students were selected and received grants, which covered 50% of the tuitions, the last part of it students paid themselves. The educational and professional backgrounds of students were diverse, but all had long record of accomplishment of working in non-profits. This program become possible due to the successful business-non-profit partnerships, which are considered one of the most effective ways of creating social change. The collaboration between the Expert Center at Almaty Management University and Chevron Corporation shows that there is great potential for education and training in such relationships between the business and NGO sector. Currently, despite such productive examples, this has not yet become a sustainable trend, because not so many universities in Kazakhstan engaged in civil and community service, which integrating social responsibility into their mission statements. ALMAU is the winner of the national contest "For contribution to the development of civil society in Kazakhstan" in a nomination "Best Enterprise". It is supposed to that, NGO empowerment project could be a model for other universities, which could collaborate with corporations, international organizations or government to maximize its impact on civil society.

In the year 2016, the next group, twenty-four NGO leaders from the city of Aktau, Mangystau region, received a chance to be students of this program. This also happened because of the university-state partnership. The Mangystau region's *akimat* (regional administration) covered the entire tuition cost for the students. The MBA "Management in the Nonprofit Sector" program is only one not only in Kazakhstan, but also in Central Asia, which focuses on the specific needs of NGO leaders. It is for those who currently work in non-profits, as well as for people who want to develop their experience in the NGO sector. This program provides students with the business approaches and skills they need to manage their non-profit organizations. Considering the vast size of the country territory and the expenses necessary for transportation, the program provides education in the distance-learning format. The degree program covers such important subjects as strategic management, marketing, NGO legal issues, social partnerships, social entrepreneurship, recruiting and managing volunteers, and financial management. Professors of High Business School from the university as well as top experts in the non-profit sector are invited to teach. The first ten NGO leaders graduated from the program in summer 2017. Now they are professional managers of NGOs, whose new knowledge and experience will bring positive changes in kazakhstani society. It is hoped, that the successful experience of the first MBA "Management in non-profit sector" will motivate other Kazakhstani universities to contribute to the development of civil society by introducing non-profit management education. To further our understanding, new research is needed on how to distinguish and evaluate the performance of nonprofit management academically trained professionals and other nonprofit professionals.

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MODELLING THE EFFECTS OF CERTAIN AFFECTIVE FACTORS ON LEARNING STRATEGIES AND CLASSROOM ACTIVITIES*

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It is well known that affective, cognitive and psychomotor factors have positive effects on science learning process. All these factors have interaction between themselves. So it is important to study what is the size and direction of these interaction. The aim of this study is to demonstrate the effects of value, attitude and self-efficacy on active learning strategies and classroom activities. In the light of this aim Structural Equation Model was used with performing LISREL. The study was conducted by the analysis of students' answers to questionnaires data using SEM. The participants in this study included 1251 secondary school students in Turkey. Study participants were youth aged 10-14, with 641 (51.2%) girls and 610 (48.8%) boys. There were 303 (24.2%) 5th grade, 333 (26.6) 6th grade, 332 (26.5%) 7th grade and lastly 283 (22.6%) 8th grade students in sample. Initially KMO and Bartlett's tests were done to test appropriateness of scale to factor analysis. Then theoretical structural model was tested using LISREL. At the end of the SEM test, it was found that value, attitude and self-efficacy have positive effects on learning strategies and classroom learning activities. The correlation coefficients shows that "value" and "self-efficacy" have high, but "attitude" has small effects on learning strategies. When the correlation coefficients on classroom learning activities examined it is seen that "value", "attitude" and "self-efficacy" have moderate effects.

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OLD MEETS NEW: COLLABORATIVE DIGITAL STORYTELLING FOR EFFECTIVE L2 READING INSTRUCTION

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ABSTRACT

The average reader in L1 and L2 does not merely engage in a simple, unidirectional decoding process of the printed word. In contrast, language users now have a habit of relating and reacting to what they have just read and seen on online platforms like their social networking and news websites, blogs, wikis, videos and other media. Therefore, the traditional L2 reading pedagogy, which mostly focuses on a uniform understanding of the text, expanding the learner's vocabulary repository, and contextualising the target grammar, cannot alone meet the needs and wants of this new generation of e-readers. On the other hand, digital storytelling can compensate for the variety, individuality, and interactivity a conventional reading class lacks by engaging learners in multimodal meaning-making with the help of technology. For this reason, the present study aims to demonstrate how digital storytelling can be used to develop a more collaborative, communicative, and creative study of difficult L2 texts by citing examples from actual classroom practices, where two groups of first-year students in an urban university of Turkey eventually produced their own alternative endings for a literary classic, and its contemporary adaptations after reading and watching the story during the course, Advanced Reading and Writing.

INTRODUCTION

With the advent of digital technologies, communication has extended beyond the boundaries of time and space. Today, people can find, exchange, and modify information in a matter of seconds, and through multiple modes of expression. In our age of social media, no language user reads for reading's sake. The once-lonely activity of decoding the printed word is now geared towards interactive and collaborative meaning-making on online platforms. The traditional conception of literacy has also been transformed to embrace the ability to "interpret, use, and produce electronic, live, and paper texts [multimedia texts] that employ linguistic, visual, auditory, gestural, and spatial semiotic systems [in multiple modes] for [strategic] purposes in socially and culturally diverse contexts" (Anstey & Bull, 2006, p. 41). Being distinguished as *multiliterates*, this new generation of (e-)readers can fulfill all four roles of *text encoder and text decoder*, *text participant*, *text user*, and *text analyst* (Anstey & Bull, 2006; Wing-Jan, 2016). That is, they can use: (i) the conventions of written and visual language (e.g. grammar, images) to decipher texts, (ii) their understanding of text structure to effectively express meaning, (iii) their knowledge of text types to "select and use texts for their intended purposes", and also (iv) their understanding of textual constructedness to "produce texts with the user in mind" (Wing-Jan, 2016, pp. 10-11).

However, the traditional L2 reading class does not support the *Four Resources Model of Literacy*, but rather promotes referential reading, where texts are mainly used for presenting grammatical and lexical items, and comprehension questions are more focused on testing linguistic skills, therefore robbing learners of the joy that can otherwise be derived, if it were not for the slow and laborious task of decoding they constantly engage in (Kramsch, 2010; Masuhara, 2007; Tomlinson, 1998; Tomlinson, 2007a). Yet, if the desired response is not an efferent but aesthetic or personal one, this can be achieved by following the multidimensional approach to L2 reading, where learners are helped to make a mental representation of what words really evoke in them, for one can become neither an effective language learner nor user without representing mentally what is said to them, and what they want to say to others through such mental resources as sensory imagery, inner speech, and affective responses (Tomlinson, 2000, 2007a; Tomlinson & Masuhara, 2009).

Similarly, Masuhara (2005) argued that the whole point of reading – the joy of interacting emotionally and cognitively with the text – is lost when learners simply decode or study the text, and recommended connecting the linguistic codes with multidimensional memories in their brain. As a result, the multidimensional approach involves experiencing the text rather than studying it, and includes a variety of multisensory activities: (i) affective activities (engaging learners' emotions, experiences, and views), (ii) imaging activities (creating mental images during the processing of language), (iii) inner voice activities (talking to themselves during the processing of language), (iv) kinesthetic activities (doing physical actions), and (v) process activities (creating own version of the text) (Masuhara, 2005; Masuhara, 2007; Tomlinson, 1998, 2000, 2007a, 2007b, 2007c).

Because the meaning conveyed by the traditional verbal narration is enhanced through innovative multimedia elements (images, audio, video, animations, special effects, graphics etc.), digital storytelling (DST) can prove an excellent educational tool for tapping into the multidimensional mode of L2 reading. Besides combining the old and new means of communication, DST necessitates a combination of learner roles and skills, for the students, having already been captivated by the Internet, films, and video games, are motivated to “work not only as readers and writers but also as directors, artists, programmers, screenwriters”, and as befits the multiliteracies framework, they collaborate with each other, and develop a number of skills such as research and writing skills, organisation skills, presentation skills, technology skills, communication skills, interpersonal skills, teamwork skills, problem-solving skills, assessment skills (Castañeda, 2013; Castañeda & Rojas-Miesse, 2016; Gregori-Signes, 2008; Kajder, 2004, p. 64; Pardo, 2014; Robin, 2006; Vinogradova, Linville & Bickel, 2011). Being a powerful and multipurpose tool of delivery, digital stories can thus be helpful not only for those that cannot put the right words together to communicate their message properly, but also for the ones that need to undertake more in-depth studies of discourse organisation and structure (Gregori-Signes, 2008; Kajder, 2004). For this reason, this study aims to demonstrate how DST as a multidimensional tool can be used to develop a more collaborative, communicative, and creative study of difficult L2 texts by citing examples from actual classroom practices, where L2 readers produce alternative endings, and modern adaptations for the specific genre (tragedies) that they have analysed in the EFL class.

THE CONTEXT

In this study, two classes of first-year students, studying at the FLE department of an urban university (Turkey), contributed with their DSTs to the multidimensional reading class. A total of 56 participants (31 female, 25 male) made 14 student-selected groups of four, and attended three 50-min classes of *Advanced Reading and Writing* over a three-week period. They were purposefully provided with Lamb and Lamb's (2008) conversion of Shakespeare's *Hamlet* into a short story for B2 (upper-intermediate) onwards. It was considered that with the help of a universally appealing, “linguistically easy” but “cognitively and emotively complex” literary text, the desired personal response could be also elicited from L2 readers (Kramsch, 2010, p. 138; Tomlinson, 2007b, p. 112; Tomlinson, 2010). Before composing their collaborative DSTs, the groups performed such in-class activities as (YouTube) video (pre)viewing, visualising, drawing, building character networks, making literary dominoes, and having class discussions. After they were familiarised with free online DST tools, they scripted alternative endings, and modern adaptations for the text. The lesson sequence ended with the selection of the best version among all joint written products.

PROCEDURE

The step-by-step procedure by which the groups finally produced their collaborative DSTs can be demonstrated with examples from actual classroom practices as in the following. Since learning is optimal in a stimulating and enjoyable environment, the pre-reading phase of this model lesson started with a game-like challenge activity (Tomlinson, 2000). Learner interest was aroused using a 3-min video from the YouTube channel, Alltime10s (2013). The groups raced to write from memory as many details as possible, and among the ten curious facts about Shakespeare's life in the video, the top three responses concerned his drug addiction, translation into 80 languages, word coinage, and alcoholic death.

With the help of imaging activities, where learners “see, smell, hear or touch things in their minds”, learners are helped to connect with their previous experiences, and worldly knowledge, while their emotions are engaged (Tomlinson, 2000, p. 26). As a result, the students in this study were secondly guided into the visualisation of a royal wedding and funeral in the Middle Ages. They shared their medieval images of the ceremony place, the kind of clothes, food and drink people had, as well as their feelings, and behaviours. According to Masuhara (2005), a teacher's reading of the text aloud – like a mother to her child – relieves learners of the stress from unknown words, and focuses their attention on the overall meaning. In a suggestopedic manner, the teacher here read the initial page of the story, where the major characters were being described. After hearing about their deeds in the story, the students made a drawing of what each character looked like. Not only Tomlinson (2000) but also Tomlinson and Avila (2007d, p. 87) supported that the learners should be “encouraged to read along in their heads, as the teacher reads emotive texts aloud”, and given the time to think in their inner voices through such kinesthetic activities without having to worry about making language mistakes. Examples of how they imagined Gertrude, Claudius, and young Hamlet can be seen in Figure 1 below.

In order to develop cultural awareness of the period (settings, attire, traditions), the students previewed Franco Zeffirelli's 1990 film adaptation of *Hamlet*, and compared the actors' appearances with their drawings. Their curiosity was further excited by pausing the wedding scene, and asking them to predict what Hamlet would do next. In this way, they were motivated to read the rest of the story to check if their guesses were right.

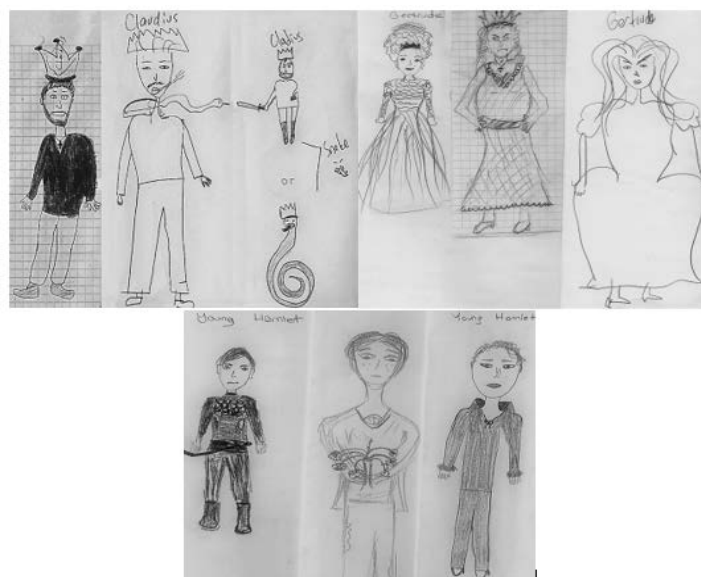


Figure 1: Student drawings of major characters

At the while-reading stage, the groups showed their understanding of the relationships between the major characters by building Sherman's (2003) character networks. For indicating the material connections, they used arrows, and for the psychological ones, they bracketed personality adjectives beneath each character's name as in Figure 2 below:

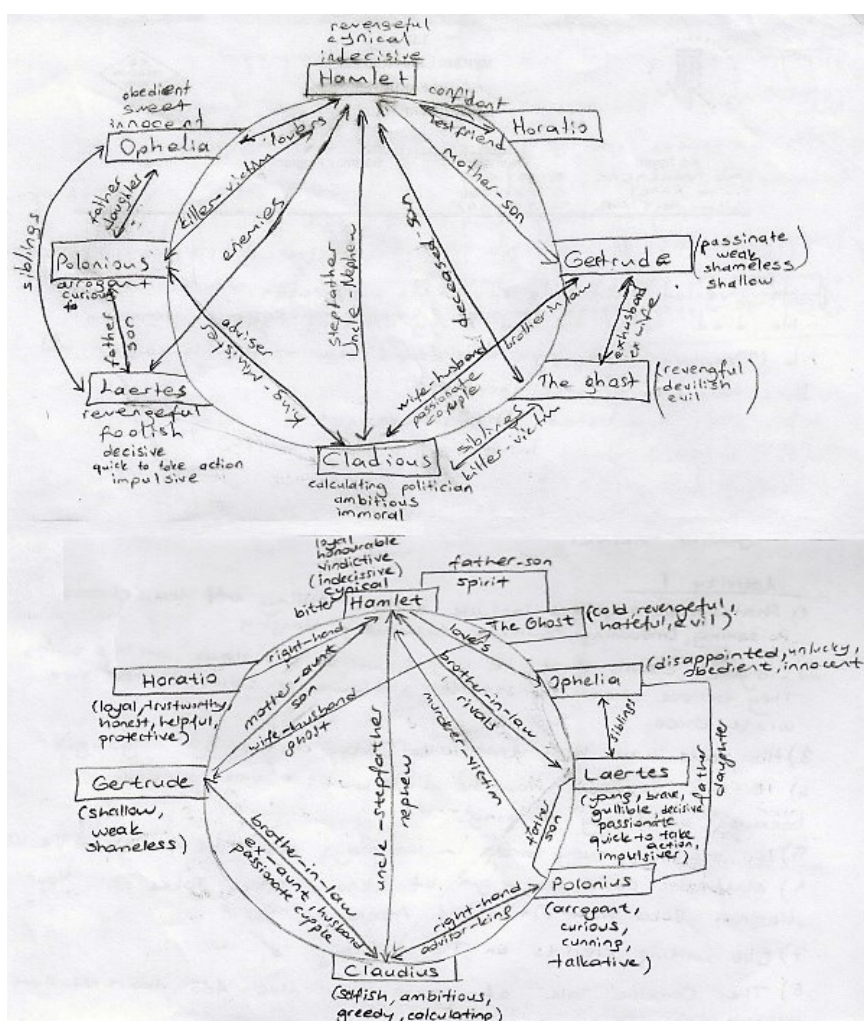


Figure 2: Examples of character networks by student groups

After making this diagrammatic analysis of characters, the groups picked their most loved/hated characters, and supported their case by citing examples of their behaviors (tragic flaws). In both classes, it was Gertrude that became the target of bitter criticism due to her frivolity as the mother of a young man in Hamlet's age, whereas Ophelia was the most popular for her meekness, and innocence, which could easily be understood considering the gender stereotypes in the students' home (Turkish) culture. Consequently, they summarised the incidents, denoting the major themes of the story (e.g. ambition, revenge, friendship, indecisiveness).

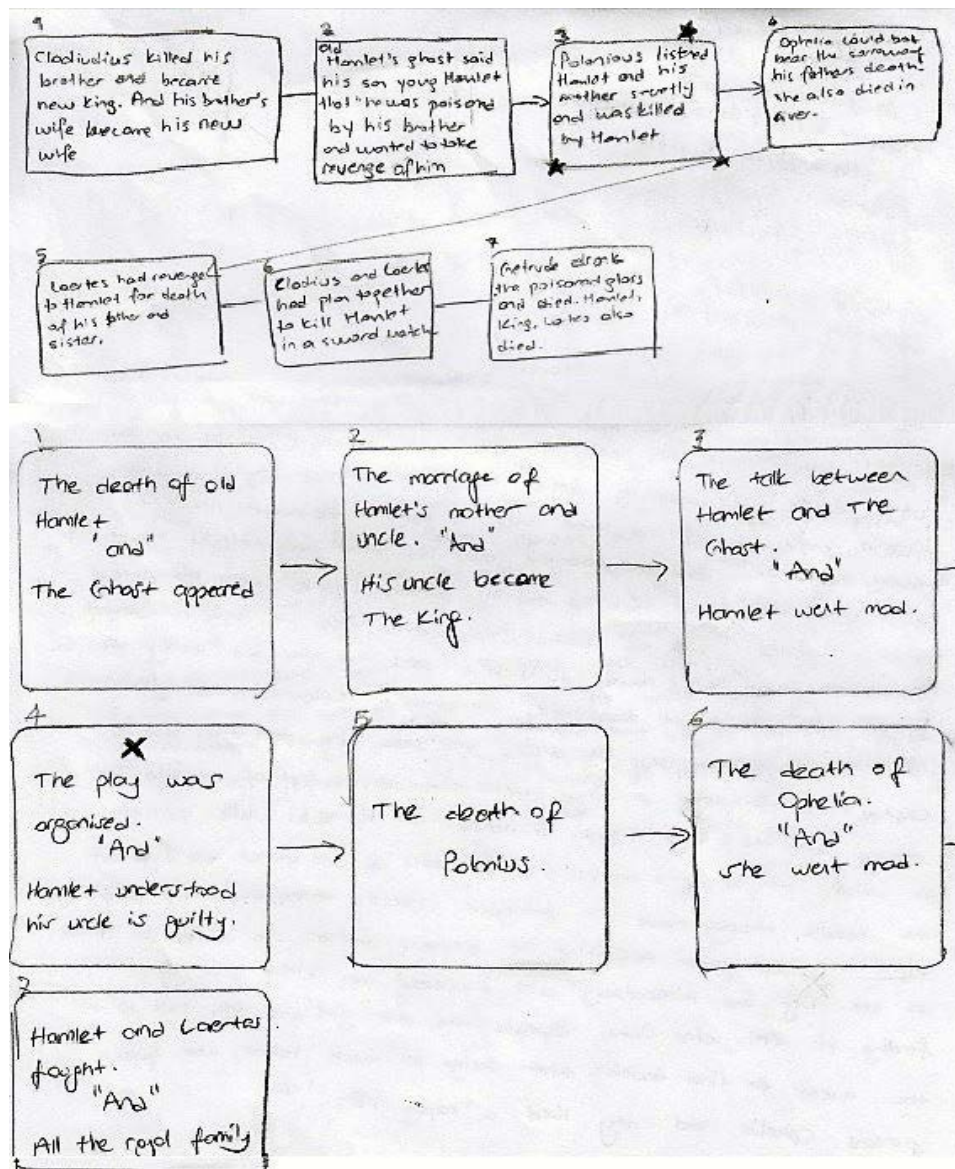


Figure 3: Examples of literary dominoes by student groups

For Tomlinson (2000), it is best practice that cognitive, studial activities are preceded by their affective, experiential counterparts. For this reason, the multidimensional reading class proceeded with Gallagher's (2004) literary dominoes, a C-R activity, where a set of dominoes were used for demonstrating the chain reaction in tragedies. Here, the students were given six dominoes (depending on the level, class time, and complexity of the story, the number of dominoes may vary), apart from the last, that is, the resolution of the story (Everybody died!). As can be understood from Figure 3, they achieved to identify the key events causing Hamlet's downfall. Having reviewed the dramatic structure of the specific genre, each group determined one most effective domino, marking it with a cross/star/tick. It is clear from Figure 3 that while one group identified Polonius's accidental death as the key moment, another found Hamlet's trick, the 'mouse-trap' scene as the climax of the story.

At the post-reading phase of the lesson, they removed their (self-chosen) most effective domino from the chain, and changed the course of events from then on. Although the collaborative writing groups had worked on the same number of dominoes, there emerged 14 different finales for the original story eventually. As part of his efforts to humanise the one-size-fits-all approach of the global materials to textbook content, Tomlinson (2007a, 2007b) suggested getting the students to produce their own local versions or endings for the text by using different mediums: e.g. videotaping their versions of poems, short stories and novel excerpts. Furthermore, Masuhara (2005) offered to make a public display of the learners' such hard work.

Since the groups were expected to script and share their own alternative endings, and modern adaptations for Hamlet's story, they were taught how to enhance the effect of their joint products on their readers through pictures. Free online DST tools like Mystorybook, Storybird, StoryJumper, and other resources like Microsoft PowerPoint and Photo Story were overviewed. According to Castañeda (2013, p. 46), it is the story itself – not the technological aspect – that should be the focus of digital storytelling; as a result, digital storytellers should “spend little time learning and using the software” and “ample time crafting, revising and narrating the story”. Knowing that the quality of their writing is a more definitive indicator of achievement than the visual design alone, the groups seemed to prefer simpler (Mystorybook) or familiar (PowerPoint) resources for practicality's sake.

During the collaborative writing process, the group members brainstormed ideas, reviewed each proposal, and reached a consensus on the idea to be developed in their first draft. As their products would be read aloud, displayed, and put to the vote, they asked for the teacher's feedback, revised their grammar, and went on to design their own story pages, which involved choosing images from online galleries and/or drawing their own pictures, combining their images with the relevant text, and making more modifications for overall coherence. Figure 4 shows the three best samples from the students' alternative endings designed by using DST resources.

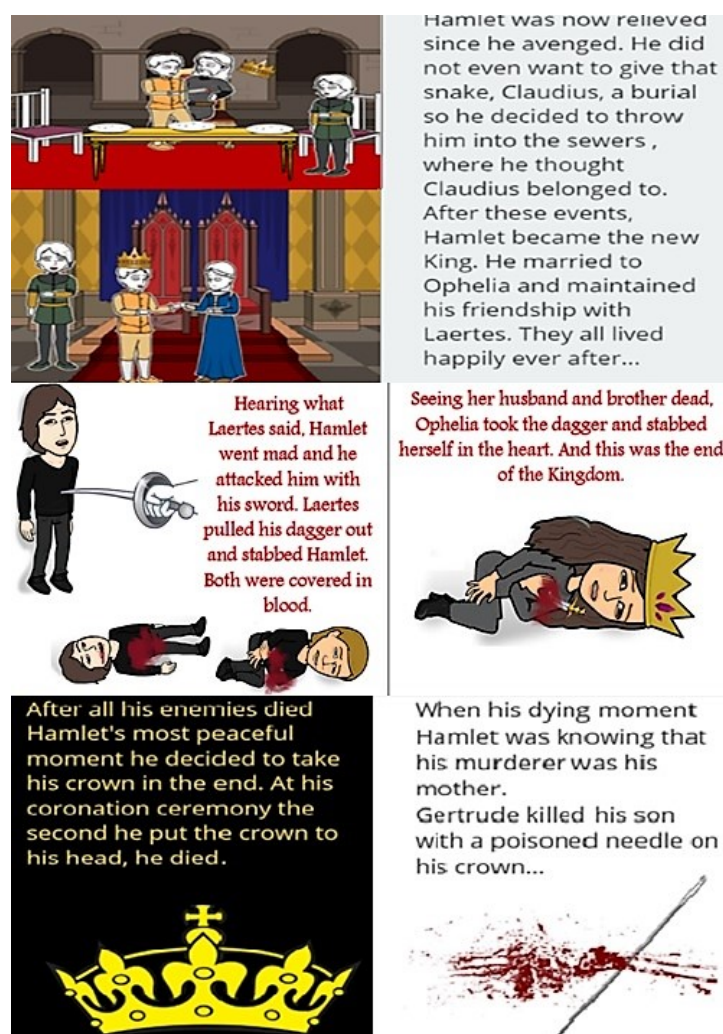


Figure 4: Examples of alternative endings in DST

It can be concluded from Figure 4 that in the first of these three writing samples, the students chose to have a happy ending, where Ophelia and Laertes took sides with Hamlet, and Claudius was overthrown and imprisoned. The second group, on the other hand, preserved the sad but very Shakespearean ending, where Laertes conspired against the new royal couple, made them drink their baby's blood, and caused Ophelia's suicide eventually. In the last and bloodiest sample, they decided that Hamlet should be killed at his coronation ceremony with a poisonous needle placed in his crown by his own mother.

This collaborative writing activity was followed by a similar but extended one, where the same groups gathered to script a modern version of the authentic story. In order to facilitate their task performance, they were shown extracts from famous screen adaptations of Hamlet such as Akira Kurosawa's 1960 film noir, 'The Bad Sleep Well', the Spaghetti Western version called Johnny Hamlet (1968), and Metin Erksan's 1976 Turkish drama known as 'The Angel of Vengeance' or 'The Female Hamlet'. Its cartoon version, 'the Lion King' was also previewed, so that the learners could better comprehend the universality and eternity of Shakespeare's human themes. They were made aware that they were free to choose the setting, modify the nature or source of conflict, and change the names of the characters, as long as the plot remained more or less the same. Figure 5 displays the three best samples from the modern adaptations the students designed by using DST resources.



Figure 5: Examples of modern adaptations in DST

According to Figure 5, the setting varied greatly in the given samples; i.e. from an artist's workshop to a big corporation, and even to a grocery. However, in each case, there was a power conflict, leading to the murder of Hamlet's father by his own brother, as in the case of the original storyline. While the killer was revealed at an art exhibition in the first, and at a (family) dinner table in the second sample, the third group employed an eyewitness (his father's mistress) to inform Hamlet (Hamdi) of the murderer's identity. As for the methods of killing, theirs were not as violent as Shakespeare's, and the students mostly opted for a more down-to-earth, fair ending rather than a total destruction of the whole family. Ultimately, the collective works of the collaborative digital storytellers were presented to the whole class under a pseudonym of their own choosing, and also voted by fellow narrators. The samples provided in this study were the ones that had earned appreciation and admiration from both their peers and the teacher.

CONCLUSIONS

It has long been the mainstream of the L2 reading pedagogy that the students rarely read with a real incentive (i.e. reading for pleasure or continuous learning), but rather they do so in order to restate the textual information, when elicited through comprehension questions or gap-fills (Masuhara, 2005). However, digital storytelling can offer a useful tool for building a multidimensional class, where L2 learners can regain the fun, interest, and involvement they seek in L2 reading, and thus have a more rewarding experience of living the text rather than analysing it on word level. The following benefits of DSTs have been observed in both our class, and the literature: (i) while the students work for, and with each other, or, more precisely, they learn from each other the skills, and knowledge they lack (e.g. the less technologically-minded or those with limited language skills being supported by the experienced ones), assess each other's work, and become independent, (ii) they also develop the essential interpersonal and social skills for motivating, encouraging, supporting, negotiating, and maintaining communication, and (iii) as they are not simply writing but as a matter of fact, designing personal content in multimodal ways, and to their potential reader's liking, digital storytellers enjoy the creativity, diversity, flexibility, individuality, and interactivity absent from the conventional L2 reading class (Castañeda, 2013; Gregori-Signes, 2008; Kajder, 2004, p. 64; Pardo, 2014; Ramirez, 2013; Robin, 2006; Torres, Ponce & Pastor, 2012; Vinogradova, Linville & Bickel, 2011). It is therefore worth investigating whether digital storytelling can enhance other language skills, intercultural skills, and critical thinking skills, or foster their vocabulary and grammar learning through experimental studies in different teaching contexts.

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ON IN-STRUCTION-ABILITY OF TACIT KNOWLEDGE AS ORDINARY, PRACTICAL MEMBER'S METHOD

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ABSTRACT

This study begins with problematic how tacit knowledge could be 'view-able', 'share-able' 'reproduce-able' among competent members who share similar experience. Tacit knowledge is private but public.

This idea relies on Ethnomethodology. EM is a descriptive study of ordinary members' methods, situated practice and ordinary actions, which constitute social order, rationality, and work, etc.. Here, the idea of member implies an agent who has a competence to appropriate tools. Members always play between the situated reasoning, actions and the horizon of understanding.

Our experiences are always situated and intended into something. So, interest goes to examine how learning takes place as byproducts of participation rather than understanding. We already know that studies of situated learning and embodied cognition have been developed in educational studies: descriptive studies and instructional design research over the last decade.

If development and learning are routinely ubiquitous productive experiences, then micro-level and detailed analysis of the actual situation is required. On the other hand, detailed analysis of how situational practice is involved in learning experiences is still rare in (Korean) studies.

In this study, I examined how the tools and resources are dispersed into situations and become invisible in our 'participatory appropriation', and how the situation leads to our practice by structuring the next situation with the passage of time.

I examine how experience, tacit knowledge is interactively structured in situational practice, through case studies such as interaction with others, personal practice, and use of visual materials. In addition to the transfer of experience, the learning of knowledge was also intended to show how experience, or know-how, develops in the embodied context. Finally, it suggests that the instructional design can be presented as logic and a model for the design of the minimalist learning environment.

1. SITUATIONALISM PARADIGM AND PRACTICE: PRACTICAL COMMUNITY? COMMUNITY PRACTICE!

It has been quite a while since situated learning theory emerged in teaching and learning research. Situated learning theory started from the study of child development since the 1970s. In the study of child development, It tried to reveal through various studies that the socio - cultural context is an endogenous variable directly related to what a child can and can not do. Here, of course, Vygotskian scholars were the protagonists. They sought to refute the structuralist assumptions presupposed in Piaget's work with ecological psychology or cultural psychology as the backdrop. They wanted to show that the cognitive structure expressed by the child's reaction or thoughts was consistent but dynamic and contextual. Since then, many developmental studies have shown the micro-genetic and diverse cognitive aspects in the child 's situations rather than the static and linear changes in the cognitive structure.

Many studies on situated learning have been actively discussed since the 1980s with universities and research centers in the western United States. The main reason was that Vygotskian psychologists interacted with the local universities is US. They have also fused with so-called micro-social theories to create activity theory. In particular, the formation of a context awareness or situated learning centered around the US cannot ignore the effects of micro sociology. Traditionally, in teaching and learning research based on psychology, there has been a limit to view the context as endogenous variables of learning and development. On the other hand, interdisciplinary researches such as cognitive science based on Silicon Valley were in the midst of research on interaction and context, and micro-sociological studies added to this. Here, micro-sociology is the name given to the fact that it differs from the existing sociology based on social structure and norms is in that they try to see the 'daily life' as the foundation of reality and the tendency to overturn the world.

This microscopic approach, especially the symbolic interaction and ethno-methodology, showed how society, organization, and work are maintained through microscopic situated analysis of the folks under the banner of

methodological situationalism and restoration of daily life practice. According to them, the situation of practice is 'by itself' a structured, ordered as social organization and a process of work. The situation here refers to the intertwining of time and space created by practice and cultivated in practice. In learning theory, the situational paradigm is largely driven by insights from these studies on the actual interplay of social interactions and situations. Situated learning and communities of practice theory came from this background. Studies on situated cognition, along with embodied cognition and distributed cognition have been poured out, but it is still unclear as to when situated experience gets a status as learning. It is so because we can fully agree that our thoughts and experiences are based on situated contexts, but not all situational experiences can be seen as learning. Of course, it was not clear how our experience was contextual. Furthermore, the interpretation of all experiences as learning does not fit into everyday language. This is because most of the learners have implied some kind of normative meaning called desirable change.

The challenge highlighted among situational researchers was to find an answer to how our experience finds consistency beyond the context of variable and improvisational contexts. The question of how our experience finds consistency is also a question of how our experience changes, when we turn it upside down. Every experience is a situational experience, but our experience keeps it constant. The situationalist viewpoint is in contradiction with the view of normative view and learning that preceded by consistent homeostasis alike an individual. In examining the situatedness of our experience, the existence of the identity of the experience, ie, the homeostasis, was questioned. And we began to deal with how we are negotiating, transacting with the surroundings in order to create, maintain and restore the homeostasis of experience, and how our experience is changing as a result. From this point of view, the identity of participation, that is, competency, arises from the negotiated experience.

Today, communities of practice (CoP) is also known as a model of network learning or organizational learning, and is sometimes referred to as an ecology of learning. Furthermore, 'theorizing' of situational learning such as CoP has become a successful model in educational theory. Today, even within the paradigm of situationalism, the process of participation in CoP has been accepted as a model of situational learning, where contextual learning and CoP are considered synonymous. In view of the situational paradigm, those who assume the CoP as the theoretical model sought to take only the strategy of 'learning in the community' or 'learning in the knowledge organization', while not scrutinizing the practice.

Every community is an intangible community, or an imaginary community, in that some aspect of experience and interaction is called community. It is an intangible and imaginary product, but it is also a device that allows members to believe that they exist as shared objects. This sense of reality is only possible if participants experience at the identity level. For example, the establishment of a professional learning community among teachers in a school does not mean that a learning community could be established. If a group is established at the community level, then the organization should exercise its power to tie the parties apart, not through separate programs but through a wide range of daily routines. Confirming the existence of the learning community can be a break time, or it can be a time of gathering at lunch time and chatting. It may be a long time or a short time.

In the paradigm of situationalism, the idea of participation in the CoP as embodied learning in identity level is more appropriate to be seen as 'learning through practice'. The concept of CoP is limited, because it limits all individual actions and experiences to collective activities in organizational level. Of course, the return to the community has a weakness that makes the specification of learning activities too narrow. As we shall see later, all practices themselves imply interactions with others overtly or tacitly, and are collective, so a close examination of even individual practices implies a sense of community. Rather, the paradigm of situationalism is more appropriate to see that problem recognition begins with looking at practices and ends with practice.

Situated learning theory is a paradigm rather than a theory. The spectrum is broad and its interest starts from a much more fundamental question. Of course, it is not so difficult to summarize the whole topographic map of the study, which is a paradigm of situationalism. In Psychology, Vygotskian developmental theory and ecological psychology, and sociology, symbolic interaction, ethno-methodology, and philosophical background of practice and social anthropology have met with a paradigm of situationalism in learning research (Nicolini, 2012). In recent years, activity theory, which has been mixed with the above-mentioned intellectual roots, occupies a large part in the paradigm of situated learning theory as well as CoP theory. The paradigm of situationalism is based on the assumption of cooperation or harmony in social theory, although the theory of action takes the position of conflict theory as well.

In the contextual paradigm, we can summarize how we see experience, knowledge, and learning as follows.

First, experience is dispersed not only in the objects it is dealing with, but also in situations. Thus, all experience is a direct experience that is not mediated by concepts or representations, and thus experiences are improvisational. Second, the situation is the space that we face and reside in. Thus, the intellectual experience as a direct experience

arises from interacting directly with the object or its surrounding subjects, i.e., the situation. At the same time, it is embedded in the flow of context.

Third, the reasoning that actually works in the problem solving process is as contextual as using circumstantial clues and resources.

Fourth, perception, behavior, emotion, and intellectual experience are a direct experience of and in the situation, so learning is not a matter of understanding or thinking but perception and action, firstly.

Fifth, all experiences are non-mediated direct experiences. At the same time, they are based on the possibility of sharing and reproducing with other people, and learning of them involves coordination with others, compromise, obedience and modeling.

Sixth, the situation, which is an activity system that affords our experience, that is, an immediate, micro-genetic environment, requires an act of positioning itself, that is, an act of participation.

Seventh, learning is not the change of the individual internal structure but the flow of the related pattern of the individual and the situation.

And the supposition above the above is as follows. In other words, all actions are situational acts of negotiation and coordination, all thoughts are situational thinking of negotiation and coordination, and therefore all learning is also negotiation and coordinated situated learning. This is a pitiful point for situational learning theory. In education theory, learning is a form of experience or behavior that corresponds to its position on a normative level. Let's take an example. Let's assume that students to learn literature are reciting poetry repeatedly. Is it learning by memorization or doing situated learning based on practice? Another high-level premise is that all experiences are based on practice (Gherardi, 2008; Schatzki, 2001). The attributes of situationalism presented above are also attributes of practice. The context and practice are the same as the two sides of the coin, so they can be regarded as two axes that cannot exist for the meaning to be established. Practice and context are seen as constituting each other. To read is to find the context of the story, comprehending the meaning between lines, in which reading activity must be carried out. In general, when we refer to an action as an action, it implies the following features.

First, actual activity is involved and as contextual as it is.

Second, it is patterned and routinely repeated, not a one-time experience.

Third, it is public rather than private, as it is reproduced in a way that can be shared with somebody.

Fourth, 'while engaged in the work', it is as concrete as the agent and the agent and the object are put together.

Situated learning can be called learning by practice in some sense, if we think of it as a more familiar concept for us. In the following section, I will try to talk about cases with basic assumptions about how experiences are interactionally learned based on situational practice.

2. HOW DOES EXPERIENCE EMBEDDED IN THE CONTEXT?

2.1. The tools of knowledge and the afford-ability of objects

According to situationalism, all knowledge has the attributes of tools. The term "tool" here means a means of mobilization to do something. Knowledge can be seen as a tool, whether it is explicit knowledge or tacit knowledge. Even conceptual knowledge is nothing more than a tool for us to use that knowledge. We often use the term "knowledge" as a tool in a pragmatic sense. The utilitarian nature of situationalism implies the meaning of acting in a 'pragmatic' way in the context of what we are trying to accomplish.

If you understand what the tools of knowledge mean, you can more easily figure out what it means to learn situations. In order to understand how knowledge becomes instrumental, it is necessary to reconsider the fact that once knowledge is gained, it is experienced by us in a way that the knowledge is not indistinguishable from the object to which it is aiming.

Merleau-Ponty (1962) has argued about the invisibility of tools, such as a blind's stick. Give a blind man a stick and let's talk about it. He will talk a lot about the looks of the stuff, such as being heavy, too long, smooth on the surface. However, he does not perceive itself as it has begun to use it as his own tool. When he appropriate the cane, it works as the extension of his body. At this time, the cane is felt as the object to be handed to him, such as a curve road or an obstacle in front of the road. Likewise, once a tool and its use begins to be mastered, its existence becomes as transparent as it is without.

The knowledge and skills that we mobilize when we solve problems can also be seen as a tool. Knowledge or technology is visible before we learn them, but once we learn and begin to use them freely, we are not conscious

of their existence. It is easy to imagine that a situation in which a person has learned enough to freely use any knowledge or technology has made it possible for the user to flexibly adapt the knowledge or skills as they are, without being hasty or unconstrained. Ironically, mastering knowledge and skills implies a dual meaning that it regulates me and make me free from it.

No matter how high-level knowledge or skills are mastered by an actor, it becomes an object (problem space) directly experienced embedded in the situation to the party. For example, in a learned situation, a violin and a piece of tune are the objects of a fingertip and ear feeling that give an immediate response to the performer. Familiar words are immediately used and responded in conversation. Also, the carpenter's hand is virtually flamboyant when it is nailed to the wooden board.

Medical doctors 'see' how the symptoms of pneumonia have progressed in black and white films and interpretations are also contextually and pragmatically proceeded. It is not the interaction between the situation and the mind, but the relationship between the situation and the perception or behavior that is open to it. The object is not an object of thought but an object of seeing, hearing, speaking and using.

According to activity theory, which is one of situationalism, the acquisition of knowledge is an appropriation to utilize it as a tool, and at the same time, sense the quality of objects, contextual sense of meaning. Polanyi (1958) described the intrinsic motives drawn by objects as dwelling in a practice. From an 'emic' point of view, the practice in which he participates is not only an intellectual but also an object of aesthetic and ethical attachment. Here, one is able to perceive and respond to the quality of the object, which means the development of competence. At this point, as the interaction develops into direct experience and action, it is expressed in the form of non-mediated perception, practical, practical behavior and emotion. Here, non-parametric perception means that our perception toward an object is immediate, not mediated by knowledge or representation. And that the interaction of the object or the situation with it is in the form of actual action, which in any case means that our plans and actions never follow the rules, i.e., 'knowing-that'. It follows the quality of the object without following the rules. For example, when we are faced with a problem situation, we take the action and decide on the following actions based on the result of the action. This process, of course, takes place in a cyclical, holistic way, not a single, segmented process. Daily practice is like a prescription that automatically leads to behavior for users who live in it, such as habitus or tradition. These habitus and traditions allow us to live improvisationally in a stable manner without having to define and plan new situations or objects that are encountered every time.

2.2. Context as the flow of experience and the relationship of work

The context in the situational paradigm is the local environment of our actions and reasoning. In this regard, the question posed in situated learning theory is how contextual attention and attitude temporally structuralize situation variables. Situationalism basically takes an emic perspective rather than transcendental. If the person is immersed in the situation, he or she will have to act and reason *in situ*. He takes for granted so many things *in situ* and focuses purposefully his attentions to the object, and thus organizes so called a 'phenomenal field'.

This can be expressed as follows.

<Figure> Temporal structure of situation

In this respect, it is necessary to take another 'effort' of situational reasoning to form meaning through action. In order to solve the problem and to create meaning as described above, a situational flow of development of time is needed, presupposing the unpredictability of the act that is developed with endless open conclusion in the present infinite current of 'here now'. Every moment we meet is always tense and unfamiliar, even if it is repeated everyday things. This is because the moment when we meet 'here now' is a unique and individualized 'present' that is reflected and embodied in the past experience and future. Therefore, when inferences occur in order to solve problems and dissolve them, we are at a moment when we need to reflect on the past and future expectations, and make endless choices and decisions.

Here, in most situations of everyday life, most things are handled without being conscious of such tension and newness. And when it comes to encountering a problem situation that is contrary to existing cognitive structure, reflection and reflection often occur. Dewey (1931) explained that the experience of mobilization of these stigma is the moment when learning takes place. The cycle of question - answer - evaluation between teachers and students, which is an easy way to find out in school classroom, is an example of how the composition of the situation concentrates the attention of the participants. A teacher's question to a particular student turns the situation around, forcing the student to think about how to find the answer unobtrusively. It makes me wonder what stories came before the question, what the teacher wanted to answer, how my answer could not escape from the post-war context, or how I could answer the opinion differentiated from the student who replied in the past.

The function of the teacher's question structuring the situation response of the student's response is not limited to the individual. The influence of the situation is not limited to the students who are asking the question. In other

words, the question he asked to Mr. The rest of the students is not identified with him, but the questions he made to him are also questions to them. 'I know that next turn may be myself.' A teacher's question to a student has the effect of binding each student into a single identity. In this way, the practice community of us in class is composed of situations and situations.

It is easy to understand how one infers the next moment by moment, by comparing it to a puzzle solution. Matching a puzzle is a process of exploring the relations between the whole and the part of the lyric retrospectively and prospectively. It is as if we are not only paying attention to each sentence when we read a book, but also exploring how it relates to the flow of context, at the same time. The associations of each piece make up one situational condition, and the conditions so created become another context, directly affecting what the next puzzle piece should be chosen. For example, the immediate emergence of the empty space between the pieces of a puzzle is a condition that allows us to visualize the phenomenal field in horizon of the expectation that something must be present (Garfinkel, 1967). In this way, the relation between the whole and the part is structured.

The nature of these actions arises when they are put into contextualized issues that have been placed. This may be a game of infinite puzzle solving, and that's why the same game is experienced 'as if it were always new'. In other words, it acts as a player to infer new associations, even if the number of various cases of the situation at that time is one rule of the game. Therefore, the following situation, which is experienced every time, always has the emotion of 'throughout for the first time'. And such unpredictable tensions cause inferences about the following actions.

Various situational inferences are triggered during solving the problem and in the process of performing the task. These inferences are due to the anticipation of the next situation, the unfamiliarity of each situation due to the actions according to the previous situation, and the nature of the temporality as a basis for establishing the context. Temporality, as a source of structuring that gives a totality to our actions, acts as a frame for us to act and induce action. It is because temporality can act as a frame of action, accompanied by emotional expectations that are experienced before the present. Here, the horizon of the individual's understanding, such as the anticipation of the previous experience or situation, acts on the overall reasoning and acts as the direction of our work. This is the product of a coincidental situation in which factors such as concerns and expectations about vague consequences stemming from previous experience of the actor's situation are considered (Shon, Minho, Cho, Hyun-young, 2014). The flow of time that we put into practice shows the nature of the situation that determines the process of work, experience, and learning.

3. HOW EXPERIENCE IS LEARNED CONTEXTUALLY

3.1. How are communities of practice experienced in the learning of sensory knowledge ?

The learning of experience, such as sensory knowledge, is usually treated as the creation and sharing of tacit knowledge. Coffee barista technology arises from participation in the barista education program for a while. High school students participate as teachers and deliver the technique to trainees. Such techniques consist of techniques for extracting coffee and the ability to distinguish flavors. If we can reconstruct the experience of the practitioners involved in the training, we can see how the coffee barista technology can be created, that is, how the sensory knowledge is learned. It is possible to understand how dozens of coffee can be classified as dozens of coffee with similar taste and similarity, and how the natural vegetable material of bean can be turned into a target of cultural symbol surrounding coffee and socio-cultural consumer goods. It will renew our understanding of numerous practices.

In general, constant grinding and practice to acquire tacit tend to regard it as a 'non-contextual' personal situation. However, every practice has the nature of some demonstrations. The demonstration here means practice with someone in mind. For example, if you are practicing while preparing for a concert to come. What about an apprentice who practices hard to master pottery making? Does the practice of making porcelain soil also be a demonstration? **It is necessary to review the fact that in all exercises the co-presence of the other is directly or tacitly associated** (Wenger, 1998).

According to symbolic interactionists, even individual headaches are simulations of real conversation. The flow of thought in us is a monologue, but it is much more of a dialogue. If we think of a case in which we continue to make words in order to sort out thoughts in our minds, we can fully understand what this point means. Although I am thinking alone, there is a dialogue between the subjective self (I) and the objectified self (Me). In this sense, Vygotskyists have argued that our thinking is not an internalization of a concept or meaning but an aspect of internalization of interaction.

The contextual learning, that is, the acquisition of sensory knowledge contextually, has the following meaning. **All of this sensory knowledge consists of 'in a way that allows interaction with others, such as colleagues'.** In a somewhat abstract way, all these processes must involve action and practice is based on interactive attributes.

Interactive aspects are often situational and peripheral, so they are taken for granted and overlooked. Because when you learn about the taste and aroma of coffee, it is because the learner's attention is focused on the object, that is, the coffee itself. Therefore, it is easy to think about the interaction between the learner and the object as a condition that a tacit of coffee taste discrimination arises.

According to various research results, the interaction is not limited to the interaction with the target object. For example, the Chicago sociologist Becker persuasively found that being a marijuana smoker through a study called 'Becoming a marijuana user' is a process of learning. It is not only because of the chemical that makes marijuana feel so called 'getting high'. He found that beginners arise from tacitly matching their experiences with colleagues. Interactions with people associated with this object facing such objects also permeate knowledge of the object or techniques that deal with it. First, the problem of 'who' is implicitly engaged. In the case of a newcomer, a professor is already a sociologist and has already been set up contextually within the community. Thanks to this, the words and modes of action of the old timer are accepted as being typical of knowledge, and imitate and follow him. At this time, the novice wants to follow the experience of the master while reserving any suspicion. Even if the instructions or experiences of the old timer are immediately followed, and even if there are difficulties in accepting them as a part of their experience, the newcomer takes an attitude of trusting and following him, reserving his own judgment. This is because the collective emotion, or ethos, is the basis for the working community to function as a learning mechanism.

It is also the emotional foundation of learning that Wenger (Wenger, 1998) argues that the practice community theory differs from network learning theory in his book. This emotion begins with an attitude that aims to align the differences between the types of communities in which one wants to identify with oneself. The identity formed through participation is the product of the mechanism of identification.

The ability to distinguish the taste of coffee, the object of interaction, is required not only for the tacit knowledge embedded in the tongue but also for competence to objectify in a way shared in the community. Of course, the two cannot be separated, but for the sake of explanation, it is. In the same vein, P. Winch has said that the fact that a mechanic has been able to repair a machine means not that he can repair it, but that he can do the work of other mechanics who have been able to repair the machine. Many qualitative sociological studies that have suggested implications for how learning experiences arise find such assumed aspects of learning experiences in such social interactions.

If the category of identity and its formation are similar to the tacit and the pattern of learning, the same interpretation of the double restraint of tacit learning can be applied to this. It is more accurate to say that all membership categories constitute constellations of practice, not specific communities. It is based on the premise of an anonymous majority community. For example, it is awkward to say that there is a working community of fathers. However, the identity category of the father is established in relation to the aspect of the practice that many anonymous people in similar positions share. It is like saying that seven contiguous constellations visible to the naked eye at night look like a big dwarf, but do not exist as reality but exist as meaning.

Similarly, the practice community of cancer patients does not exist formally, but of course there may be institutionalized organizations such as cancer patient associations, but the identity category of cancer patients actually exists. Being a cancer patient means more than having a cancer in your body. Learn how to look at your own disease or world, how to live your life as a cancer patient, how to eat and how to deal with your illness, and gradually learn with the experiences of people you have not experienced Goes. They have implicitly accepted their stereotypes and as such the category of cancer patients becomes part of his identity. Identity as a cancer patient is both formed as part of a response strategy to the disease and also as a social response strategy. These identities are typical of what we see as contextualized as we actually participate in the practice. Being of being is a being in the world that emerges as a result of participation in doing.

3.2. How practice is context-dependent

Most learning is related to the mastery of knowledge or experience. The children recite infinitely repeated numbers of the calculation to learn how to count. It is necessary to memorize the concepts in the textbooks before the examinations, and to repeat the exercises in which the concepts are applied. In order to play the piano with K-pop score, you have to repeat the practice of tapping the piano key several times. A 10,000-hour practice is required to reach the skills of professional woodworkers and professional musicians (Sennett, 2008). **Before examining how situational practice is practiced, it is necessary to examine how practitioners' practices are characterized by a management of situations.** The following is the interview scene in the virtual medical situation which is the simulation situation of the actual medical situation. Here, the doctor is diagnosing the patient's individual, ambiguous physical symptoms by naturally associating them with one medical fact in the interaction with the patient.

<Case 1>

Doctor (SD): You do not have it at all. Yes, um ... Its black side. It's not black ... It's a mixture of mucus or something.

Patient (P): Is it mucus?

SD: Yes. Is not it a mixture of whiteness and other substances?

P: I do not know. I do not know that.

SD: You do not know that. Do you have diarrhea?P: NoSD: You do not. Yes. Do you feel sick?

P: Oh. Sometimes.

SD: Where are you sick?

P: I do not know. Are you sick near Meiji? There was a thing like that.SD: Near Meiji. uh... Since when did you do that?

P: I do not know. I do not know exactly. I think it has been several months.

SD: A few months ago. How are you sick? Do you feel sore? Or is it ...

P: Sometimes I get sick.

SD: Oh. Do you feel sick?

P: Yes. Sometimes I get sore.

SD: Oh. Do you think it has a love affair? It's okay if you eat rice or it hurts more when you eat rice ...

P: Yes. The sore ... on... then... I think it's okay if I eat a little bit before I eat ... Yes... (syncopation)

SD: Yes. Okay. You said the pain was painful. The pain is ... Do not you feel like you're stretching to the other side?P: Do you stretch it?

SD: Yes. What... I'm sick here and my back is sick again ...

P: No. I do not know

SD: You do not know that. Yes. Are you mad, are you?

P: Sometimes I think I have some time to do that. (Jo Hyun-young, 2015)

In this situation, the doctor questions the patient and confirms the patient's answer again and again. It looks like a self-affirmation of the patient's answer, but anyone in the room can hear it. However, one interesting fact is that the doctor is reconstructing the patient's ambiguous and uncertain answers in a way that redefines meaning in the process of re-speaking. For example, when asked about the aspect of pain, the patient's answer to "I'm sick" is to say that the patient feels sick, "You feel sick." The patient may say "sometimes is sore," which implies that there is a feeling that it is not in the grammar.

However, the doctor does not specifically ask about it anymore, but it limits the aspect of the pain to feel sore. However, the patient does not refute the doctor's words. Likewise, the part of the pain is also answered by the patient, "Are you sick near Meiji?", And vaguely and uncertainly answer the boundary of the pain area. However, when the doctor tells a part of the pain in a situation that a physical examination is taking place a while later, the assertion that "the pain says that the pain is painful," continues the next question. Likewise, the patient does not refute this, and rather, the patient complains of a strong pain in the 'precisely on the spot' in the following physical examination situations. Unlike the ambiguous description of the patient in <situation>, the abdominal pain of the patient appears to be very self-evident in the following situations.

The way the doctor reconstructs and speaks the patient's words seems to be a simple self-talk, but it plays an important role in determining the meaning of the patient's answer. If the patient says "near the mites" and vaguely says the boundary of the pain, then in the next dialogue, if the doctor says "mitsuchi area" and the boundary is limited, then the conversation follows without any mention from the patient. This does not directly answer the question, but implicitly acknowledges that there is no major disagreement over what the physician has defined as the site. The patient's acknowledgment or rejection of the doctor's passive words determines whether or not the next conversation will proceed to negotiate on the issue or to move on to the next question. This type of utterance also provides a time margin to recall the contents of the next utterance, reminding the patient again. If the gap between conversation and conversation, and between conduct and action, is too long in a natural medical setting, then this is very awkward, or is likely to be interpreted as having any meaning.

Therefore, unless the pause space has a different meaning, words or actions that naturally lead to the situation must be made while searching for the next action. In particular, in the virtual clinical situation of the clinical performance evaluation, the student doctor reconstructs the words of the standardized patient and restricts the meaning of the symptoms necessary for the diagnosis, so as not only to find the clue for solving the problem, I

will secure time. This type of interaction shows the characteristics of asymmetric interaction between expert and non-expert. Experts are in a position to solve problems very positively in the way of diagnosis and prescription, somehow, among the individual and similar situations of patient care. Thus, the physician must be able to deal with ambiguous symptoms in some way by himself or herself as a problem that can be explained, and this can be done through a process of discourse of mutual interaction.

In other words, the expert appropriately takes advantage of various resources placed in the circumstance surrounding him in the problem situation, that is, the unequal power relation with the patient's speech or patient, and thus, it brings the situation to the intention. In other words, in order to narrow the gap of difference, the similarity of context is changed to the same through strategy of placing situational factors in place.

Heidegger explained the strategy of the context through the two forms of existence, 'distance elimination' and 'distance orientation' (Pak Chan-guk, 2014). It is equivalent to 'distance removal' to make it easy to use the necessary tools to do something. This means that they are familiar and proficient. The closer the distance is, the greater the dependence on the object becomes, and as a result, it becomes invisible enough to recognize the existence itself, and it becomes comfortable and familiar.

Distance or visibility here does not imply a physical meaning. This is very contextual and relatively dependent on the use of the tool. For example, when we are nailed, even if the hammer is only 2 meters away from me, it is as if it is considered to be far away because it is not a distance that can be reached when reaching out. In addition, objects that are so close and familiar that they cannot be visualized can be seen to be more distant than other visible objects. For example, the presence of glasses that I wear can be felt farther away than someone in front of the conversation.

Familiar and comfortable being has the characteristic of taking a direction at the same time as eliminating the distance. The actions of removing the tool's distance and orienting occur continuously in the flow of the situation. You need a hammer and pliers to nail the wall. Hammers and pliers are used alternately and at the same time, depending on how the actor hammers. Thus, hammer and pliers can be nailed without clogging, depending on the action to be followed, sometimes in a way that makes the nail easier to hold, and sometimes when the pliers are placed in a more accessible way. Direction refers to the act of adjusting the distance between the tool and the actor in the context of work.

Take the course of learning how to ride a bicycle on an unfamiliar road. When riding a bicycle on a smooth, even road, the functions of bike riding, such as how to hold the handle and how to step on the pedal, are very familiar and comfortable and are not to be taken seriously. However, if you are in a new situation, such as when you need to overturn, you must loosen the handle, hold it firmly, adjust the pedal slowly and quickly, and adjust accordingly. In addition, when the brake is applied, the driver can predict the flat road to be unfolded, gradually release the brake, and step on the pedal. The skills required to ride a bicycle here mean that the situation can be adjusted appropriately, sometimes by bringing some of the tools closer to the situation and sometimes a little farther away. It is also a process of predicting and preparing the direction of the tools to facilitate the use of the next necessary functions among the situation to be unfolded next and previous situations.

On the other hand, catching a direction here implies that the meaning of the tool itself is expanded while meaning a deformed action such as a residue or a residual technique. The presence of the left and right directions is possible only when there is a standard of forward direction. And how much you know the difference means you have become more familiar with where the forward is. It is easy for us to think that it is the force that applies to the object itself, but we actually take the way of coordinating the circumstances surrounding it.

It is also an activity that relocates the resistance factors that are a stumbling block to what you want to do. This process is a process of constantly inquiring the dissolution in ambiguity, and the experience of failure in this process is an experience of various situations and an educational experience to utilize situational resources. All of these experiences remain as meanings that enrich the emotions surrounding the object. There are no meaningless moments in the experience of trial and error, and the situated experience remains a potential resource that can be mobilized for other practical purposes.

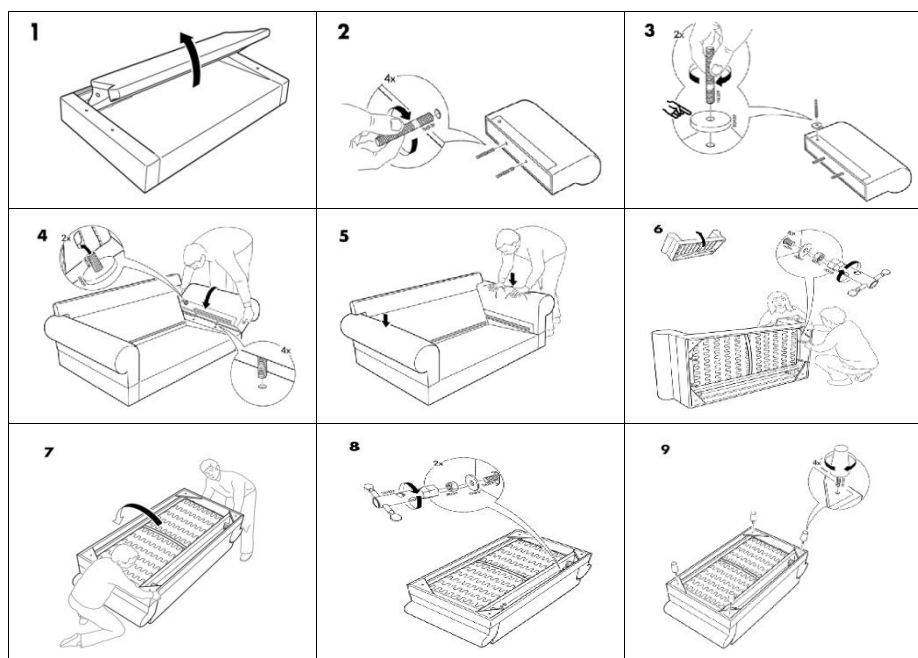
In this respect, practice implies a repetition and at the same time a constant renewal of change, carried out in a tense of and a desire for perfection that can never be achieved. Repetitive practice and variation created by imperfection means stopping in that state, but sometimes it leads to the creation of a new style in itself. In the end, the practice to master knowledge or skills is situated learning that repeatedly experiences the differences and identities between situations.

3.3. How the sharing of experience depends on contextual participation: Examples of Visualization as Practice

1) Visualization as manual? or practice!

In the case of furniture, as well as those that are sold for direct use, the manufacturer will also provide assembly drawings to assist the assembly. Particularly, as the sharing method of information through the Internet has become

popular recently, there have been various ways of sharing information about assembling processes and strategies by showing photographs of the process of assembling directly other than assembling, or uploading video materials. These materials generally visualize information that is difficult to deliver in a language so that the user can more easily follow the production process. So how can these visualizations provide accurate and abundant information about the knowledge or technology you want to convey? The following is a furniture assembly drawing of I company famous for prefabricated furniture.



In the above furniture assembly diagram, it is explained that it is possible to assemble the finished form of furniture simply by following the order. How much assembly and actual assembly can match? Obviously, assembly charts complement the limitations of the language's information delivery capabilities and provide more specific information. The purpose of each step is to visualize and communicate the necessary manipulation methods in the process as much as possible. Nonetheless, the ambiguity always follows the user who wants to follow what the drawing of the assembly drawings means. In the above assembly diagram, the direction of the arrows shown in each figure and the assembly order of the screws are not clear.

In the actual assembling process, the drawings shown in the assembly drawings are achieved only when they are accompanied by practice of finding the meaning through the method of actually comparing the object and the picture, applying the action, and coordinating it. For example, the sophistication required to handle an item, the strength of a force, the direction and angle of tightening a screw, and the like are in fact lacking in information only by the arrows shown in the drawing. And differences in the manipulative abilities and physical conditions of individuals dealing with it also make a difference in utilizing and interpreting the information. Of course, previous experiences and background knowledge also make a difference in understanding the drawing. In other words, these visuals, which contain a skill or experience, do not convey any information by themselves. In fact, the visualized information at each stage shows some of the information needed at each stage, but what it means depends entirely on the user's competence. In order to understand how information or technology is delivered through visual materials, you should look closely at how users are doing in real-world situations.

The reason why visualization data is limited in conveying information is that people usually do not see phenomena or objects as they are. What someone sees is determined practically by his point of view, intention, and context. Simply speaking, people see what they want to see. In this respect, it is possible within a limited range that visualization material directly affects learning as a change of understanding or experience. In order to see something different from what you saw in the first place as a result of the learning of new information, it is not enough to just work visually. It must be accompanied by other perceptions.

2) Seeing as practice to situate one's body

The following are observations of a 5-year-old child learning a new letter.

Mom: (Drawing the letter 'P') So you write 'l' and you draw 'o' like this.



Child: Okay. All right. (Draw a picture with 'l' and 'o' attached to it)



Mom: No, it's not (it's a 'l' and repeating the shape of the right semicircle).

Child: All right. (Draw a picture with 'l' and 'o' attached to it, draw a few more pictures with a look compared to your mother's picture)

Mom: No. Take a good look. Do not draw the circle, but stop here. Hold your hand and draw a 'P' together.

Child: Oh ... Stop it? (Again, I look at the picture of the mother)

This is a good example of how to look at how things are done as you are familiar with them rather than seeing them as they are. In the above situation, it can be inferred that the child's reaction to the letter 'P' would have been a combination of 'l' and 'circle', which are already familiar to him. Perhaps it is not easy for a child who has never painted a semicircular representation.

In the above example, the child starts seeing the circle as a semicircle by drawing a semicircle with his own hand, guided by his mother's hand. The shape of the 'P' that the child finally reaches is not the result of changing his or her understanding, but a product of the practice of collaborating with his mother and discovering the difference by acting his own hands. In other words, the child was looking at something else while looking at the hand with her mother. An example of how cooperation with a mother can differentiate a child's perspective and thereby enable a child to achieve different interests. The act of interaction thus provides a primer that opens the possibility of a proper understanding between subjects and objects at every moment.

3) Indexical expressions as taking a field into view

The transmission of some experiences is possible not only by demonstrations but also in talks. **The transmission of experience through talks are the most typical example seen anywhere in everyday life.** At this point, talks are more like an act of directing or urging action on where to focus attention than a representation that conveys the content of experience. Here, the words are concrete, interactive, and 'proximal language' rather than abstract and literary 'distant language'. A good example of the fact that we are using proximal language as a practice is the 'indexical expressions'. The use of situational directives is an example of how our thoughts and actions are immersed in the context and difficult to distinguish between the two. The simple example of situational directives are adjectives such as 'i', 'it', 'is', and these words can be understood only by referring to the situation of utterance. The problematic of situated learning also originated from dealing with the indexical expressions in learning.

In daily life, the use of indexical expressions such as context directives is very broad. In a situation in a chemical laboratory, let's consider a case where the researcher told the assistant, "Now the water has been boiled enough." For example, if we translate this into an objective expression, we can say that "H₂O is heated to 97.7 degrees Celsius at 13:57 Korea Standard Time." But people do not actually use such objective expressions in their life world or in the process of doing things. People know that they in concrete situations can already use meaning with contextual expression. **Indexical expressions guarantee stability and practicality rather than using correct and objective expressions in real situations.**

For example, people do not take a pause to the work, objectively explain the contextual expressions, or check to see if it is delivered to their colleagues and return to the work that was done again. If people have to speak in such a way, what they want to do or the conversation they want to share will not be developed purposefully. In addition, it is assumed that the context could be shared among the participants. Therefore, when the proximal language is freely used, attentions can be more focused on the object(problem space).

When talks that are closer to ordinary life are used, they function actively, leading to more successful manipulation of the situation and thus the successful work. In other words, a language closer to 'forms of life' and commonsense understandings can lead to shared knowledge or empathy. If we express this in terms of Sennett (2008), it is important that "expression itself is not important, but what purpose it is for the act of mobilizing imagination".

Sennett (2008) described in detail his mastery of techniques, such as dexterity, in his book 『The Artisan』. I will try to cite Sennett's example for a longer period of time in how the use of proximal words in the delivery of experience will cause learners to empathize. Sennett explains how he brings imaginative power as a close

approximation such as a metaphor which we live, that is, situationally directed words that identify similar things (Lakoff & Johnson, 1980) is. In the act of learning while following the old man casually, the language of the imagination which equates the act of the old and the act of the old is mobilized. One example is her experience of a situation where a poor grandmother with English from Europe delivers her traditional recipes and follows. His explanation is about recipes presented in metaphorical expressions rather than precise descriptions of recipes (for example, a numerical value indicating the amount of spice entering, a description of the degree to which the meat is cooked in a few degrees of fire).

"Your child is dying here [pointing at the chicken], preparing the child for new life [bones], filling him with earth [stuffing], be careful! The child should not eat too much [lightly put the material], clothe the golden coat [grind it before learning], make a bath [prepare soup for life]. Now I have a child, but I have to be careful! A child dies when exposed to too much sunlight [heating temperature is 130 degrees Celsius]. Give your child gems [sprinkle with soft pepper sauce after cooking]. This is my recipe." (Sennett, 2008, Kim Hong Sik, p. 308)

In the above quotation, the grandmother's recipe for cooking a chicken is an objective expression (in []) that the parable and the parable want to direct. Sennett explains how close-ups such as metaphors can convey experience more precisely than objectively and accurately communicated.

"When you compose a story in a sympathetic way, a lot of analogies are mobilized. The parable here is a loose analogy, not an exact analogy. There is a reason for loosening the analogy. Cutting chicken tendons is technically like cutting a string, but it does not feel very similar. This loose analogy opens the moment of learning to readers. If it is not 'the same' but 'similar', it induces attention to the very act of cutting the tendons. A place where the hands and the brain of the person to be cooked actively exchanges opens. A loose analogy is emotional, so when you are told that the person who first comes into contact with the action or action is similar to what you did before." (Sennett, 2008, Kim Hong Sik, pp. 299)

When describing something, I adjust the context of the imagination to see the object, not the object as abstract. Once the phenomenological field is 'created', imagination becomes possible and eventually the whole process can be seen. In other words, it helps the imagination by making the situation shareable. The use of such proximal expressions allows us to imagine the whole process of the process first and to engage in the practice in order to bring about goal-oriented participation in the process of actual practice by letting the participants know in advance what they should aim at and what process they will be moving forward.

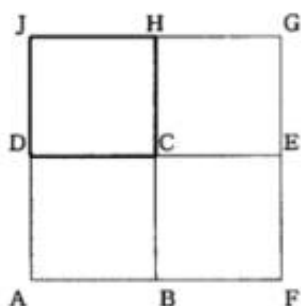
If you think you should follow the instructor's directions in doing things for the first time, you will never free from the instructor who are looking at my behavior and pay attention only to the standards unknown to you. Eventually, the learner cannot concentrate on the situated action he / she does first, and then he / she worries about outcomes and possibly ruins the work. However, if we relate to the former experience of the actor through loose parables, we feel sympathy with the instructor and can concentrate on the act itself rather than the uncertain outcome, along with emotional confidence that we have experienced.

According to activity theory, a story is the object of our act as if it were an artifact. A story or talk is an object and it is the object of artifacts. Before a word is pre-emulated, it focuses on the meaning of a linguistic function, and after it has become an emotional word, it is used as an artifact like a speech object. Here, the word itself is a medium that enables work, and the talk itself is also a work. Also, among those who work, talks are not only used for how to reach a goal, but they also create their identity, and they also create devices that afford or exclude actions.

The following is a scene of a situation in which Socrates and Sadong(slave boy, Menon) teach and learn about the principles of Pythagorean theorem in a way that interweaves with each other.

<Case 3>

--



B40 Socrates: Now let's draw a line connecting this corner to this corner. Do these lines divide each of these squares in half?

Sadong: Yes.

B41 Socrates: If you draw four of these lines, you will have one square (BEHD)?

Sadong: Yes.

B42 Socrates: Think about how wide this new square is.

Sadong: I do not know.

B43 Socrates: There were four squares. Did each line segment each square in half?

Sadong: Yes.(syncopation)

B49 Socrates: Is this a four-figure-wide square from the corner to the side of the square?

Sadong: Yes.

B50 Socrates: These lines are called 'diagonal' by scholars, and if you use this term, do you think that the square with one side of this diagonal is twice the square of the first?

Sadong: Yes, Socrates. (Excerpt from Kang Wan, 1996)

In the above dialogue, you will see 'this corner and this corner', 'split the square in half', 'these half pieces', 'from corner to corner of the square', and 'one side' - this is DB'. On the one hand, contain an explanation of mathematical principles. On the other hand, these explanations consist of very common meanings that can be seen by anyone who is familiar with minimal knowledge and is in the process of indicating a figure or splitting a figure. In other words, according to the structure of perception induced by the instructor, **the process proceeds as a routine and non-meditative act as much as it is to see, hear, and speak 'moment by moment'** (Cho & Shon, 2015).

Here, we can conceptualize the practical strategy of the teacher as a 'participatory appropriation', 'Participatory appropriation' is contrary to the logic of 'internalization' in that it can be dealt with by internalizing knowledge. Knowledge to be dealt with is understood and utilized only by participating in the context. It also means that the information and knowledge handled in the field are revealed by contextualities and indexicalities embedded in the field, so that we have to tell the meaning through participating in the situation (Hall & Nemirovsky, 2012). These strategies mobilized to communicate knowledge are discursive practices in that they are usually spoken by words. The discourse practice implies that the word plays a role of prompting, directing, controlling and adjusting something rather than the role of representation. The function of performative utterance implicitly conveys the operative meaning such as 'what should be regarded as important' and 'how should we remember when we have a similar case next time'?

In this example, the mechanism through which knowledge is conveyed is not the use of visualized data, nor the word that conveys knowledge, but the structuring practice of perception induced by the process of 'methodically exchanging' questions and answers between the instructor and the learner. Each of the words by the instructor acts as an indicator to the situation or an instruction to the perception act, and its meaning is not so different from the everyday common words which are so 'self-explanatory' among the users that they are all 'learnable.' No one will look at the shape of the figure as it is, that is, objectively, and selectively structure only the parts that are perceived and protruded according to the instruction of the teacher. In other words, the learner sees only what is expected in the context of induction of experience leading to perception, that is, in the context of audiovisual.

Let's take one more example of how the delivery of experience through visual materials is learning by situated learning, that is, learning by practice or sharing. Goodwin (1994) analyzed microscopically the work of archaeologists on how to establish a metaphor. Archaeologists find something in the "ground" in the sense that it is hard to see in the eyes of ordinary people, and finds out the relics and traces of the prehistoric people. It is a

process of discovery that is involved in the practice of experts, such as interpretation and work, so that it is hard to say that it is just a discovery if it is a process of discovery, but it is a process of discovery when a practitioner takes a name. It is a discovery of objects or traces placed objectively, but only as much as it is re-constituted by the practice of an expert. His analysis shows how the practice of an expert takes an object into view and constitutes an object in an operational state through practical strategies. In particular, he notes the following practical strategies for taking the situation into an object:

First, as a coding act, it is a strategy to transform phenomena into knowledge objects.

Second, as a highlighting act, it is a strategy to turn the situation into an intentional phenomenological field by highlighting only certain aspects.

Third, it is a strategy to represent things, which is to describe things, by perceiving things, as knowledge itself.

These strategies are actions that enable objects to be expressed and manipulated to perceive themselves as knowledge. These strategies are often used everywhere to do something. They may be understood as a practical strategy to create conditions that can work on activity that objectify the condition purposefully. It is not the visual function of these strategies that enables them to communicate knowledge or experience, but the performative function. In this respect, the fact that visual data has its function is based on situational practice, which is anchored in objects structured in discourse.

4. CONCLUSION

It can be said that situated learning for someone is not an unfamiliar theory, which is nothing new in educational theory. It is not surprising that learning-by-doing and reflective practice are closely related to each other. The more extended interpretation is the similar educational theory to organizational learning, community learning, even learning ecosystem, PBL and lifelong learning. It is because I can think. Action science researchers such as Schon, for example, argue that experts do not apply professional knowledge and skills to situations based on scientific methods, but rather reflexive practitioners, ie, (Bricoleur) to solve this problem. These insights have been reflected in research and education related to professional development through contextualized programs. This is also the case with numerous studies related to practice. Or if they are the fundamental educational theories that provide more systematic epistemology to these educational theories.

If there is such an evaluation, the attitude that situational learning is not different from the existing educational theories arises from considering situational learning as a macroscopic model of education and learning design. In other words, the paradigm of situationalism when approaching 'situation' from the viewpoint of transcendent outsider rather than situational viewpoint of participant does not present any new understanding of learning and new design possibility. At the moment of taking such a viewpoint, the situation issue does not hold.

It is like irony that contextual research should be centered around story plot. In the contextual paradigm, the points at which experience and learning are established are not in the text but in the context of the situation. What we can accomplish is because of the situational reasoning of 'always present' seeking 'next' in the context of work, not the knowledge mobilized in the work. Such a situation is a passing moment, but a thick description. It is a thought derived from a transcendental point of view that the development plan will show the course of a certain work. From a participant point of view, the process is a continuous repetition of the present and the next. For those who want to find a development map, a situational perspective can be considered a trivial story that does not present any new meaning.

For a long time, the researchers regarded contextual variables as peripheral factors for obtaining text and systematically excluded them. To derive the generalized principle of conditional reflection in Pavlov's laboratory, we can imagine how things in daily life surrounding the experiment were excluded as situational variables. For example, the amount of saliva from a laboratory dog that was "made to come out" when the bell rang was needed to be constantly managed in the laboratory, because of various unexpected variables in daily life.

A child mobilized for Piagetian conservation experiments responded 'appropriately' to the inducer's question, which was treated as a circumstantial condition variable unrelated to the research hypothesis. In behaviorism and cognitive paradigms, the acquisition of conditional reflection and conservation concepts is an important key to understanding learning. But the routine and practice in the laboratory can be a key to understand learning as well as how they are doing what they are doing. The attention to the learning of situationalism begins with situations taken for granted.

Situated learning asks for the logic and model of professor of minimalism as an educational theory as it is the focus of the composition of the situation, that is, how 'here now' finds 'next'. Learning is an aspect of experience that occurs between the present and the next, rather than the development of work, as it is distributed in everyday life before it occurs in the thinking frame or the moment when experience changes. The reality that learning parties experience is a repetition of a structured situation. For example, the design that presents the PBL from the

viewpoint of information processing and the design that it presents from the viewpoint of situationality will be different from each other.

Situated learning as a practice also shows that learning about conceptual knowledge is also achieved through the practice of participation, that is, the interactive use of tools through the body and things. Learning Design for Sociology calls for a completely different approach to learning design from knowledge structure or cognitive processes (Abrahamson, 2009; Kirsh, 2013; Nishizaka, 2006; Pea, 1997) The viewpoint of the perspective of the viewpoint will certainly provide a story that will allow us to reconsider the gap with the reality that it is bound to have. Discrepancies between PBL development and its development from "taken for granted", practice-based learning models and disparities in the course of their practice. Such a difference is also the difference between a design prescribed in the logic of knowing and a design prescribed by logic of life. Of course, in the practice community theory, the design of learning which is prescribed by logic of life, not the logic of knowing, is presented. However, the understanding and design of situational learning needs to be embodied as a micro-practice unit rather than a macro-organizational unit in order to provide a richer story about learning.

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ON THE LEVEL OF ACADEMIC ACHIEVEMENT OF THE VOCATIONAL SCHOOL STUDENTS: THE EFFECT OF MOTIVATION

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ABSTRACT

Motivation, a positive effect that directs behavior toward a goal could be perceived as one of the most important psychological concepts in all area of the life especially in education. In this study, it was investigated the relationship between academic achievement and motivation of vocational school students according to gender and class parameters. 192 vocational school students from 4 different programs (accounting, business, chemistry, and construction) attended the Academic Motivation Scale (AMS) which was prepared by Vallerend (1992). The AMS consisted of 28 Likert-type scale questions related to intrinsic motivation, extrinsic motivation and amotivation. Findings of the study indicated that there was only one significant relationship that was between academic achievement and two intrinsic motivation subscales. Females had higher scores in all motivation types. Also, there was only significant differences between males and females for intrinsic motivation. And, according to departments, there was significant difference in motivation by department in extrinsic motivation.

Keywords: motivation, academic achievement, vocational school

INTRODUCTION

Motivation is an internal process that make a student move toward an educational goal. We can say that it, like intelligence, can't be directly observed. Self-determination theory (SDT) developed for understanding individuals' motivation say that the impetus of motivated behavior is having the experience of choice and emotion of efficacy in actions (Eymur & Geban, 2011). One of the main characters of SDT is that the theory suggests motivation as a multidimensional concept (Deci & Ryan, 1991). In this study, they stayed that there are three main types of motivation which are intrinsic motivation, extrinsic motivation and amotivation.

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Intrinsic motivation means that to being engaged in an activity for the pleasure (Deci & Ryan, 1985). Intrinsic motivation for a function is turn out when the function is carried out of interest, enjoyment, or inherent satisfaction (Vallerand & Ratelle, 2002). Main part of this kind of motivation are that intrinsic motivation to know, intrinsic motivation toward accomplishments, and intrinsic motivation to experience stimulation (Vallerand & Ratelle, 2002).

Extrinsic motivation means that the individual's motivational stimuli are coming from outside. By extrinsic motivation, our desires to organize an activity is controlled by outside source (Vallerand & Ratelle, 2002). when somebody need the intrinsic motivation active, consistently performing a behavior for the lack of receiving a prize may lead increased feelings of control loss.

The main parts of extrinsic motivation are integration, identification, introjections, and external regulation. Integrated regulation is a function is integrated into the person's behavior for intrinsic pleasure. Identified regulation defines conditions in which persons force themselves to take a function which is more general Introjected regulation is controlled by rewards Externally regulation is the lowest type of motivation (Petrie & Govern, 2004).

A motivation is the lacking any motivation to do an activity, and characterized by a failure to value the activity. It is also defined as the lack of both extrinsic and intrinsic motivation. It is the representation of the belief that one's behavior is the result of something out of conscious (Cokley, 2001).

It is well-known educational concept that to raise teachers' motivation for teaching and improving quality of education needs the comprehending of the relationship between teachers' motivation and academic achievement. Investigation of vocational students' motivations is not adequate in the literature. In this study, we aim to explore the relationship between academic achievement - motivation, and the motivational difference between gender - departments.

METHOD

In this research, 192 students that accounting, business, chemistry, construction and electrics programs from a vocational school attended as voluntary The students of sample are 68 females and 124 males which age between 18 and 21. In the study group, 52 students from accounting, 55 students from business, 46 students from chemistry, and 39 students from construction. The Turkish version of Academic Motivation Scale (AMS), modified by Eymur and Geban, was used (Appendix A). It consists of seven factors with four items each: intrinsic motivation to know, intrinsic motivation toward accomplishment, intrinsic motivation to experience stimulation, extrinsic motivation identified, extrinsic motivation introjected, extrinsic motivation external regulation and amotivation.

To measure intrinsic motivation, extrinsic motivation, and amotivation of the students a questionnaire was used, and asked them to to indicate their gender, department, and cumulative academic average (GPA). AMS consisted of 28 Likert-type scale questions relating to intrinsic motivation (to know, toward accomplishment, and to experience stimulation), extrinsic motivation (identified, introjected, and external regulation) and amotivation (Vallerand et al.,1992). Achievement was measured by cumulative academic average (GPA).

The Cronbach's alpha coefficients were determined for each subunit of the AMS subscales (Eymur & Geban, 2011). The AMS subscales have the values of internal consistency between 0.60 and 0.84 which were: intrinsic motivation to know 0.84, intrinsic motivation to accomplish 0.81, intrinsic motivation to experience stimulation 0.80, extrinsic motivation identified 0.60, extrinsic motivation introjected 0.73, extrinsic motivation external regulation 0.75 and amotivation 0.79

An independent sample t-test was conducted to test the motivation of female and male. Analyses of variance were used to explain differences in motivation between departments. Pearson's correlations applied to investigate the relationships between academic achievement and motivation.

FINDINGS

Motivation and academic achievement;

The relationship between academic achievement and the AMS subscale was obtained by Pearson's correlations analyze. The results showed that there is only significant relationship between academic achievement and two

intrinsic motivation subscales (to know and to experience stimulation). Pearson Correlation Coefficient of intrinsic motivation to know is $r = .521$, so there is a positive correlation between the *academic achievement* and *intrinsic motivation* to know. Pearson Correlation Coefficient of intrinsic motivation to experience stimulation is $r = .493$, this mean that there is positive correlation between *academic achievement* and *intrinsic motivation to experience stimulation* (Table 1). The all subscales are positively correlated except extrinsic motivation external regulation and amotivation

Pearson Correlation Coefficient between GPA and Motivation	
Motivational Subscale	r
Intrinsic motivation to know	0.521
Intrinsic motivation to experience stimulation	0.493

Table 1: Relationship between the motivation and the academic achievement

Gender analyze:

We can say that in the all motivation types, females had better points. T-tests analyze show that there were significant differences between males and females for intrinsic motivation to experience stimulation. Females' scores had upper level than males for intrinsic motivation to experience stimulation. (Table 2). For amotivation, the score was the minimum level in the all analyze.

Motivational subscale	Gender				t	df	p
	Female		Male				
	M	sd	M	sd			
Intrinsic motivation – to know	3.21	0.66	3.01	0.68	-1.96	188	0.04
Intrinsic motivation – toward accomplishment	3.02	0.78	2.67	0.81	-1.73	189	0.06
Intrinsic motivation – to experience stimulation	3.18	0.65	2.70	0.61	-2.75	189	0.00
Extrinsic motivation – identified	3.52	0.54	3.15	0.63	-1.88	188	0.03
Extrinsic motivation – introjected	2.41	0.20	2.31	0.92	-0.41	190	0.50
Extrinsic motivation – external regulation	3.61	0.69	3.57	0.70	0.36	188	0.61
Amotivation	1.36	0.86	1.25	0.85	-0.80	190	0.31

Table 2: Motivation by Gender

Department analyze:

The result showed that there was significant difference motivation by departments in one subscale of extrinsic motivation introjected ($p < 0.01$). Business and chemistry department students differed significantly from one another. Amotivation scores for all departments are low level. Extrinsic motivation (introjected) subscales is also lower than other subscales Business department students are more motivated than others (Table 3).

Motivational subscale	Departments								F	df	p
	Bussines		Accounting		Chemistry		construction				
	M	sd	M	sd	M	sd	M	sd			
Intrinsic motivation – to know	3.71	0.61	3.11	0.68	3.75	0.53	3.66	1.01	1.06	3	0.34
Intrinsic motivation – toward accomplishment	3.12	0.74	2.47	0.71	3.27	0.80	2.83	0.95	1.43	3	0.26
Intrinsic motivation – to experience stimulation	3.11	0.62	2.93	0.60	3.14	0.51	2.78	0.85	2.15	3	0.10
Extrinsic motivation – identified	3.67	0.59	3.15	0.73	3.36	0.67	3.17	0.77	1.18	3	0.13
Extrinsic motivation – introjected	2.20	0.80	1.51	0.72	1.91	0.72	2.28	0.75	5.41	3	0.00
Extrinsic motivation – external regulation	3.92	0.58	3.87	0.40	3.39	0.81	3.81	0.64	1.36	3	0.1
Amotivation	2.14	1.16	2.25	0.77	1.84	0.93	2.01	0.60	1.60	3	0.11

Table 3: F-test Statistics results by department parameter

CONCLUSION

Many educational studies conducted to investigate motivation of students and the relationship between motivation and academic achievement. In this study, we investigated the relationship between academic achievement and motivation and examine the motivational difference between gender and departments. it was found that there is a positive relationship between academic achievement and motivation, specifically, intrinsic motivation to know and experience stimulation.

Finally, we investigated the motivational differences between gender and department were investigated. Females were found to be more motivated than males in all motivational subscales. Also, there is a significant different between females and males in intrinsic motivation to experience stimulation subscale. According to the department parameter, amotivation scores slightly decreased. Besides, amotivation scores were low for all years and high motivational scores were observed bussines students.

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APPENDIX A

Akademik Motivasyon Ölçeği

Her maddeyi dikkatli bir şekilde okuduktan sonra, sizi en iyi ifade ettiğini düşündüğünüz rakamı işaretleyiniz. 1. Kesinlikle Katılmıyorum, 2. Katılmıyorum, 3. Kararsızım, 4. Katılıyorum, 5. Kesinlikle Katılıyorum.

Üniversiteye Niçin Geldiniz?

	1	2	3	4	5
İlerde daha yüksek maaşlı bir iş bulmam için en az üniversite diplomasına ihtiyacım var					
Yeni şeyler öğrenmek beni mutlu ve tatmin ediyor.					
Üniversite eğitiminin ilerde kariyer seçiminde bana daha çok yardımcı olacağını düşünüyorum.					
Gerçekten üniversiteye gitmekten hoşlanıyorum.					
Aslında, bilmiyorum; üniversitede boşa vakit geçirdiğimi hissediyorum.					
Çalışmalarında kendimi aşma zevkine ulaşmak için.					
Kendime üniversite diploması alabileceğimi kanıtlamak için.					
İlerde daha prestijli bir iş bulmak için					
Daha önce görmediğim yeni şeyleri keşfederken ki hazzı tatmak için					
Sonuçta üniversite bana girmek istediğim iş dünyasının kapılarını açacak.					
Üniversite benim için eğlencedir.					
Daha önce üniversiteye gitmek için iyi sebeplerim vardı; ancak, şimdi devam edip etmemem gerektiğinden endişeliyim.					
Kendi özel yeteneklerimde, kendimi aşma zevkine ulaşmak için.					
Gerçek şu ki üniversite derecesi aldığımda kendimi önemli hissedeceğim.					

İlerde “iyi bir hayat” istiyorum					
İlgimi çeken konularda, bilgimi genişletme zevkine ulaşmak için.					
Üniversite kariyer yönelimimde, daha iyi tercih yapmama yardım edecek.					
İlginç hocalarla tartıştığımda aldığım zevki tatmak için.					
Niçin üniversiteye gittiğimi anlayamıyorum ve açıkçası çok da umrumda değil.					
Zor akademik aktiviteleri başarma sürecince aldığım zevki hissetmek için					
Kendime akıllı olduğumu göstermek için.					
İlerde daha iyi maaş almak için.					
Benim çalışmalarım, beni ilgilendiren birçok konuda öğrenmeye devam etmeme imkan veriyor.					
Üniversite derecem benim çalışma yeterliliğimi artıracığına inanıyorum.					
Birçok ilginç konuyu okuduğumda tatminkâr hissettiğim için.					
Üniversitede ne yapıyorum bilmiyorum ve anlamıyorum.					
Üniversite, çalışmalarımda mükemmelliğe ulaşmak için araştırma yapma zevkine ulaşmama fırsat veriyor.					
Çalışmalarımda başarılı olabileceğimi kendime göstermek istiyorum.					

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ON THE WAY TOWARDS CAREER AWARENESS: INTERVIEW WITH GRADUATES

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ABSTRACT

Considering the problems; lack of recognition of hearing-impaired employees, facing difficulties in work environments, and requirements of work places, it can be said that raising awareness of hearing-impaired students in vocational education to inform them about working life and familiarize them with work places is important. For that reason, it is necessary to provide settings and opportunities, which bring graduates and students together and support knowledge transfer between them. Suggested action research aims to examine the process of "Interview with Graduates" activity, which is one of the important steps of career awareness study, conducted with hearing-impaired university students. The research was carried out with the participation of senior students and graduates of Anadolu University, School for the Handicapped, in 2015-2016 fall semester. As a results of the research, it has been determined that "Interview with Graduates" activity had positive effects on the improvement of hearing-impaired students' awareness and hearing impaired students were informed about things to do after graduation, jobs that can be applied, problems to be encountered, procedures for applying jobs, and work places.

INTRODUCTION

In The Disability Research of Turkey, conducted by Turkish Statistical Institute (TSI), it is aimed to determine the number, ratio, socio-economical structure, problems faced in social life, expectations, type of disability, reason of the disability, regional differences, and rate of having persistent disease of disabled people in Turkey. The results of the Disability Research of Turkey was announced to the public in July of 2004. According to the data of the year 2002, % 12,29 of the population of Turkey was identified as disabled, % 2,58 of which were defined as orthopedic disability, vision-impairment, hearing-impairment, language and speech disorders, and mental retardation. Hearing impaired population constituted % 0, 6 of this population. As numerically, according to the data of 2017, it can be said that there are 478.889 hearing-impaired people in Turkey. Among this group, the number of hearing-impaired, who attended high school and above levels of education, is 53.157 (TUIK, 2011). In this group, there are many obstacles to overcome for hearing-impaired people, who expect to attend university level education after high school. One of these obstacles is literacy problems (Kretchmer & Kretchmer, 1978).

On the other hand, when hearing-impaired students have a chance to attend university education by overcoming the obstacles, they face with the problems of inappropriate settings and insufficient educational methods for their disability. Higher education is one of the important steps of vocational education and it is the right for all individuals, whether they are disabled or not. On this base, Anadolu University, The School for the Handicapped (SfH) was established in accordance with the Law No: 3837 dated 03/04/1992 to cover the appropriate vocational education programs for hearing-impaired students, who need special education. SFH provides education in four

programs, including two bachelor's degree and two associate degree programs. The main aim of SfH is to provide vocational education for hearing-impaired students, who completed high school education and to bring them into society as productive and independent individuals. The educational approach of SfH is formed with the programs, educational settings, which suitable for the disability levels and types of hearing-impaired students, and with specialized and experienced educators in special education.

STUDY

Every individual dreams of selecting a profession that suits her/his abilities and having a job that suits her/his profession. It is obvious that having a career provides an individual identity and social status (Simsek & Oge, 2011). Career development is a difficult and complex process that takes a long time (Adiguzel & Erdogan, 2014). Career means a lifelong effort and at the same time it refers to a progression process in a selected profession by an individual (Simsek & Oge, 2011). However, it is underlined in various researches that individuals, which attend vocational education, have difficulty in planning their careers.

The main reasons of this problem can be listed as follows; employment problems in today's work environments, unemployment problems, and the problems that disabled people face in work places in relation to their professions. Because of these problems, hearing-impaired and normal hearing young people have difficulties in planning their careers and most of them thought that just getting a job is enough for them, regardless of it is appropriate for their professional qualities or not (Dursun & Aytac, 2009; Kozak & Dalkiranoglu, 2013; Sarikaya ve Khorshid, 2009; Yilmaz, Dursun, Pektas & Altay, 2012). Formation and development of career awareness is a quite complicated process (Ferreira, Santos, Fonseca & Haase, 2007). For the management of their careers, individuals are expected to have some qualities, such as; able to learn new skills in a continuous way, able to establish effective communication with various types of employees and work with them, able to adapt to the changing needs of workplaces, able to acquire professional knowledge and use it effectively (Yesilyaprak, 2013).

Career planning is important, particularly for young people, who are at the beginning of their career. It is important to involve a set of career planning activities into the education process of students, to discover their knowledge, skills, and interests and to help them to create their career goals. These activities, which can be placed in education process, are listed as follows; ensuring students opportunities to meet and talk with experienced professionals, in line with career goals of students, organizing activities and practice opportunities for students to get information about career planning, and reorganizing internship process of students for more effective and informative results (Dier, 2000; Sharf, 2002). There is also need for educators to be informed about career planning and they need to perform informative studies in order to improve awareness levels of students through involving career planning activities in their courses. Particularly, it is also suggested that educational programs must be formed to support professional development of students and career activities must be integrated to educational programs (Dier, 2000; Kuzgun, 2003; Watts, 2001).

The main research that examined career planning activities of hearing-impaired students in vocational education process covered the years between 2013-2016. Present study, which focused on 2015-2016 Fall semester part of this research, explained "Interview with Graduates" activity as one of the career awareness activities. With this purpose, the answers were sought for the following questions in this part;

1. How the research cycle was carried out?
2. How the process of "Interview with Graduates" activity was performed?

METHOD

It is necessary to elaborate how the courses, which take part in vocational education programs of hearing-impaired, are planned in order to increase career awareness of students and how the activities are carried out for this purpose. Consistency of the research method with the research purposes and suitability of it to describe the process in detail are important. Since action research is a process oriented approach and has ability to provide indepth explanation of working process, it was determined as suitable for this kind of studies. For that reason, the research was designed as an action research. Practice is central in action research. In action researches, qualitative and quantitative data collection techniques are used particularly for the solution of the problem. Cyclical models (Figure 1) are used for definition of the problem, collection of the data about the problem, analysis of the data, and providing improvements about the problem (Biber & Leavy, 2011; Creswell, 2005; Mills, 2003).

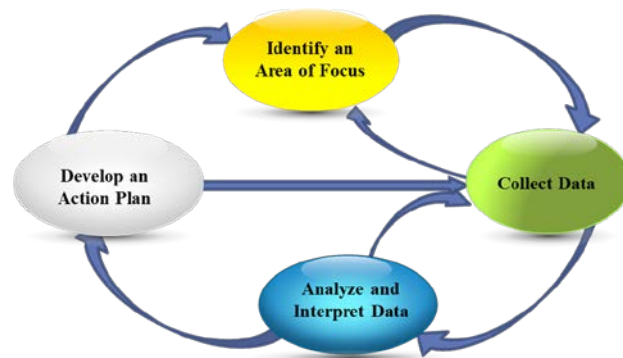


Figure 1. The Cyclical Model of Action Research (Mills, 2003)

The present research was carried out with the participation of senior students of Computer Operator Training Associate Degree Program, Architectural Drafting Associate Degree Program and Graphic Arts Bachelor's Degree Program in fall semester of 2015-2016 school year. In this article, the process of “*Interview with Graduates*” activity, which was conducted in *Professional Language* and *Language Arts* courses of aforementioned three programs, will be explained in detail. Students' recognition of work environments and what kind of works, duties were performed in the field of professional practice, and of conceiving where the graduates were working and what kind of problems, they faced, were significant to be able to make career plans by themselves.

Setting

The research was carried out at SFH. During the research, the data was collected from five courses in fall semester of 2015-2016 school year (Table 1).

Table 1: Focused Courses

Program	Course
Graphic Arts Program	Language of Graphic Design VII
Computer Operator Training Program	Professional Language for Computer Operator Training III
	Writing and Speaking Skills for Computer Operator Training III
Architectural Drafting Program	Professional Language III
	Writing and Speaking Skills for Architectural Drafting III

Focused courses of the research were performed in one computer laboratory, one field course classroom, and two language classrooms. Classrooms and laboratories were equipped with the material which were suitable for educational and communication needs of hearing-impaired students and the walls of the classrooms were covered with sound insulation material. Smart board was in all classrooms and laboratories. In laboratories, there was one computer per student and there was one computer for instructor in all classrooms (Figure 2).



Figure 2. Computer Laboratories and Language Classrooms, used in Focused Courses

Participants

The participants of the research were composed of 26 senior students, who attended SFH in 2015-2016 school year, 10 graduates of SFH, and 3 instructors as researchers, an internship coordinator, and an advisor. Researchers, internship coordinator and advisor were the members of the trustworthiness committee. Students were the senior level students of Computer Operator Training Associate Degree Program, Architectural Drafting Associate Degree Program and Graphic Arts Bachelor's Degree Program in 2015-2016 school year. Average age of the

students was 23. One of the students used cochlear implant. Other students wore ear level hearing aids. The 16 of the students had severe level hearing impairment, seven of them had profound level of hearing-impairment, and three of them had moderate level of hearing impairment. “Whole Communication” method was used to establish communication with the students in classrooms. Before the research process, students were informed about the purpose and the process of the research and written permission letter was taken from them. Since Ceramic Arts Program had no senior student, during the research process, students of this program did not involve in the research.

The research data was collected by the first and second authors, who were carried out the courses “*Professional Language*” and also responsible for the field courses of vocational programs and the third author, who was carried out the courses “*Writing and Speaking Skills*” and “*Turkish Language Skills*”. Internship coordinator participated to all of the focused courses and played an important role for strenghtening of the cooperation between researchers. At the same time, she was the instructor who knew sign language and provided support for the students, in terms of communication, during the courses. The advisor supervised the research process and provided point of view for the researchers. Researchers were the faculty members, who had around 20 years of experience both in their professions and in the education of hearing impaired. In addition, they conducted projects, PhD thesis and published book translations in the field of action research. Their studies were presented in congresses and published in academic journals.

Data Collection and Analysis

Qualitative and quantitative data collection techniques were used during the research process. Research data was collected through; classroom observations and video recordings, course plans and reflections, voice recordings and reports of researcher meetings, diaries, products of students, documents, interviews, and e-mail and Facebook messages and sharings, Whatsapp messages. For validity and reliability study of the data collection tools and techniques, expert opinion had been taken. Data collection and data analysis were conducted concurrently. In relation to the goals of the research and based on the decisions taken in researcher meetings, the data was analysed systematically, reflectively, and in a cyclical way.

FINDINGS

In this part of the article, findings are persented in relation to the research questions.

How the research cycle was carried out?

The researchers, who were responsible from field and language courses in the school, observed that students faced some difficulties in their internship, gradaution, and after the graduation processes. First of all, they defined some problems about that due to the language limitations of hearing-impaired students, they could not benefited from written and oral sourses and they began to investigate to determine the situation of the problem in a more detailed way in 2013. In this process, a facebook page was opened to establish communication with SFH graduates and they applied to the page. At the same time, a quetionnaire was developed and presented to the graduates via internet and opinions of them were collected. At the end of the research, it was determined that graduates had problems on awareness about workplaces, about works done in workplaces, and communication in workplaces (Kaya, Ozten Anay & Girgin, 2015). For solving these problems, it was decided that there should be awareness activities about after graduation as part of the courses in education process.

After the definition of problem, pilot study was carried out in fall and spring terms of 2014-2015. With pilot study, it was aimed that students must recognize workplaces to develop career awareness and their visits for future workplaces were organized. Facebook page for graduates were decided to be used for this reason. Based on this Facebook page, an additional page was organized for senior students with the name “We are graduating, help!” Students asked their questions directly to the graduates using this page, in class and off class times. In the process of pilot study, two activities were planned and performed to recognize work places. With these activities, it was observed that contribution to the development of students’awareness about career issues was provided and they asked questions about graduation and continued to communicate with graduates. After this development, it was decided that organized activities shoul be increased and continued and application data should be collected in fall and spring terms of 2015-2016 school year.

In the fall-spring 2015-2016 period, in which the data of peresent research was collected, various activities were planned and applied for the awareness about graduation and career issues in 12 courses in total. The research cycle is persented in Figure 3.

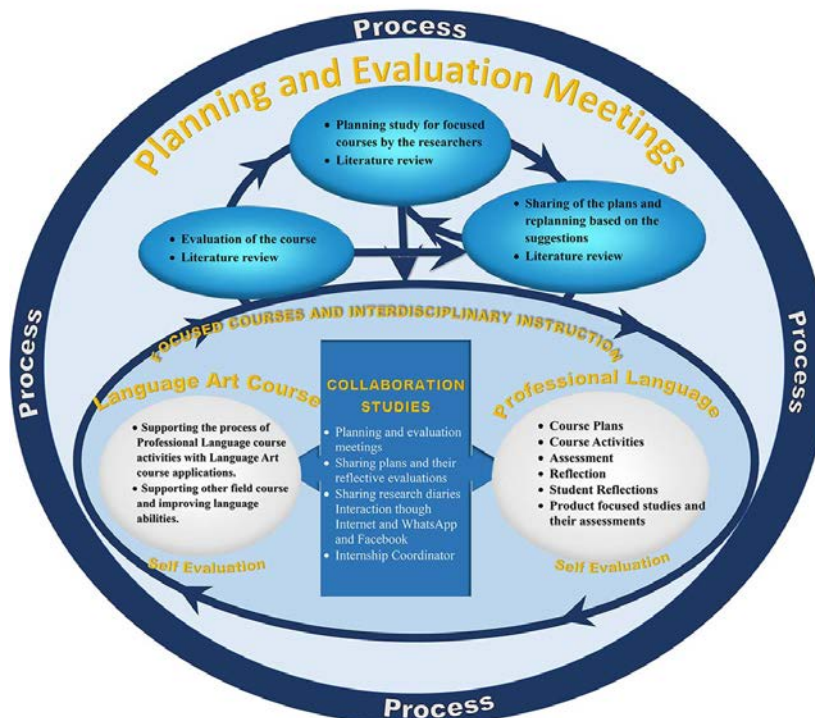


Figure 3: Research Process

In the process of research, interdisciplinary study was conducted between Professional Language courses and Language Art courses. The research was developed through weekly meetings. The activities carried out during the research perocess were listed in Table 2. This study was approved and supported by the school director and she gave possitive efforts by providing school facilities for activities of the research and participation of all of the students to the activities. She also facilitated the research process by approving necessary changes in course contents, suggested by the research team.

Table 2: Activities

Activity	Sub-activity
Activities to recognize workplaces	<ul style="list-style-type: none"> • Internship Story • Interview with Graduates • Workplace Visits
Job Application Activities	<ul style="list-style-type: none"> • Presentation for Job Application Techniques • Job Application Documents • Preparation of Job Application Portfolio • Rehearsal for Job Application Interview
ISKUR Activities (ISKUR is a government instution to apply for a job in Turkey)	<ul style="list-style-type: none"> • ISKUR Visit • ISKUR Application as Disabled • ISKUR Presentation

Students were evaluated through homework and exams grades in the process of performing the activities. Each activity had its product. In the present article, the process of “*Interview with Graduates*” activity, as part of “*Recognizing Workplaces Activities*” will be explained.

How the process of “Interview with Graduates” activity was performed?

Various activities about introducing workplaces were planned for senior students, as part of *Professional Language* and *Language Arts* courses in order for familiarizing students with work places, where they will work

similar places after their graduation, and established communication with graduates, who were valuable sources for them to learn first-hand working life experiences of a hearing-impaired. The courses, in which the activities were carried out, was listed in Figure 4.

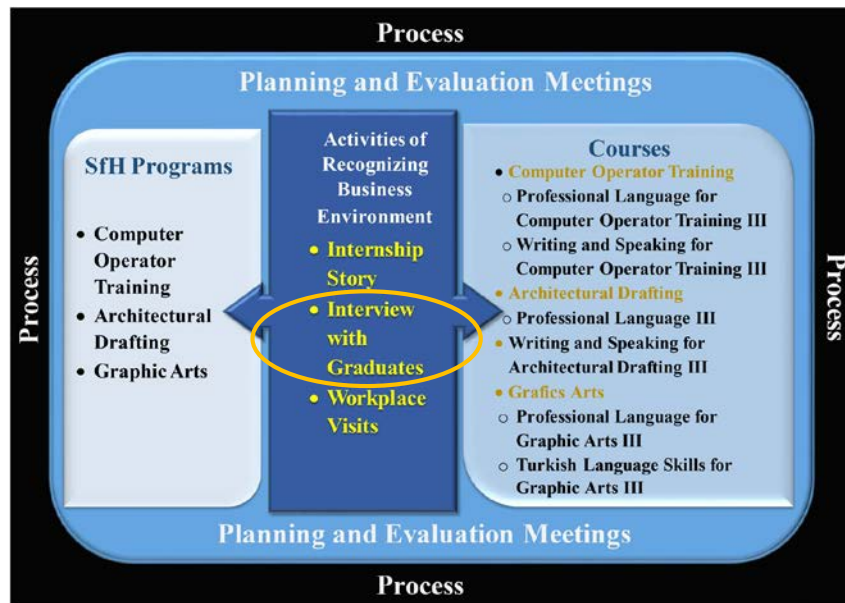


Figure 4. Activities for Recognizing Workplaces

Interview with Graduates activity composed of various sub-activities. Each activity was the issue of separate lesson and carried out by supporting different techniques and strategies. Figure 5 shows sub-activities and studies done in this process.

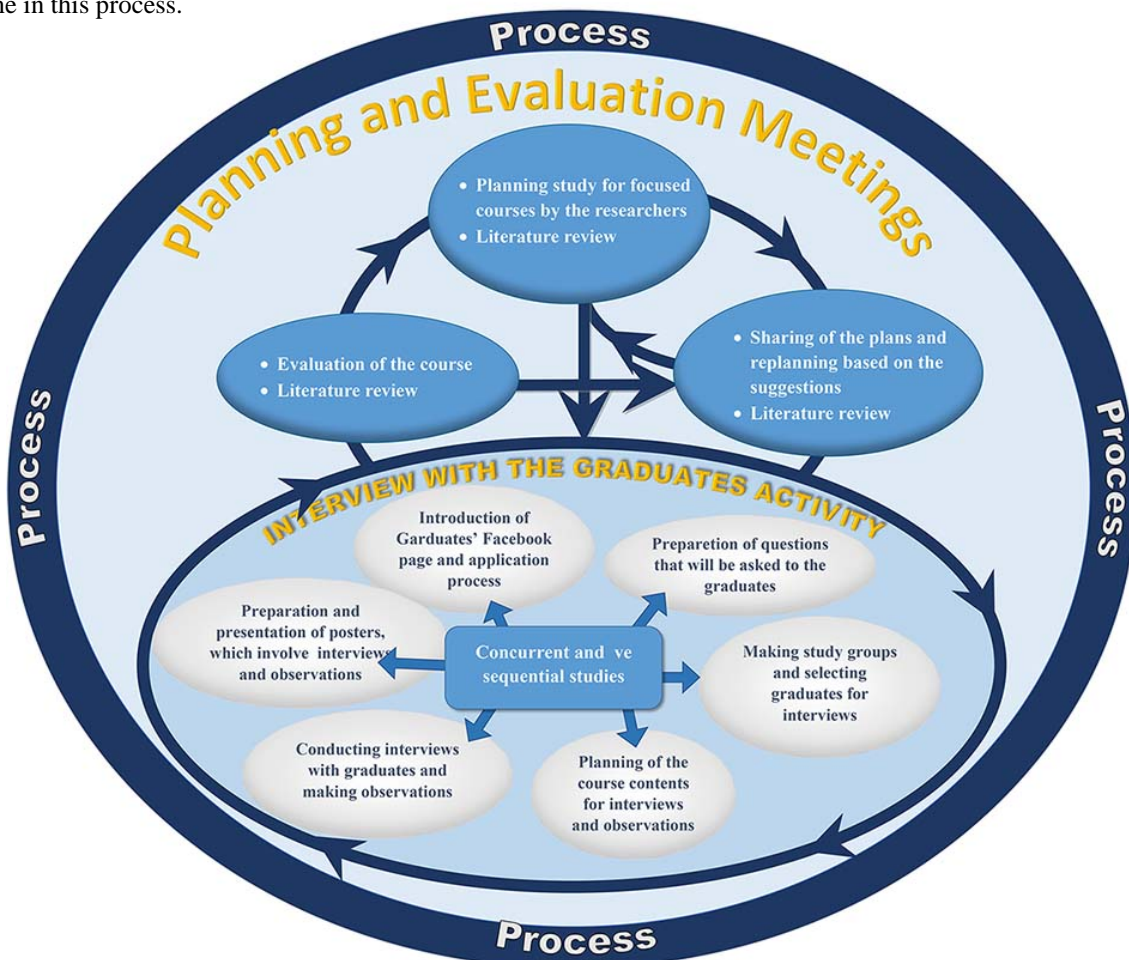


Figure 5. The Process of Sub-activities of Interview with Graduates Activity

Activities and sub-activities were carried out sometimes concurrently and sometimes in succession. “Interview with Graduates” activity was performed between 16/12/2015-13/01/2016, in fall semester of 2015-2016 school year. In the beginning of the semester, the process and the dates of “Interview with Graduates” activity were decided in Planning and Evaluation Meeting, dated 14/10/2015. Sub-activities and the dates are listed in Table 3.

Table 3. The table for Sub-activities of Interview with Graduates Activity

Sub-activity	Date		
	Computer Operator Training	Architectural Drafting	Graphic Arts
<i>Introduction of Facebook Page to the Students</i>	15/10/2015	14/10/2015	16/10/2015
<i>Preparation of Interview Questions for Graduates</i>	3-17/12/2015	2-16/12/2015	4-18/12/2015
<i>Lectures on Interview/Observation and Definition of Study Groups</i>	24/12/2015	23/12/2015	25/12/2015
<i>Conducting Interviews with Graduates and Making Workplace Observations</i>	24-31/12/2015	23-30/12/2015	25/12/2015
<i>Preparation and Presentation of Posters</i>	Preparatory work: 31/12/2015-7/1/2016 Presentation: 13/1/2016	Preparatory work: 30/12/2015-6/1/2016 Presentation: 13/1/2016	Preparatory work: 4-8/1/2016 Presentation: 13/1/2016

Introduction of Facebook Page to the Students: Facebook page of graduates of SFH, which was established in 2013, had 400 active members. This number increased year by year with the participation of new members. “Interview with Graduates” activity began with introduction of the Facebook setting to the students and asking students for applying to the page. Students were added to the “We are graduating, help!” group page and encouraged to communicate with graduates (Figure 6). This activity started on the week, dated 14-16/10/2015, simultaneously with the “Internship Story” activity. Students were allowed to examine Facebook setting until the beginning of the activity on 2-18/12/2015. In this process, for providing active use of Facebook page, homeworks were given through this page, feedback for homeworks and courses were given by using the Facebook page, and researchers asked questions to the students about courses through the page. It was observed that the students interested in the Facebook setting and shared their questions and time-to-time homeworks through the page. Also, the Facebook page was sometimes used by the students for their internal communication.

**Figure 6.** Facebook Stting

Preparation of Interview Questions for Graduates: The activity was started with the homeworks, given in Professional Language courses on the date 2-4/12/2015. Students were asked to prepare questions for their interviews, to ask prepared questions to the graduates through Facebook setting, and to write their process on their diaries. The prepared questions coming from the students for interviews were examined in the courses, dated 16-18/12/2015. All the material was shared in the classes and discussed with students, considering if there was any need for change in questions, or not (Figure 7).

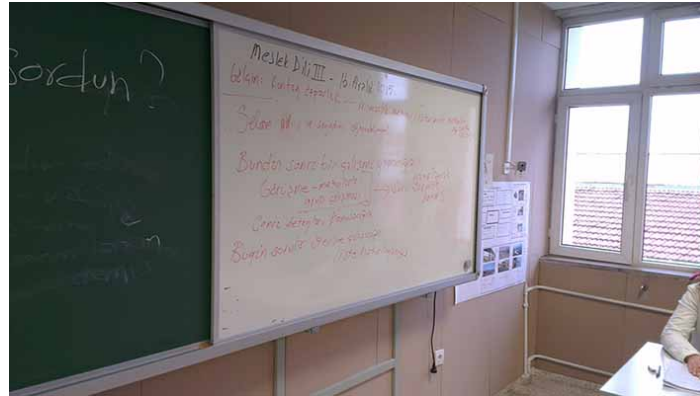


Figure 7. Architectural Drafting Course (16/12/2015)

At the end of the week's classes, students were informed about the next week's duties that they will work in groups, a selected graduate is assigned them for the interview, and they will conduct their interviews by visiting the graduate in his/her workplace. The questions, which prepared by the students individually, were unified, after class discussion and students were asked to reorganize the questions in the light of class discussions. Prepared questions were examined and question list of each program, involving questions of the students and the questions, added as critical by the researchers, which were based on their evaluation meeting decisions, were decided in Professional Language and Language Arts courses of the week, dated 21-25/12/2015. Some of the interview questions were as follows; "What is your job?", "How do you find your job?", "Are you satisfied with your job?", "Is there any other topic that you want to learn in your education process?", "What are the changes in your life, when you started to work?", "Do you have any problems related with your hearing impairment in workplaces?", "Can you explain it?", "Is it difficult to find a job as a graphic designer?", "Can you give any example?", "Is it difficult for you to communicate with your colleagues, in your workplace?", "Do you have any suggestions for us about where can we apply after our graduation?" and "Is the the knowledge you gained in the school help you in your workplace?".

Lectures on Interview/Observation and Definition of Study Groups: In the focused courses of 21-25/12/2015 week, study groups of students and the graduates, with whom the student groups make their interviews were decided. The student groups were defined in relation to their preferences. The graduates were decided, in relation to both the suggestions of the students and based on the information coming from pre-investigation of researchers about the relevancy of the graduates. Students asked to begin their interview process with taking appointment and after the interviews, they asked to present the interview in written format (Figure 8).

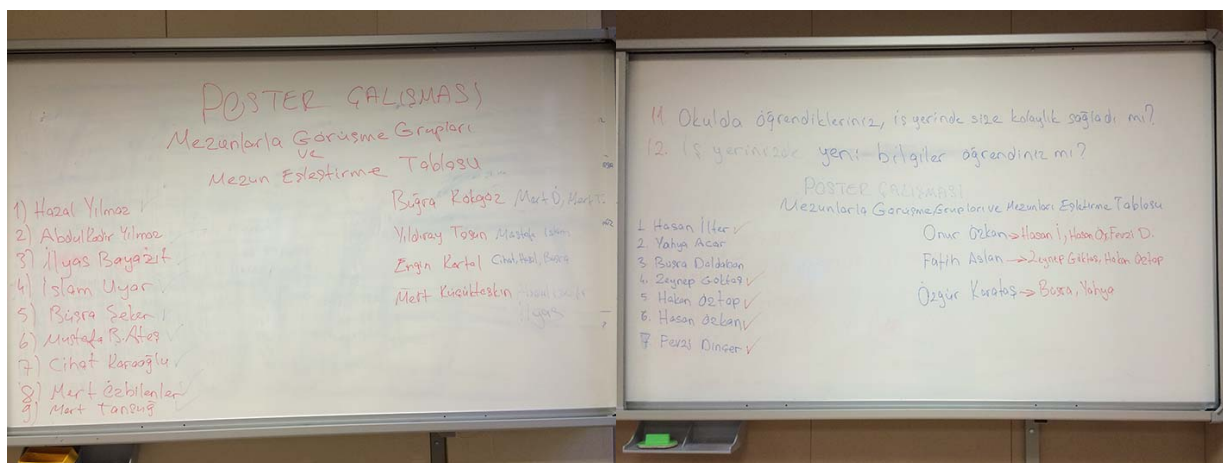


Figure 8. The Pairs of Groups and Garduates

On the same week, the lectures on interview and observation techniques were given in Language Arts courses. With the decision taken in Planning and Evaluation Meeting, dated 21/10/2015, an "Observation Document" was prepared for students. The reliability study of the document was done by the field expert. In week's classes, "Observation Document," which was prepared by the researchers, was introduced to the students and the researcher filled the document being as a model for students. Later, students made exemplary observations in classes. As following study, students were asked to draw a draft plan for SfH cafeteria, in addition to their observation task. For this task, researchers helped students for their observations and drawings (Figure 9). Draft plan drawings were asked from the students in order to recognize furnitures, equipments, placements of them in the space and also to recognize who were the employees. This goal was shared with the students.



Figure 9. The Observation Study in SFH Canteen

Since the students of Graphic Arts and Architectural Drafting had the issue of drawing in their education, they did not need additional information, and it was expected to apply their previous knowledge to the task. On the other hand, the students of Computer Operator Training were given information about the issue of draft plan drawing and exemplary draft plans were drawn by the researchers as being models for the students.

Conducting Interviews with Graduates and Making Workplace Observations: The students conducted their interviews with selected graduates and made their observations on the dates between 23 and 31 December 2015. Some of the students that used new year vacation conducted their interviews with the graduates, who lived in their cities. For the interviews and observations, which was taken place in other cities, and which was not completed in this period, Skype program used as an alternative communication tool with the graduates. Interviews were transformed to texts by the students, examined in Professional Language and Language Arts courses, reorganization and correction studies were done with the students. These studies were done both inclass periods and with students individually in relation to the study plans, prepared with students. In these studies, students were asked to complete unfinished parts of observation documents and draft workplace plan drawings. After the finished texts were checked and approved, students were asked to transform texts into poster presentation form.

Preparation and Presentation of Posters: Interview texts, photographs, and draft workplace plan drawings were organized in poster format between the dates 31/12/2015-8/1/2016. The dimensions of a poster were defined as 50cm x150cm. The design of the posters was expected to make by the students. The students of Graphic Arts and Architectural Drafting were not need for help for poster design, since they had already some courses or took lessons for about design issues. However, it was observed that Computer Operator Training students had difficulty in designing their posters, because they did not have this kind of courses and had limited knowledge to use computer programs for designing. For a solution to the problem, support for designing the posters was taken from the students of Garphic Arts (Figure 10).



Figure 10. Poster Design Study of Computer Operator Training Students with Graphic Arts Students

It was observed that Graphic Arts students were participated to this cooperation willingly and they worked together with their peers from a different discipline. The poster design covered the organization of texts, photographs and draft workplace plan drawings. The correction of language and visual material in posters were done in Professional Language and Language Arts courses. In addition, individual studies performed with the students. Prepared posters presented to all the students and instructors of the school, in the first floor foyer of SfH, on the date 13/01/2016 (Figure 11). During the presentation process, students were asked to explain their posters. This presentation was evaluated as final exam grade in Professional Language and Language Arts courses. It is observed that some of the graduates, interviewed by students, participated to the poster presentation exhibition.



Figure 11. A Poster Sample and Exhibition**CONCLUSIONS**

At the end of the activity process, it was determined that the students developed an awareness about real workplaces and about what kind of works to be done in their future jobs and also they established communication with their future colleagues and other employees in workplaces, familiarized job finding strategies, understood the problems faced in workplaces, how the learned lessons were applied to the practice, and that the students made plans for after graduation.

In the “Interview with Graduates” activity process, through making observations in the workplaces of graduates, it was observed that students were examined the equipments, computer hardware and softwares, which were used in workplaces, and works, studied in workplaces and compared these physical situations and works to their school studies, equipment, and knowledge, they learned the value of their vocational knowledge, learned in the school, and application field of this knowledge. In addition, it was observed that the graduates helped the students about how to search and find a job by sharing their experiences. Despite these advances in the career awareness issues of hearing-impaired students, there is still need for enriching and accelerating the activities.

SfH already had Professional Language and Language Arts courses in its programs and their use in the research helped to accelerate the reserach process. However, if these types of courses do not exist in vocational programs, it is necessary to determine which courses will be used for these ativities to recognize workplaces, or new courses should be planned for that puspuse. Getting support from the school management is also an important factor to place these activities of career awareness in course contents. In the present research, the approval of the director of SfH and that one of the researchers being in school management facilitated the research process.

The research was carried out with the senior students of three programs of SfH. The repetation of the research, covering all programs of the SfH is planned for 2017-2018 school year. In the research, activities to improve career awareness of hearing-impaired students of SfH will continue through enriching and improving. In the process of research, the contents of all Professional Language and Language Arts courses were improved with new contents involving career awareness activities and organized for 2017-2018 school year, and approved by the administration board of SfH and Anadolu University Rectorate for adding new course catalogue of the university. In terms of sustainability of the study, it is important to update related course contents with the knowledge gained from the research. However, it is also important to expand the scope towards field courses with eriching the activities.

It is observed that the graduates, interviewed by the students, were quite pleased from the “Interview with Graduates” activity and eager to share their experiences and opinions with the students. I addition, they stated that they were very pleased for calling by the SfH and making them to participate to educational process. Establishment of this relation between graduates and students is important to the formation of school culture and tradition. The “Interview with Graduates” activity, which was placed in the research activity, is planning to continue with the udates, considering content, time period, and application processes.

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ONE YEAR OR TWO? THE IMPACT OF HEAD START ENROLLMENT DURATION ON ACADEMIC ACHIEVEMENT

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This study examined the impact of Head Start duration on children's language and mathematics skills based on the nationally representative sample of the Head Start, Family and Children Experiences Survey (FACES, 2009). Analysis of the FACES (2009) revealed that children who attended Head Start for two years displayed substantial advantages both in language and math skills compared to one-year attendees by the time they left Head Start. These advantages were sustained until the end of kindergarten with a slight reduction of the effect sizes. This study adds to the growing body of evidence that a longer exposure from an earlier age to a public preschool program plays a significant role in improving the academic skills of children from economically disadvantaged families.

OPPORTUNITIES OF INTERACTIVE TEACHING IN THE IMPLEMENTATION OF PROJECT METHOD

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ABSTRACT

The opportunities of interactive learning in the conditions of implementing the method of projects in aerospace university were studied. For this purpose, the training process was implemented technology of project-oriented training of students in the form of a unique project for the development and creation of a series of student scientific-educational small satellites. Interactive learning in a project-oriented approach allows you to solve simultaneously a several problems, main of which is the achievement of learning objectives, development of communicative skills and development of research competencies. Evaluation of the effectiveness of the system of research competencies formation using a set of criteria-oriented test tasks showed a positive dynamics in all indicators in the structure of research skills. The use of interactive technologies in the organization of training opens the opportunity to consider the issues of individual educational strategies defining the direction vector and content of education of the future engineers, to improve the quality of their training and creates opportunities for self-realization and life self-fulfillment.

INTRODUCTION

In the modern world the issue of training of highly qualified personnel through the use of new educational technologies and innovation is important (Watkins, 2005; Gulakova & Kharchenko, 2013). Recently, methods of interactive learning have been widely developed. Interactive learning is learning with well-organized feedback of subjects and objects of learning, with a two-way exchange of information between them. The interactive model aims to organize the comfortable learning conditions, in which all trainees actively interact with each other. Compared to traditional forms of education, interactive learning is changing the interaction between the teacher and the learner: the activity of the teacher gives way to the activity of the students, and the teacher's task is to create conditions for their initiatives. It is interactive methods of teaching that form the way of joint activity of the learners, in which the participants of the educational process interact with each other, exchange information, jointly solve problems, simulate situations, evaluate each other's actions and their own behaviour and immersed in a real atmosphere of cooperation to resolve the problems. Interactive methods of teaching provide opportunities for improving the quality of training specialists, for their self-realization and life self-fulfillment in various types of educational activities (Loginova, 2017). Interactive training allows you to form the active-cognitive and intellectual activity of students, increase the motivation to study the subject, develop in various forms the communicative competencies of students (Loginova, 2011; Yakovleva & Yakovlev, 2014).

At the same time, the real employers consider the knowledge, skills and practical experience of graduates in the context of the ability and willingness to effectively apply them in practice, meet the quality standards of the industry and regional markets. One way to solve this problem is to implement a practice-oriented approach. This approach in vocational training is aimed, first, at bringing the educational organization closer to the needs of practice and life. Secondly, it allows creating conditions for the purposeful formation of the competitiveness of future workers and employees. Practical-oriented training is a type of training, the primary goal of which is to form the professional competencies of practical work required by employers today, as well as to form an understanding of where, how and for what the competences obtained are applied in practice. It is especially important to organize the learning process so that the educational result is manifested in the formation of students' own internal motivation for learning, thinking, imagining, creative abilities, sustainable cognitive interest. It is necessary to form a system of vital, practically in-demand knowledge, skills and practical experience that will allow the future graduates to easily adapt to life and treat it actively and creatively. This can be achieved by using interactive teaching methods in a practice-oriented approach.

One of the leading places in the practice-oriented teaching is a method of projects. The project-based method is the development of cognitive skills, abilities independently to use their knowledge and skills to navigate in the information space. Project-based learning requires the integration of knowledge, skills to apply knowledge from various fields of science and technology, technology and creative areas (Polat, 2005).

In our opinion, the use of interactive methods in practice-oriented learning is important. In this regard, the purpose of this work was to study the opportunities of interactive learning in the implementation of the project method.

RESULTS AND DISCUSSION

The need to introduce interactive learning into the practice of training at the aerospace university was due to two trends. The first follows from the general orientation of the development of education, its orientation is not so much to obtain specific knowledge, but rather to develop the skills and abilities of cognitive activity, the ability to learn, the ability to process huge amounts of information. The second follows from the development of the requirements for the qualities of the personality of the graduate himself, who must also possess the ability of optimal behavior in various situations in the professional sphere (Loginova, 2017). The logic of the educational process in interactive learning changes significantly and moves from the formation of new experience to its theoretical comprehension through application. That is why the interactive activity of students ensures the growth of knowledge, skills, methods of activity and communication, which together determines the quality of training and the disclosure of new opportunities for future graduates, including the opportunities for their life self-fulfillment.

In this regards, the changes were made in the educational process that ensure the implementation of the goals set. For this purpose, the training process was implemented technology of project-oriented training of students in the form of a unique project for the development and creation of a series of student scientific-educational small satellites (Kovalev, Loginov & Zelenkov, 2015). The integrated system of training engineers for the aerospace industry using innovative technology project-based learning student is actively developing in the Siberian State Aerospace University for several years in cooperation with an industrial partner of JSC "Information Satellite Systems". Students from the third year take part in all stages of satellite production from the development of project documentation to the control satellite in orbit. Thus, the students receive the full range of necessary services within the walls of university, starting with assistance in the preparation of an innovative project and ending with the sale of finished products.

The main requirement of educational programs in the field of "Engineering, technology and technical sciences" becomes a practice-oriented as the ability to form a certain set of professional and over professional competencies that allow the graduate to quickly join the production chain. In the undergraduate program, the focus is on the implementation of applied engineering competencies and basic soft skills, work in team engineering projects in competition formats and the introduction of the mandatory end-to-end module "Project Activities". Master programs focus on specialized engineering competence and soft skills in project management, end-to-end qualifying work in the form of a real engineering project. Engineering master programs aimed at training engineering teams in order business and the implementation of real engineering projects.

Here are the basic requirements for successful learning in the mode of interactive technologies:

- Positive interdependence - the team members should understand that general learning activities benefit everyone;
- Direct interaction - the members of the group must be in close contact with each other;
- Individual responsibility - each participant must master the proposed material, and everyone is responsible for helping to others.
- Development of teamwork skills - the students should learn the skills of interpersonal relationships necessary for successful work, for example, clarifying the different aspects of the process, assigning responsibilities, scheduling assignments.

The essence of interactive learning is that the educational process is organized in such a way that practically all students are involved in the process of cognition, they have the opportunity to understand and reflect on what they know and think. The joint activity of students in the process of learning and mastering the teaching material means that each makes its own individual contribution; there is an exchange of knowledge, ideas and ways of working. Moreover, it happens in an atmosphere of goodwill and mutual support, which allows not only receiving new knowledge, but also develops the cognitive activity itself, translates it into higher forms of cooperation and collaboration.

When using interactive forms, the role of the teacher changes dramatically and ceases to be central; he only regulates the process and engages in its general organization, prepares the necessary tasks in advance and formulates questions or topics for discussion in groups, gives consultations, monitors the time and order of implementation of the planned plan. Participants turn to social experience - their own and other people, while they have to communicate with each other, jointly solve the tasks, overcome conflicts, find common points of contact and make compromises. Psychologists found that in the context of educational communication there is an increase in the accuracy of perception, the productivity of memory increases and the intellectual and emotional properties of the personality are more intensively developed, such as the stability of attention, the

ability to distribute it, observation in the perception, the ability to analyze the activity of a partner, to see its motives and objectives.

One of the principles of interactive practice-oriented learning is the principle of productivity learning. According to this principle, the main guide of learning is the personal contribution of each student in the process of project training. The trainee sees the result of his work in a specific product of activity. For example, when creating a small spacecraft, the student not only gets new knowledge and experience, but also sees the result of his contribution to the product being created.

This approach can significantly improve the effectiveness of training. This is facilitated by a system for selecting the content of educational material, helping for students to assess the significance and the practical relevance of the acquired knowledge and skills. In project-based learning the students apply their existing experience, as well as a new experience on the basis of acquired competencies. This experience becomes the basis for the development of students. Thus, an ideal model of the competitive personality of the future specialist is formed.

Thus, interactive forms of education provide high motivation, strength of knowledge, creativity and imagination, communicability, active life position, team spirit, value of individuality, freedom of expression, focus on activities, mutual respect and democracy.

The technologies of interactive learning include the technology of context-competence-based learning, the technology of modular training and the technology of self-regulatory learning. The use of interactive technologies in teaching makes it possible to bring the student closer to the assimilation of the educational material, to include in the studied situation, to encourage to active actions, to experience a state of success and, accordingly, to motivate their behavior.

In the system of practice-based learning the practical experience is formed, such as the comparison, assessment of phenomena and processes, identifying cause-and-effect relationships, setting goals, and needs for further replenishment of the subject knowledge. The realization of practice-oriented learning presupposes the consideration of practice as a source of cognition, as an object of cognition with an integrated approach to the analysis of facts, as a means of cognition.

The basis of the project approach in education is a rational combination of fundamental education and vocational training. For the transition to the profile education, it is necessary to implement the principles of personality-oriented and practice-oriented education. On the one hand, the practical-oriented education is associated with the organization of the student's educational, industrial and pre-diploma practice with the aim of immersing him in the professional environment, correlating his conception of the profession with the demands made by the real employer and realizing his own role in the work. On the other hand, it is considered the most effective to introduce professionally-oriented teaching technologies that promote the formation of students' qualities of personality, knowledge, skills and abilities that are important for the future professional activity, providing qualitative performance of the functional duties in the chosen specialty.

There are several basic fundamental directions in the research and implementation of interactive learning in the realization of the project method with elements of practice-oriented education. One of the important directions is the formation of students' practical experience and research competencies by introducing them into the professional environment in the process of project-oriented learning.

The introduction of a practice-oriented approach to the educational process is conditioned by the need to search for adequate educational technologies as a set of tools and methods for teaching and developing students that will successfully implement the effective development of the competencies declared in the standard. The obligatory element of education by the method of projects is the development of the practical experience of activity, the level of which is more accurately determined by the methods of the competence approach (Prosalova, 2013). The implementation of the project approach implies that students receive not only practical but also research and social competencies that are necessary for them for future professional activities.

One of the most important competencies is a research competence (Chervova & Yanyuk, 2007), which provides an opportunity for students with available to them the knowledge and skills to model, analyze, and transform (modify on a background of varying professional tasks) the objects of professional activities, showing the activity, the ability to make their own decisions and take responsibility for them, critically evaluate the results of their actions.

To evaluate the efficiency of the system of research abilities formation a set of criterion-oriented test tasks has been developed. We used methods of pedagogical diagnostics and testing, pedagogical observation, conversation, questionnaire, statistical processing of results of experimental work and analysis. In the experiment, was attended by 130 students of the Institute of mechanical engineering and mechatronics, consisting of three control and three experimental training groups of the third and then the fourth years. The experiment was carried out step by step monitoring of the process of formation of research competence at the end of the third and fourth years of study.

It was found that the percentage of students who meet the criteria of formation of research competence, according to experts in the control groups was 28%, while in the experimental group, the figure was 46%. Thus, the method of project-based learning allows effectively generate research competence of students of technical colleges. In Fig. 1 shows the results of the analysis of the realized capabilities of students of control and experimental groups.

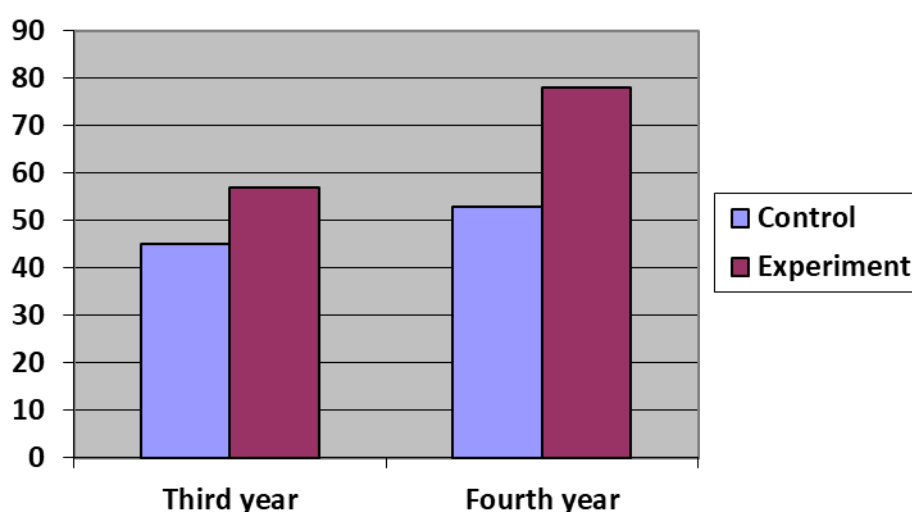


Figure 1. The percentage of realized capabilities in students of control and experimental groups at the end of the third and fourth year of study

CONCLUSION

The basis of interactive approaches to learning is the interaction of the teacher and trainees, as well as trainees among themselves. At the same time, the main conditions for the existence of an interactive are the existence of a goal, a direct and prompt exchange of information, a certain scientifically justified degree of equality in the distribution of functions performed in the process of solving the problem, a high level of knowledge and a mutual understanding. Interactive learning in a project-oriented approach allows to solve simultaneously a several problems, main of which is the achievement of learning objectives, development of communicative skills and development of research competencies. It helps to establish emotional contacts between students, provides an educational task, as it teaches to work in a team, listen to the opinion of their comrades. The use of interactive technologies in the organization of training opens the opportunity to consider the issues of individual educational strategies defining the direction vector and content of education of the future engineers, to improve the quality of their training and creates opportunities for self-realization and life self-fulfillment.

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OPTIMIZATION OF MEDICAL DATA TRANSFER FROM THE MIT-BIH ARRHYTHMIA DATABASE TO THE LEARNING MACHINE

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ABSTRACT

Cardiovascular disease is a major public health problem and the leading cause of death in the world. An electrocardiogram (ECG) is a recording of the electrical activity of the heart as a function of time. Due to the speed of implementation, efficiency and especially reliability for diagnosis, the ECG plays an important role in monitoring and diagnosing patients today. This during the ECG is only effective when it is recorded over a long time. The analysis of such a recording requires methods of parameter optimization and automatic classification of heartbeats.

In this paper a genetic algorithm is used to optimize the electrocardiogram (ECG) signal. The proposed method is able to optimize the ECG data and exceeds the result of related works which proves its effectiveness in ECG arrhythmias detection.

INTRODUCTION

Cardiovascular diseases are one of the most important causes of mortality in the world (Impact of Technology, 2017). Sudden cardiac death represents about half of the deaths caused by cardiovascular disease, the average age is between 50 and 60 years old but it can occur at any time. The mechanisms of this sudden death are principally ventricular arrhythmias with a percentage of 75% where the presence of PVC (Premature Ventricular Contraction) is considered as an eventual predictor. This paper is dedicated to investigate about the optimization of the ECG signal, to make it more comprehensible by doctor's cardiologist.

The presented work in this paper proposes classification of PVC beats, and is organized as follows:

In the first section, we introduced the problematic and then examined related works to classify cardiac arrhythmia in Section 2. The third section presents details works specialized in detection of the PVC pathology. The proposed approach is detailed in Section 4.

Our experimental results and a discussion are presented in Section 5. Finally, the conclusion is drawn and future work is suggested in the last section.

RELATED WORKS

In the literature, we find several techniques applying various methods, the aim of which is to simplify the reading of an ECG signal, we have been interested in the following works:

In (Olmez, 1997), Classifies the waveforms of the ECG signals corresponding to the beat types (normal, premature ventricular contraction, P-type beats and left-branch block) by hybridizing between an RCE neural network (Restricted Coulomb Energy) and genetic algorithms, resulting in a classification rate of 94%.

The work of (Wieben, 1999) shows that the characteristics of filter banks and decision trees are used for classification purposes. The algorithm reached a sensitivity of 85.3% and a positive predictive of 85.2%.

The Fourier transform was used in (Eric Chan, 2000), which worked on the collection and analysis of ECG signals for the non-invasive detection and quantification of the presence of abnormal cardiac conduction patterns. Its principle is that incoming beats, triggered by the R wave, are matched and averaged for patients with ventricular pathologies and those with P-wave triggers are matched and averaged together for patients with of atrial pathologies. The QRS and P-wave inputs and outputs are respectively calculated for post-analysis ventricular and atrial applications. The windowed Fourier transform of the second derivative (acceleration) of the ECG average signal is calculated for the areas of interest of each conductor. An index of variation of the spectrum obtained from the "acceleration spectrum" for each of the conductors serves to quantify the degree of fragmentation of the spectrum within a prespecified bandwidth.

(Lachiri, 2011, Maatar, 2011), presented a method for the automatic classification of cardiopathies from an electrocardiogram (ECG). This treatment is based on an analysis of certain morphological parameters for the recognition of 8 cardiopathies. The morphological parameters were divided into homogeneous groups (amplitude, surface, interval and slope). These parameters are calculated for beats with 8 types of abnormalities from ECG records retrieved from the MIT-BIH arrhythmia database. This study resulted in a maximum overall rate of 82.14% for all morphological parameters. Analysis of the different groups separately showed that the best recognition performance was 96.36% for the surface parameters. The worst is 66.07% for the amplitude parameters.

ECG SIGNAL

In [Figure 1], we have the different waves of a normal ECG; in our study we are interested in the Ventricular case that can cause sudden death in a patient.

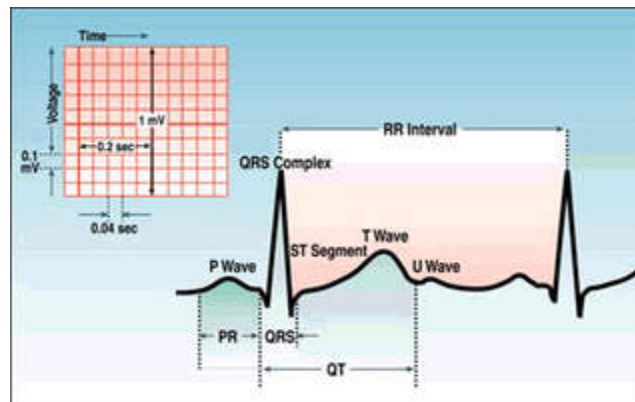


Figure 1: The different wave Electrocardiogram (ECG) signal.

PREMATURE VENTRICULAR CONTRACTION (PVC)

Ventricular fibrillation is a cardiac rhythm disorder which manifests as a complete disorganization of the electrical activity of the ventricles with the immediate consequence of the loss of any effective cardiac contraction. According to (Briand, 2002) Ventricular fibrillation is characterized by the occurrence of very abnormal, widely varying, abnormally large, unequally amplitude ventricular complexes, occurring in a totally irregular and high frequency manner (Talbi, 2011).

The parameters used to try to predict the risk of PVC are relative to the QRS and P waves of the ECG [Figure 2].

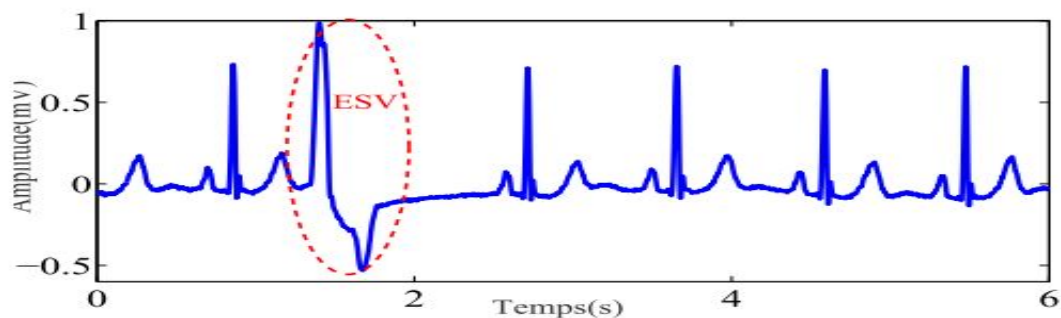


Figure 2: ECG of a subject which has premature ventricular contractions (PVC) (Talbi, 2011).

To discriminate between the two types of beats (normal and at risk (PVC)), it is imperative to calculate certain parameters and characteristics that can constitute the input vectors of the classifier. These feature vectors are each composed of 9 elements:

- The temporal parameters, namely the duration and the amplitude of the P wave represent the two first elements of the vector and the duration of the QRS complex.
- The shape of the QRS complex.

ECG RECORDERS

In [Table 1], we can see the few patients in the database MIT-BIH and who are coded from 106 to 234, each record to normal beats and ventricular beats.

recorder	N	PVC	Others	Total
106	1500	517	0	2017
116	2273	109	0	2382
119	1535	442	0	1977
200	1815	773	0	2588
205	2574	68	0	2642
208	1681	1216	44	1941
214	2013	235	0	2248
219	2083	57	3	2143
221	2022	393	0	2415
234	2733	3	5	2741

Table 1: Number of normal and abnormal beats for each signal.

METHODOLOGIES

The genetic algorithm is a method for solving both constrained and unconstrained optimization problems that is based on natural selection, the process that drives biological evolution. The genetic algorithm repeatedly modifies a population of individual solutions. At each step, the genetic algorithm selects individuals at random from the current population to be parents and uses them to produce the children for the next generation. Over successive generations, the population "evolves" toward an optimal solution. You can apply the genetic algorithm to solve a variety of optimization problems that are not well suited for standard optimization algorithms, including problems in which the objective function is discontinuous, nondifferentiable, stochastic, or highly nonlinear. The genetic algorithm can address problems of mixed integer programming, where some components are restricted to be integer-valued.

The genetic algorithm uses three main types of rules at each step to create the next generation from the current population:

- 1- Selection rules select the individuals, called parents, which contribute to the population at the next generation.
- 2- Crossover rules combine two parents to form children for the next generation.
- 3- Mutation rules apply random changes to individual parents to form children.

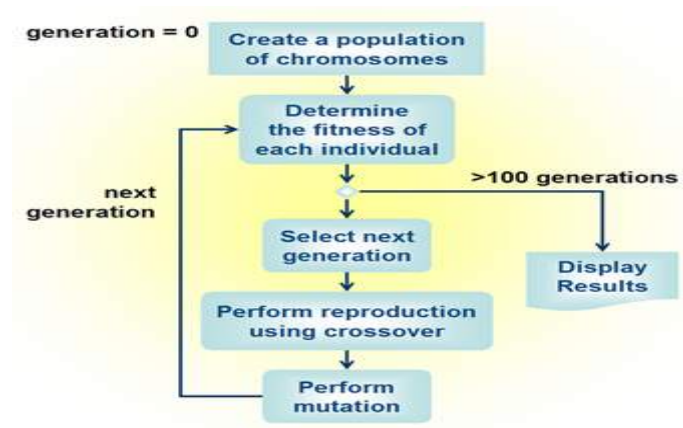


Figure 3: The different wave Electrocardiogram (ECG) signal.

EXPERIMENTATION

- Since 1975, the laboratories of Beth Israel Hospital in Boston and Massachusetts Institute of Technology have produced a MIT-BIH database (MIT-BIH, 1992), which was started to be distributed in 1980.
- The source of the ECG included in the MIT-BIH database is the standard used by many researchers for the evaluation of arrhythmia detectors. We have also used this database which contains 48 recordings; each recording has a duration of 30mn and a sampling frequency of 360HZ.
- Each record has two different leads from the ECG signal; these signals contain normal beats, ventricular extrasystoles and some different signals.

In this study we focus on the classification of Premature Ventricular Contraction (PVC), the records of "MIT BIH Database" are used for the development and evaluation of classifier performance. These labels (annotations) [Table 2] are used to learn the classifier and evaluate these performances during the test phase. Since this study aims to identify the PVC beat. The cardiac cycles used for the learning of the various pathological cases were chosen randomly from several records. The advantage is of course to build a database including different forms of each cardiac arrhythmia.

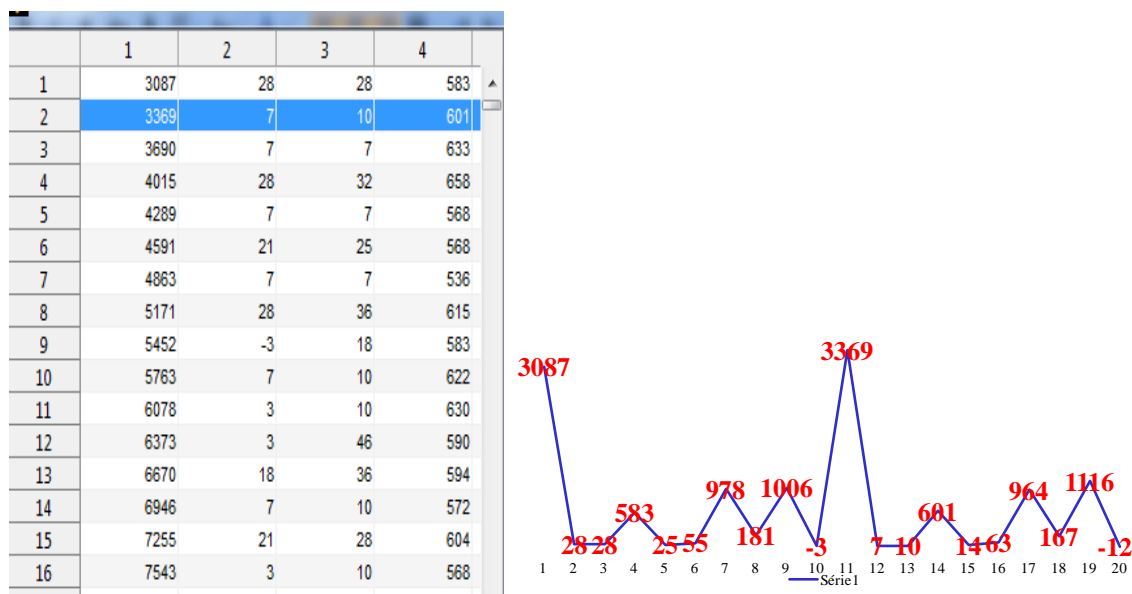


Table 2: Parameters of MIT-BIH data base.

- ♦ The MIT-BIH database is in the form of matrices.
- ♦ Each line of the matrix represents a cardiac cycle of a patient.
- ♦ Each patient contains several cardiac cycles.

PROGRAM OF GENETIC ALGORITHM

```

package simpleGa;

public class Algorithm {

    /* GA parameters */
    private static final double uniformRate = 0.5;
    private static final double mutationRate = 0.015;
    private static final int tournamentSize = 5;
    private static final boolean elitism = true;

    /* Public methods */

    // Evolve a population
    public static Population evolvePopulation(Population pop) {
        Population newPopulation = new Population(pop.size(), false);

        // Keep our best individual
        if (elitism) {
            newPopulation.saveIndividual(0, pop.getFittest());
        }

        // Crossover population
        int elitismOffset;
        if (elitism) {
            elitismOffset = 1;
        } else {
            elitismOffset = 0;
        }

        // Loop over the population size and create new individuals with
        // crossover
        for (int i = elitismOffset; i < pop.size(); i++) {
            Individual indiv1 = tournamentSelection(pop);
            Individual indiv2 = tournamentSelection(pop);
            Individual newIndiv = crossover(indiv1, indiv2);
            newPopulation.saveIndividual(i, newIndiv);
        }

        // Mutate population
        for (int i = elitismOffset; i < newPopulation.size(); i++) {
            mutate(newPopulation.getIndividual(i));
        }

        return newPopulation;
    }

    // Crossover individuals
    private static Individual crossover(Individual indiv1, Individual indiv2) {
        Individual newSol = new Individual();
        // Loop through genes
        for (int i = 0; i < indiv1.size(); i++) {
            // Crossover
            if (Math.random() <= uniformRate) {
                newSol.setGene(i, indiv1.getGene(i));
            } else {
                newSol.setGene(i, indiv2.getGene(i));
            }
        }
        return newSol;
    }

    // Mutate an individual
    private static void mutate(Individual indiv) {
        // Loop through genes
        for (int i = 0; i < indiv.size(); i++) {
            if (Math.random() <= mutationRate) {
                // Create random gene
                byte gene = (byte) Math.round(Math.random());
                indiv.setGene(i, gene);
            }
        }
    }

    // Select individuals for crossover
    private static Individual tournamentSelection(Population pop) {
        // Create a tournament population
        Population tournament = new Population(tournamentSize, false);
        // For each place in the tournament get a random individual
        for (int i = 0; i < tournamentSize; i++) {
            int randomId = (int) (Math.random() * pop.size());
            tournament.saveIndividual(i, pop.getIndividual(randomId));
        }
        // Get the fittest
        Individual fittest = tournament.getFittest();
        return fittest;
    }
}

```

```
}
}
```

RESULTS

To optimize the characteristics of the set of signals of the MIT BIH Arrhythmia database, we used the genetic algorithm program (detailed at the top of the article). First, the matrix of the MIT-BIH data block (input xi) was used. We then supplemented the test matrix with data arbitrarily drawn from the study base. The optimization rate is estimated at 94%. This result is remarkable

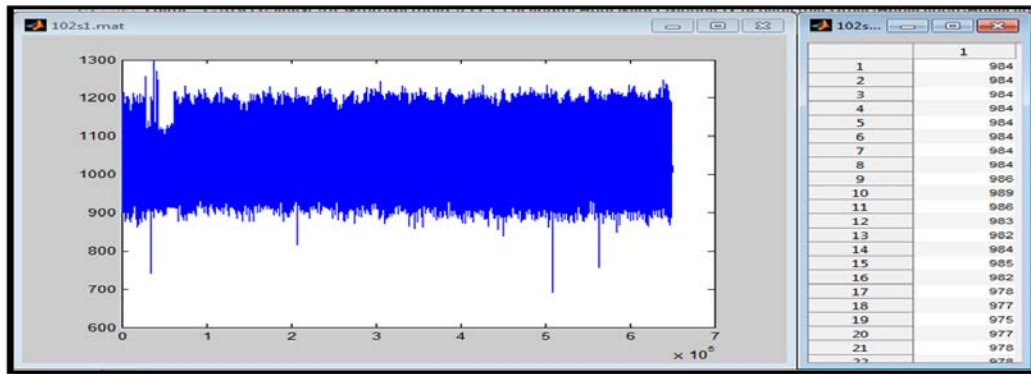


Figure 4: Record of Electrocardiogram (ECG) signal.

- We did apply the genetic algorithm on the raw data from the MIT-BIH database, which gave us a physician-readable ECG signal keeping only the relevant parameters.

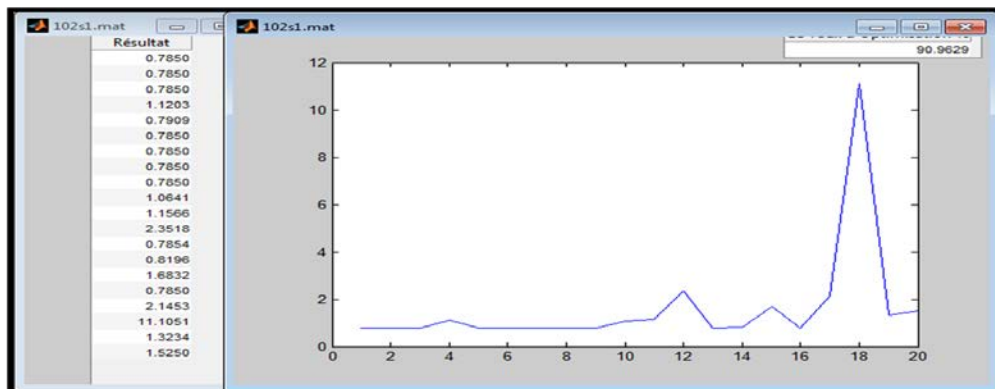


Figure 5: Record of Electrocardiogram (ECG) signal after optimization.

- In our experiment we have programmed an application that allows optimizing the different waves of an ECG signal from a very large number of annotations. The ECGs we distinguish are sometimes normal (N) and sometimes abnormal PVC.

CONCLUSION AND PERSPECTIVES

Genetic algorithms are research techniques that involve a large part in optimization, for their simplicity, speed of execution and ease of implementation. Their fields of application are very broad: eco, optimization of functions (cost or losses), planning, and many other fields.

After optimizing the ECG signal of the MIT-BIH database, we can say from the results that genetic algorithms are an important technique in any diagnostic aid system in the cardiological field in particular and in the medical field in general.

Among the prospects for this work, the expansion of the database, and the introduction of a new core may be more appropriate for our application.

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ORTAÖĞRETİM ÖĞRENCİLERİNİN TÜRK EDEBİYATI DERSİNE YÖNELİK TUTUMLARININ ÇEŞİTLİ DEĞİŞKENLER AÇISINDAN İNCELENMESİ

Türkan GÖZÜTOK¹

Ayşe DEMİR²

Bu çalışmanın amacı, Karabük ilindeki ortaöğretim öğrencilerinin Türk Edebiyatı dersine yönelik tutumlarını çeşitli değişkenler açısından incelemektir. Araştırmaya 2016-2017 eğitim öğretim yılında Karabük ilindeki farklı türdeki liselerde öğrenim gören 525 öğrenci katılmıştır. Tarama modelinin uygulandığı çalışmada veri toplama aracı olarak Veyis (2015) tarafından geliştirilen “*Türk Edebiyatı Dersi Tutum Ölçeği*” ölçeği kullanılmıştır. Verilerin analizinde betimsel istatistiklerin yanında t testi ve tek yönlü varyans analizi (ANOVA) kullanılmıştır. Araştırmanın sonucunda ortaöğretim öğrencilerinin Türk Edebiyatı dersine yönelik orta düzeyde olumlu bir tutuma sahip olduğu belirlenmiştir. Ayrıca öğrencilerin Türk Edebiyatı dersine yönelik tutumlarının cinsiyet, sınıf düzeyi ve okul türü değişkenlerine göre anlamlı bir farklılık gösterdiği tespit edilmiştir.

Anahtar kelimeler: Türk Edebiyatı, Tutum, Ortaöğretim öğrencileri, Karabük.

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ORTOPEDİK ENGELLİ BİREYLERİN İNTERNET KULLANIMININ SOSYAL İLİŞKİLERİ BAĞLAMINDA İNCELENMESİ

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Bu araştırmanın amacı ortopedik engelli bireylerin sosyal ilişkilerinde internet kullanımının etkilerini araştırmaktır. İnternetin ortopedik engelli bireylerin hayatlarını devam ettirirken sosyal dışlanma ya da sosyal içerilmelerine etkisini ortaya koymaktır. Bu araştırmanın örneklemi Kuzey Kıbrıs Türk Cumhuriyetinde yaşamakta olan uygun örneklem yoluyla seçilen %33.3 (n=13) kadın ve %66.7 (n=26) toplam 39 ortopedik engelli bireyden oluşmaktadır. Yöntemsel olarak betimsel yöntemlerden nicel türde ve tarama modeliyle gerçekleştirilmiştir. Ortopedik engelli bireylerin sosyal dışlanma durumlarını belirlemek için Köten ve Erdoğan (2014) tarafından geliştirilmiş olan Sosyal Dışlanma Ölçeği uygulanmıştır. Ölçeğin genel güvenilirliği Cronbach Alpha Katsayısı .88 olarak çok yüksek bulunmuştur. Ortopedik engelli bireylerin demografik bilgilerini ve internet kullanım özelliklerini belirlemek amacıyla araştırmacı tarafından oluşturulan kişisel bilgi formu kullanılmıştır. Araştırmadan elde edilen sonuçlara göre ortopedik engelli bireylerin internet kullanımları ile sosyal ilişkileri arasında anlamlı farklılıklar bulunmuştur. İnternet kullanma sıklığının artmasıyla ortopedik engelli bireylerin kendini sosyal içerilmiş olarak hissettikleri sonucuna varılmıştır.

OSMANLIDA FERMAN VE BERATLARDA KULLANILAN TEZHİP SANATI (TUĞRA SÜSLEMELERİ) VE SANATSAL AÇIDAN İNCELENMESİ

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ÖZET

Osmanlı padişahlarının imzaları niteliğinde olan tuğralar yazı sanatının kullanımı ve üzerine ek tezhiplerle (süsleme) dikkat çekmektedir. Türk süsleme kültürünün ve estetiğinin bir yansıması olarak dikkat çeken tuğralar ferman ve beratlar da özenle çizilmektedirler. Bu belgelerin tarihi ve kültürel değer ve önemlerinin yanında sanatsal açıdan da değerlerine değer katmaktadır. Çalışmamızda T.C. Başbakanlık arşivleri müdürlüğü Osmanlı arşivi daire başkanlığınca derlenmiş Osmanlı fermanları kitabından kronolojik olarak eskiden yeniye olacak şekilde seçilen 5 örnek ferman ve berat incelenmiş ve tarihsel dönem ve konuları verilerek desen, motif, renk ve sanat tarzları ele alınarak incelenmiştir. İncelemeler sonucunda tuğraların üzerindeki tezhiplerin (süsleme) dönemlere sanat tarzları açısından farklılıklar gösterdikleri görülmüştür. Osmanlının ilk dönemlerinde uzak doğu ve doğu tarzının yıllar ilerledikçe ve batıyla olan ilişkiler arttıkça batının sanat anlayışından etkilenerek tarzların farklılaştığı görülmektedir. Bu farklılaşma sonucunda tezhip (süsleme) sanatımızda geleneksel tarzdan kopmadan ancak batının barok ve rokoko tarzlarından etkilenildiği görülmektedir.

Anahtar Kelimeler: Osmanlı, Ferman, Berat, Tezhip, Sanat

GİRİŞ

Türklerin İslamiyet'i kabulü ile birlikte birçok sosyal alanda kültürel farklılıklar oldu. Bunlardan biride hat sanatıdır. Türklerin kullandığı Uygur yazısının sanatsal incelikleri nedeniyle hat sanatını benimsemeleri ve geliştirmelerinde etkili olmuştur. Osmanlıda kullanılan hat sanatının kullanıldığı en çarpıcı örnekleri tuğralardır. Siyasi ve sosyal hayatta kullanılan tuğralar bir imza niteliği taşımasıyla birlikte sanat eseri olarak da kabul edilmektedir. Bir tanıma göre tuğralar Osmanlı padişahlarının nişan ve yazılı alameti, bir nevi imzasıdır. Tuğra kelimesinin kökleri Oğuz Türkçesindeki "Tuğrağ" kelimesine dayanmaktadır. Kelimenin söylenmesindeki "tuğra" sesi Oğuz Türkçesinde kelime sonundaki gırtlaktan gelen "ğ" harfinin dil kurallarına uygun olarak Osmanlıcada düşmesinden kaynaklanmaktadır. Bir başka görüşe göre ise tuğra; "Uygur Türkçesindeki Tuğrı=Tuğru ve Çağatay, Kazan, Oğuz Türkçelerindeki Toğru=Doğru kelimesinden gelmekte ve kendisiyle doğrulanan, tasdik olunan anlamını taşımaktadır.

Günümüzde her milleti temsil eden bir ikon veya amblem varsa Osmanlı döneminde de tahta çıkan her padişaha tuğra çekilir ve bu tuğra onun tahtan inene kadar imzası ve mührü olarak kullanırdı. Osmanlılarda en eski kullanılan mühür ve ilk tuğra özelliğini taşıyan figür Orhan Gazi'nin Orhan bin Osman ifadesini içeren tuğradır. Bu tuğra pâdişâhla birlikte babasının adını ve dâimâ muzaffer olmasını dileyen bir duayı (=el muzaffer dâimâ) ihtivâ eden özel bir figürdür. Tuğraların belirli yazım tasarım elemanları bulunmaktaydı bunlar Kürsü (sere), tuğ, zülfe, iç ve dış beyza, hançer (kol) 16. Asırda tuğralar sanatsal olarak kendini yenileyerek tezhipli olarak hazırlanmaya başladı. Mustafa Râkım'ın (1171/1758-1241/1826) ve Sâmi Efendi'nin (1253/1838-1330/1912) sanat anlayışlarına bağlı olarak estetik açıdan üst seviyelere çıkmıştır.

Osmanlılarda tuğra isimleri farklı dönemlerde farklı isimlerle anılmıştır. Bunlar: tuğra-ı garrâ, tuğra-ı hümayûn, nisân-ı âlisân, nisân-ı serîf-i âlisân, tevkî'-i refî', tevkî'-i refî-i hümayûn, misâl-i meymûn, âlâmet-i serife dir. tuğralar padisahın emrini içeren fermanlarda ve padisah tarafından bir imtiyaz veya bir hak verildiğini bildiren beratlar üzerine ve paralara nisancı veya tevkii denen kişiler tarafından yazılırdı. 19. yüzyıldan sonra ise bir arma olarak bayraklara, pullara, nüfus hüviyet cüzdanlarına ve hatta binalara da basılmıştır.

Ferman

Padişahın alamet-işerife adı verilen emridir. Diğer bir ismiyle ferman-ıhümayun ve emr-i şerif denilmiştir. Fermanla eş anlamlı olmasından dolayı emr ve hüküm için de benzeri sıfatlar kullanılmıştır. Bunlar muhteva yönünden, uyulması gereken genel kaide ve kuralları içerdiğinden bu tür fermanlara kanunfermanlar veya fermankanunlar adı verilmiştir. Ferman ilk kullanımına bakıldığında İslamiyeti kabul eden İlhanlılarda ve ardından

Osmanlılarda kullanılmıştır. Ferman kelimesi Timuriler, Karakoyunlu, Akkoyunlu Devletleriyle, Altınordu ve Kırım Hanlıklarında aynı şekliyle kullanılırken. Selçuklular, Anadolu Selçukluları ve Memlûklerde “tevkî” olarak kullanılmıştır.

Berat

Şahıs veya hükmi şahıslara, bir imtiyaz veya hak veren veya devlet malları üzerinde tasarruf veya mülkiyet hakkı sağlayan ve bu ayrıcalıkları üçüncü şahıslar nazarında tasdik ve emreden sultanı hükümlerdir. Beratta verilen vazife, imtiyaz veya muafiyetin ne şekilde yerine getirileceği emir (hüküm) kısmında belirtilmiştir. Bu kısma beratın şartı da denmektedir. Beratların te’kid (tehdit) kısmında ise; berata ilgililerce uyulması, berat hilafına “dahl-ü taaruz” edilmesi belirtilmiştir. Berat, Arapça kökenli bir kelimedir. “yazılı kâğıt” anlamını ifade eder. Osmanlı devletin teşkilatında bazı vazife ve memuriyete tayin, bir gelirden tahsis, bir şeyin kullanılma hakkı, bir imtiyaz veya muafiyetin verildiğini gösteren ve padişahın tuğrasını taşıyan belgelere bu isim verilmiştir⁹⁴. Berata “biti”, “berat-ı şerif”, “nişan-ı şerif” de denmiştir.

Nişancılar (Tuğrakeş)

Nişancılar (Tuğrakeş) Divan-i Hümâyunun olarak adlandırılırlardı. Osmanlıda Divan-i Hümâyunun önemli görevlerden birini veya birden fazlasını yerine getiren görevliler için kullanılan bir sıfattır. Dîvân-ı Hümâyûn’da tuğra çekmekle vazîfeli kişilere önceleri tevkî’î, muvakkî’, tuğrâî veya nişancı denilirken sonraları bu ad tuğrakeş (=tuğra çeken) olarak değişmiştir “Nişancı” Nisan kelimesinden türemiştir. ferman, berat, mensûr, nâme, mektup, ahidnâme, hüküm ve biti gibi devletin resmî evrakının bas kısmına padişahın imzasi demek olan nisani koyardı. Nişancılar (Tuğrakeş)’in yaptıkları tuğra ayrı bir sanat sayılır ve onların elinden çıkardı. Tuğralara hükümdar ve babasının adı (şah, han, el-muzaffer) gibi kelimeler bir arada yazılır. Bununla görevli olan Nişancı, tuğrayı ya kendi çeker veya idaresinde çalışan tuğrakeşlere hazırlatırdı.

Tezhip sanatı

Arapça kökenli bir kelime olan “tezhip”, “altınlamak” anlamına gelmektedir. Altın ve muhtelif renklerde kitap, murakka’ (albüm), levha gibi yazma eserlerde kullanılan tezyinat için geçerlidir. Arapça’da altınlama anlamına gelen “tezhib” sadece altınla işleme anlamını taşımaz bunun yanında farklı boyalarla yapılan ince kitap tezyinatına (süslemelerine) de denir. Tezhip yapana müzehhip, tezhiplenmiş eserlere de müzehhep adı verilir. Tezhip, en fazla el yazması Kur’ân-ı Kerim’lerin farklı kısımlarında ve Hat’ın çerçevesinde görülmektedir.

Yazı uygulama sürecinde başlı başına bir Sanat olduğu gibi koratif Sanatların zenginleştirilmesinde ve mimaride çok büyük rol oynamıştır. Gerek Selçuklu, gerekse Osmanlı mimarisinden yazıyı çıkaracak olursak bunların pek fakir bir manzara göstereceğine şüphe yoktur. Yazı sanatının dinsel kültür içerisinde farklı tasarım ve betimlemelerle kullanılmasının ve gelişmesinin en büyük sebebi islam kültüründe kutsal sayılan kişi ve ailelerinin tasvir ve resmin hoş karşılanmaması olmuştur. Bu noktada tuğralar yazı sanatının kullanımı ve üzerine ek tezhiplerle (süsleme) dikkat çekmektedir. Her sultanın adına tasarlanan tuğra fermanlar, beratlar ile önemli vesikaların başına da çekilmektedir. Turaları oluşturan hat yazılarının kenarları tezhib ve ebrularla tezyin (süslenerek)estetik açıdan daha güzel formlar kazanmıştır. Bir güzellik kazandırılmış. Süsleme olgusu Türk kültüründe orta asya dan Anadolu ya göç etmelerinden bu yana önemli bir yer edinmiştir. Türk kültürün deki en temel barınma ihtiyacı ve kültür sembollerinden olan çadır ve halı süslemeleri Türklerle bütünleşmiş olgulardır. Tezhib sanatı açısından zirve denilecek devir Kanuni Sultan Süleyman Devridir. (1520-1566) Bu dönemde renk ve biçim açısından yenilikler ve gelişmeler olmuştur. Desenlerin işçiliği artmış, bordürler çeşitlenmiş, tuğlar en zengin örneklerini vermiştir. Stilizde motifler çok çeşitlenmiştir.

Batı sanatının etkisiyle Türk Rokokosu denilen sanat akımı başlamasıyla Klâsik devrin hatâyî, rumî ve yarı stilize çiçeklerinin yerini natüralist, kurdeleyle bağlanmış çiçek buketleri alır. Bu dönemde ayet, hadis ve güzel sözler tuğra formunda yazılarak tezyin edilir. Ferman ve berat ların konu ve önemine göre tuğralara tezhip uygulanmaktaydı. Tezhip renk, desen, süsleme şekli ve üslubu farklı zamanlarda farklı değişimler göstermektedir. İlk dönem tuğraları tezhipsiz sade ve siyah mürekkeplidir. Tuğra çekerken, altın ve kobalt mavisi (lacivert) kullanılması Fatih döneminde başlamaktadır. İlk tezyinî tuğra örnekleri tuğranın sere bölümündeki harf boşluklarının kobalt mavisile doldurulmasıdır. Tuğranın tamamını teşkil eden harflerin araları, beyzelerin, hançerin iç kısımları ve tuğranın üst tarafı, beyze ve hançer kısmını içine alacak şekilde tuğranın üçgen bir görüntü oluşturan tezyinatla tezhiplenir Süslenen her tuğra için farklı desen ve kompozisyon hazırlanır, hiçbir tuğra tezyinatı bir diğerine benzemezdi. Yüzyılda Batı’nın Barok ve Rokoko tarzlarının Osmanlı tezhip sanatına etkisiyle yeni zevk ve yorumlar meydana gelmektedir. Tezyinat, klâsik anlayışın stilize formlarından uzaklaşıp, natüralist bir üslup kazanır, çeşitli renklerle yapılan lale, gül, süsen ve şakayık çiçekleri tek veya demet hâlinde kullanılmaya başlanır. Çelenkler, fiyonklar tuğra süslemelerinde yer alır.

Tuğralı Belgelerde Kullanılan Malzemeler

- Kâğıt
- Fırça
- Zermühre (Mühre)
- Altın Varak
- Altın Tabağı
- Arap Zamkı
- Jelatinli Su
- Zerefşan Kalburu
- Destesenk (Destezenk):
- Eskiz Kâğıdı
- Rapido
- Trilin
- Tashih Bıçağı
- İpek Parçası
- İğnedân
- Füzen
- Boyalar

Tezhipte Motif ve Rengin Kullanımı

Tezhipte Motif Kullanımı

Süsleme sanatında bir birini tekrar eden resim ve şekil ve desenlere motif denir. Motifler; sosyal kültürel olarak toplumların gelenek, görenek, zevk, anlayış ve inançlarını ifade ederler. Motifin amacı süslenen şeye daha estetik ve hoş bir görünüm sağlamaktır. Motiflerin tasnif edilmesinde ilk olarak özellikle Osmanlı döneminde daha çok kullanılan hatâyî grubu adı altında toplanan bitki kaynaklı motifler göze çarpar. Bu motifler yaprak, penç, hatâyî, yarı üslûplaştırılmış çiçekler olmak üzere kendi içinde de gruplara ayrılırlar.

Tezhipte Renk Kullanımı

Tezhibin renk kullanımında ana madde toprak boyalardır. Tezhip sanatında kullanılan renkler dönemlere göre farklılıklar gösterir. Tezhipte altın baş elemandır. Güneşi ve zenginliği sembol eder. Işığın yani aydınlığın rengi olan sarı bilgi sembolü olarak tezhiplerde kullanılır. Altından sonra en çok kullanılan renk mavinin tonlarıdır. Gökyüzünü simgelediği düşünülmüştür. Doğuda altınla mavi aynı ölçüde kullanılmakta, ancak batıya doğru gidildikçe mavinin önemi azalmaktadır. Uygulamalarda görüldüğü gibi renklerin seçimi, tıpkı motifler gibi belli bir bilinçle seçilmiştir. Avrupa tesiri altına girmeye başladığından barok ve rokoko sanatında hâkim en önemli faktörlerden olan ve Osmanlı tezhip sanatında o devre kadar hiç görülmeyen ışık gölge kontrastı karşımıza çıkmakta, renklerin koyulu açıklı kullanımı bezemeye perspektif vererek derinlik kazandırmaktadır.

Ferman Ve Beratlardaki Tuğra Tezhiplerinin Sanatsal Açısından İnceleme Örnekleri

Kuşkusuz ki Osmanlı döneminde birçok ferman ve berat yazılmıştır. Ancak çalışmanın sınırlılıkları doğrultusunda beş adet ferman ve berat seçilerek üzerlerindeki tuğra tezhipleri sanatsal olarak incelenmiştir.



Tür: Ferman

Dönem: III Ahmed

Tarih: H.2.6.1132/ M.11.4.1720

Yazı Türü: Divani hattı ile yazılmıştır.13 satırdır

Ferman Boyutu: 67x34

Konusu: Yeni şehir kazasının bazı köylerine ait mukataa gelirlerinin, matbah-ı amire'ye ocaklık olarak verildiği için yeniden sayılmasına dair.

Tuğra altın yıldızlarla çekilmiş; yeşil, kırmızı altın yıldız, pembe ve bordo renkli çiçek motifleri ile tezyin (süsleme) edilmiştir. Tuğranın üst tezyini genellikle olduğu gibi hayat ayağı formundadır. Tezyin'in dıştan çevreleyen bölümde kırmızı, sarı ve yeşil renklerinden yapraklar eklenmiş ve iç bölüm ise çiçeklerle süslenmiş ve Bu formun en alt kısmında beratın ait olduğu padişahı gösteren tuğrası mevcuttur. Tarz açısından bakıldığında dönemi itibari ile de daha geleneksel motifler den oluşturulduğunu görmekteyiz.



Tür: Ferman

Dönem: I Abdülhamid

Tarih: H.Evahir-i Za . 1198/ M. Ekim. 1784

Yazı Türü: Divani hattı ile yazılmıştır.9 satırdır

Ferman Boyutu: 76x50

Konusu: Haleb'deki Venedik konsolosu tercümanı ile oğulları ve iki yardımcısının, vergilerden muaf tutulmasına ve bu konuda rencide edilmemelerine dair.

Tuğra altın yıldızlarla çekilmiş; altın yıldız, mavi, pembe, yeşil ve kırmızı renkli çiçek motifleri ve buketleriyle tezyin edilmiştir. Tuğra'nın üst tezyini hayat ayağı formundadır. Tezyinin dış çerçeve bölümü kırmızı ve yeşil figürler uygulanmıştır. İç bölüme uygulanan çiçek motiflerinden farklı olarak merkeze Osmanlının simgesi haline gelmiş lale figürü yer almaktadır. İç sol alt kısımda içe bir buket çiçek figürü imtiyazlarla ilişkilendirilebilir.



Tür: Brat

Dönem: III Selim

Tarih: H.29.6.1204/ M.16.3.1790

Yazı Türü: İlk satır celi divanı ve sonraki satırlar Divani hattı ile yazılmıştır.6 satırdır

Ferman Boyutu: 131x61

Konusu: Saray-ı Atik Teberdarını vekil-i Harcı İbrahim'in kitabet görevinin, seyyid El-Hace yunun'a tevelhine dair.

Tuğra altın yaldız çizgilerle çekilmiş; içi gri renkli mürekkeple doldurulmuştur. Lacivert altın yıldız, mavi, kırmızı, eflatun ve yeşil renkli çiçek motifleriyle tezyin edilmiştir Tuğra'nın üst tezyini bu örnekte de hayat ayağı formundadır. Tezyinin dış çerçeve bölümü kırmızı ve yeşil figürler uygulanmıştır. İç bölüme uygulanan çiçek motiflerinden farklı olarak merkeze bahçeyi anımsatan motifler yer almaktadır. Motiflere bakıldığında dönemin etkisi ile daha kalın ve belirgin hatlar kazanmıştır.



Tür: Ferman

Dönem: III Selim

Tarih: H.Evahir-i Za . 1198/ M. Ekim. 1784

Yazı Türü: İlk satır celi divanı ve sonraki satırlar Divani hattı ile yazılmıştır. 14satırdır

Ferman Boyutu: 78x53,5 cm

Konusu: Rusya devleti orta elçisi'nin arzuhalı üzerine naboli iskelesi konsolos vekili tercümanı layro oğlu e-anderyako'nun yardımcılarında todori oğlu santo'nun ahidname gereği haraç, avariz, kasabiye akçesi ve diğer vergi istekleriyle rencide edilmemelerine dair.

Tuğra altın yıldız ile çekilmiş; altın yıldız kırmızı, mavi turuncu, sarı ve yeşil renkli çiçek motifleriyle tezyin edilmiştir Tuğra'nın alışılmış hayat ağacı formunu görmekle birlikte hayat ağacının dışına ek bir alan ilave edilmiş ve Batı'nın Barok ve Türk rokoku olarak adlandırılan tarzlarının Osmanlı tezhip sanatına etkisiyle farklı desen ve motifler kazandığını görmekteyiz.



Tür: Berat

Dönem: II.Mahmud

Tarih: H.11.6.1243/ M.30.12.1827

Ferman Boyutu: 77x54 cm

Konusu: Şam-ı Şerif’de emeviyye camii mütevellği hibetullah’ın tamir ve bakımının yapılması sebebiyle camii mütevellği’nin Suyüri zade mustafa efendi’ye verilmesine dair.

Tuğra altın yaldız ile çekilmiş; altın yaldız turuncu, pembe mavi ve sarı renkli çiçek motif ve buketleriyle tezyin edilmiştir. Diğer incelemelerimizdeki tuğralardan farklı olarak bu tuğrada tezyin alanları altın yıldızla çerçeve içine alınmıştır. Tuğra’nın alışılmış hayat ağacı formunun üçgen boyutu değişmiş ve yuvarlak hatlar almıştır. Bu çalışmada da bir önceki tuğrada olduğu gibi Batı’nın Barok ve Türk rokoku olarak adlandırılan tarzlarının etkisi görülmektedir. Bu çalışmada da yeni sanat anlayışıyla birlikte tezhip’in turayı içine içine alınacak şekilde çekilmesidir.

Sonuç

Osmanlı arşivlerinde yer alan belgeler tarihi ve kültürel açıdan değil aynı zamanda sanat sal açısından da önem taşımaktadır. Bu bağlamda örnek olarak ferman ve beratlar incelendiğinde hat sanatıyla birlikte ferman ve beratların tümüne tezhip sanatı uygulanmıştır. Tezhip uygulamasının en göze çarpan bölümü turalardaki bölümüdür. Tuğralara çizilen bu tezhipler estetik ve sanatsal açıdan el işçiliği olmaları ve teklik benzersizlik özellikleriyle sanat eseri olarak kabul edilmektedirler. Estetik ve sanatsal anlamda bir değere sahip olan tuğra süslemeleri (tezhip) bu özelliğiyle incelenerek yeni yorumlar getirilmesi açısından ve yaratılış süreçleri hakkında bilgi vermenin sanat kültürümüz açısından önemi tartışılmaz.

Çalışmamızın ışığında T.C. Başbakanlık arşivleri müdürlüğü Osmanlı arşivi daire başkanlığınca derlenmiş Osmanlı fermanları kitabından kronolojik olarak eskiden yeniye olacak şekilde seçilen 5 örnek ferman ve berat incelenmiş ve tarihsel dönem ve konuları verilerek desen, motif, renk ve sanat tarzları ele alınarak incelenmiştir. İncelemeler sonucunda tuğraların üzerindeki tezhiplerin (süsleme) dönemlere sanat tarzları açısından farklılıklar gösterdikleri görülmüştür. Osmanlı’nın ilk dönemlerinde uzak doğu ve doğu tarzının yıllar ilerledikçe ve batıyla olan ilişkiler arttıkça batının sanat anlayışından etkilenerek tarzların farklılaştığı görülmektedir. Bu farklılaşma sonucunda tezhip (süsleme) sanatımızda geleneksel tarzdan kopmadan ancak batının barok ve rokoko tarzlarından etkilenildiği görülmektedir. Rokoko tarzının geleneksel motiflere eklenmesiyle adına Türk rokoku denilen bir sanat akımının oluşması sanat alanındaki yenilik ve estetiğe verilen önemi göstermektedir.

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OTHERNESS

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All partners in the “Otherness”, Erasmus + KA2 project, share the idea that every individual is unique, equally worthy and has the right to live according to his beliefs, customs, practices and established behavior rules. We live in a world in which globalization and migration have brought together people from different ethnic origins, religious backgrounds, beliefs, traditions and languages. But sharing a common space does not automatically result in opening yourself to Otherness, trying to understand differences, valuing diversity and building common grounds for dialogue.

The target groups of the project are (1) Students aged 12/13 -15 (lower secondary school age) when they start consciously shaping attitudes and concepts; (2) Teachers and (3) Local communities.

Project activities and outputs: 1. Researching; 2. Designing a training program; 3. Transnational training activity for teachers from selected schools; 4. Piloting the training program in the selected educational institutions during school year 2016-2017; 5. Feedback and recommendations from participating teachers and students in the pilot trainings; 6. Upgrading the training program to meet teachers' and students' recommendations; 7. 2nd transnational training activity for teachers; 8. Final implementation: teachers form 2nd transnational training run trainings in the institutions they teach in during school year 2017-2018; 9. Evaluation - survey on students' attitude to Otherness

Project activities result in acquiring new knowledge and skills, and changing attitudes: students learn about Human Rights; believe and respect human rights to a greater extent; teachers get the knowledge of basics in Human Rights, Diversity and education for community well-being.

Outside the Box: Change – various forms of connecting practitioners in the process of intensive kindergarten development

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Abstract: This article describes the characteristics of the traditional, outdated educational practice in the early education institution followed by the ways in which a good quality, modern practice can evolve, as well as the achievements accomplished in some of our institutions. These achievements, as well as the processes that lie within them, are termed *Outside the box*. It is emphasized how the quality of the education development in an early and preschool institution is more concerned with the process than the result (especially not the permanent result), that is, it presents a developmental rather than a static category. In this sense, action research is highlighted as a particularly valuable “tool” for the development of educational practices and curriculum of early education. Action research enables the creation of a community of critical, self-reflective actors who can change the practice on a much wider scale than the individual, and gradually create a new, more human, and more democratic educational policy. The ultimate consequences of action research should be viewed in a much broader context than merely as a means of improving educational practice of certain institutions, that is, as creating a *professional learning community* whose participants connect and support each other in a continuous learning and professional development by strengthening their autonomy and emancipation.

There is a description of various forms of connecting practitioners who show interest and motivation for the introduction of new forms of work in order to provide each other with professional and emotional support. The Facebook group *Outside the Box* is mentioned as a form of linking practitioners for the purpose of discussion and exchange of professional experience and expertise, to which the next subchapter is devoted. This Facebook group was created with the intention of bringing together practitioners involved in the process of intensive kindergarten development through action research so as to enable an exchange of important information, research experiences, and insights which they gained in the process of developing practices. However, a growing number of interested practitioners from many different kindergartens gradually joined this group reaching a total number of 4,200 practitioners from different Croatian cities, as well as from Serbia, Bosnia and Herzegovina, Slovenia, the USA, Finland, Norway, and Australia.

Keywords: Action research, Facebook group, Kindergarten, *Outside the box*

INTRODUCTION

Outside the box illustrates the Croatian concept of connecting theoreticians and practitioners of early education on the path to seeking new opportunities for development of early childhood education and early education curriculum. It began as an attempt by the theorists at the Faculty of Humanities and Social Studies, University of Zagreb and two hundred associates from about ten Croatian kindergartens to explore and shape the educational practice so that it would be in line with contemporary pedagogical requirements stipulated in the Croatian National Curriculum for Early and Preschool Education that entered into force in 2015. This document created the legal preconditions for the development of institutional education based on the plurality of pedagogical ideas and concepts whose backbone represents humanistic ideas and developmentally appropriate practices. However, domestic and world experiences testify to the fact that a new official document, even when it is based on very contemporary professional and scientific grounds, has very modest impact on the educational practice itself. The reason for this is that the traditional understanding of the child and childhood, as well as the traditional organization of the educational process that emerges from such an understanding, cannot easily and simply be abandoned or achieved through administrative procedures. Of the many traditionalisms that can be found in the practice of Croatian kindergartens, we will list only a few:

- practice of strict planning and management of children's activities in the educational institution
- practice of direct teaching of children with the content which they need to memorize and reproduce, and which is therefore easily measurable
- practice of parceling children's educational activities according to methodical areas and strictly defined time sequences (so-called “guided activities”)

- encouraging one-sided and one-dimensional thinking of children (supporting the expected response of children in joint activities with the preschool teachers) and
- a universal and unified educational approach (the criterion for choosing educational content is the chronological age of children rather than their personal and developmental characteristics or subjective preferences and needs).

Retaining these (and many other) traditionalism in the educational practice testifies to the fact that it is in fact not managed by “official concepts” even when it is prescribed by the state, i.e. the competent Ministry, but rather by the “personal concepts” of practitioners who are employees in the institution.

ACTION RESEARCH

With this in mind, we conducted an action participatory research in about ten kindergartens so as to familiarize ourselves with and develop the educational practice and curriculum, as well as to provide support to those practitioners who want to step “outside the box.” In this process, our scientific-research activities included several directions.

The first of these was the development of the practitioners’ awareness that the quality of life, i.e. the education of the child, determines the entire context of his or her life inside the kindergarten. The context of a child’s life within a kindergarten institution is a complex interaction of various structural and cultural dimensions of the kindergarten, since the kindergarten is a complex living system or “a living organism” (Rinaldi, 2006). It is a pulsating, changeable, and interconnected world of rapid interaction in which the order originates naturally from chaos without the necessity of supervision (Roberts and Kleiner, 2003). Because of this, its functioning, i.e. the processes that occur in it, cannot be fully predicted or controlled. On the contrary, the modern educational process, i.e. the resulting curriculum, resembles “a forecast of possibilities within an arena of opportunities” (Rinaldi, according to Male, 2012). It resembles a journey to new and unknown places that change the child’s experience (Kalantzis et al, 2003). Such an understanding of the educational process is also the foundation of the development of an open development curriculum (Edwards et al., 1998, Slunjski, 2011). In that sense, the first direction of our “*outside the box*” journey was to develop the practitioners’ awareness about the unpredictability of the educational process and to provide support to the development of an open development curriculum.

The second direction involved abandoning the divisions of the educational process into activities aimed at stimulating specific aspects of child development (physical, emotional, social, intellectual, moral, creative, etc.) through separate activities. Instead, it was attempted to help the practitioners to create a wholesome understanding of the processes of nurturing, educating, and teaching children throughout every segment of the educational process. Also, efforts were made to empower them to abandon the idea of partitioning the process of teaching children into areas that, when it comes to school, belonged to certain subjects (Croatian, Mathematics, Science, etc.). This direction of work with practitioners was based on the inauguration of contemporary understanding of children’s learning (Petrović-Sočo, 2007; Tarini, 2008; White, 2008; Miljak, 2009), which emphasizes that the quality of children’s learning corresponds to the quality of their everyday life in the kindergarten, i.e. that it is not limited to parceled-out and segmented teaching of children according to certain contents. At the same time, these concepts were the foundation for the development of an integrated curriculum that takes into account all areas of the child’s development in a uniform manner, which would fit the nature of the child and his or her learning (Bredenkamp, 1996). In that sense, “*outside the box*” refers to the development of a holistic understanding of the educational process as the basis for designing a curriculum that has integrated characteristics.

The third direction of our activity referred to abandoning traditional education that is characterized by understanding knowledge as something static, which can be transmitted to children in predictable ways. Instead, it was attempted to promote the idea of creating, i.e. constructing knowledge, which in itself represents a personal, subjective, and authentic construction by the person who learns (Malaguzzi, 1998, Bascia and Hargreaves, 2000, Vygotsky, according to Berk and Winsler, 1995). The way in which a child constructs his or her knowledge depends on his or her prediction and many other individual distinctions, the way in which he or she interprets a particular learning experience and the contextual characteristics in which that learning takes place. The correct way of teaching younger children is not by means of a lecture or a verbal lesson (Bredenkamp, 1996), since younger children learn to participate actively, i.e. by creating and collaborating with others

(Bredekamp, 1996, Rinaldi, 2006, Penn, 2008). The understanding of knowledge as a dynamic and developmental category that is continually evolving, constructing, and reconstructing is the foundation for the development of a constructivist, i.e. a co-constructivist curriculum (Miljak, 2007, Slunjski, 2006, 2015, Rinaldi, 2006, Malaguzzi, 1998), and is also the third direction of our “*outside the box*” journey.

The fourth direction of our research focused on examining the existing practice in terms of promoting autonomy and emancipation of children as opposed to child manipulation in the organization of the educational process. Our activities in this part of research focused most on overcoming the traditional position of the child in the kindergarten, which is passive, receptive, and in many respects disempowered. Rather, we have endeavored to strengthen the preschool teachers to encourage independent and critical thinking in children, i.e. to encourage their autonomy as a prerequisite for responsible behavioral development. The reason for this is that an important goal of education is to create autonomous, i.e. respectful relationships that allow children to evaluate things from different perspectives and learn to act independently. In an educational process aimed at respecting the rights and individual freedoms of the child, it is possible to expect the development of those qualities that are necessary for a free, actively creative, and responsible life of the child. This requires a respectful and equal relationship between all participants in the educational process and it focuses on the development of the personality of the child with an emphasis on self-reliance. This understanding of the educational process and the repositioning of the child in it represented the underpinning of the development of a humanist-oriented curriculum (Stenhouse, 1975, Malaguzzi, 1998). This was the fourth direction of our attempt to establish “*outside the box*” practices, i.e. converting the kindergarten into a place where children are not obedient objects but rather equal participants in the process of mutual learning with other children and adults.

Throughout the entire research we observed a noticeable increase in the interest of a larger number of practitioners for the direction in which the educational practice is being developed as well as for the accomplishments that are being achieved. In this respect, they began to express their interest in an active engagement in this process. So we started looking for opportunities for a greater number of connections between the practitioners and for building strong learning communities that would enhance their motivation and further boost their professional learning. We considered this to be important because we have repeatedly assured that achieving good practice does not mean one-time fixing of problems that prevent its development or make it more difficult to develop than to provide the preschool teachers with the tools to continuously recognize and remove problems. In that respect, we have tried to encourage the connection of practitioners since we are convinced that they can change the practice to a much greater scale than the individual, i.e. they can gradually create a new, more humane and more democratic educational policy. In this context, the general direction of our research, which we have painted metaphorically as “*outside the box*,” was to encourage the preschool teachers to move from a lack of freedom and restraint toward freedom, autonomy, equality, co-operation, and promotion of democracy.

FACEBOOK GROUP «OUTSIDE THE BOX»

Over time, the number of practitioners involved in direct and many indirect ways of the research process and improvement of educational practices and curricula grew. In this regard, as a particularly innovative form of connecting preschool teachers and other professional kindergarten teachers, it is important to highlight the Facebook group “*Outside the Box*.” This group was actually created with the aim of gathering practitioners who participate in intensive career development processes through action research, which enable them to exchange important information, their research experiences, and the insights they have gained in the process of developing the practice. Most of these experiences and insights are described in the research *Outside the Box* from 2015 and *Outside the Box 2: Change* from 2016 (Slunjski, 2015, 2016). Thus, the Facebook group gradually included an increasing number of practitioners from many different kindergartens, so that the total number of its members reached 4,900. In addition to members from the Republic of Croatia, colleagues from Serbia, Montenegro, Bosnia and Herzegovina, Slovenia, and even some from the USA, Finland, Norway, the Netherlands, and Australia joined the group as well.

Although this is a completely unconventional form of connecting practitioners based on their common interest, this being the development of educational practices and the curriculum of kindergartens, it can still be stated that it provides a certain form of their professional learning. Especially considering the fact that the number of opportunities for participation of preschool teachers of different kindergartens in the Republic of Croatia in an organized professional training program is very small, and in particular in those programs that have a lasting character, which enables them to discuss everyday problems arising from their practice and which are organized to develop their research and reflexive competences.

CONCLUSION

The potential for professional development of practitioners through Facebook groups is considerably weaker than through direct contact that is intended for a common analysis of the existing practice and development of better practices. However, practitioners in this group could strengthen their motivation and have the opportunity to somehow sense the “pulse” of kindergartens with high-developed practice and, as far as possible, be “infected” with ideas that characterize the contemporary curriculum.

At the same time, this group also showed that the current level of kindergarten development in the Republic of Croatia is very different, just as the level of professional development of individual practitioners within those kindergartens is very different since preschool teachers understand and interpret the notion of quality of educational practice and curriculum very differently as well as perceive and interpret the problems that arise on the path of this development differently, not to mention that the problems in different kindergartens also greatly differ. But most members of the group share a common acceptance of the idea of joint and collaborative learning that can lead to the release of personal and institutional constraints that reduce the possibility of practicing legitimate human and democratic values.

That is why the ultimate consequence of the research that we undertook is much broader than the improvement of the educational curriculum and the kindergarten curriculum that were directly involved in it. Much greater contribution is seen in building the capacity of individuals and institutions, and creating a professional learning community (Leithwood et al., 2009) whose participants connect and support each other in continuous learning and professional development based on strengthening their autonomy and emancipation. Or, in other words, the empowerment of practitioners to actively, i.e. thoughtfully collaboratively join the idea of developing an “outside the box” practice that needs to be better, more humane, and more democratic.

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ÖĞRENCİ DİRENÇ DAVRANIŞLARI ÜZERİNE BİR ÖLÇEK GELİŞTİRME ÇALIŞMASI

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ÖZET

Kısaca öğretim etkinliklerine karşı koyma eğilimi olarak tanımlanabilecek olan öğrenci direnci, öğrencinin okulda süre giden eğitim-öğretim faaliyetlerine, öğretmene veya yöneticilere bilerek ve isteyerek, çoğu zaman önceden planlayarak çeşitli biçimlerde karşı koyarak tepki göstermesidir. Genellikle, tepki gösterilen kişi veya durumların öğrencide yarattığı öfkenin dışı vurumu olarak ele alınabilecek direnç davranışları, öğrencinin akademik ve sosyal gelişimine önemli zararlar verir. Bu nedenle bunlarla etkili bir şekilde mücadele edilmesi önemlidir. Bu mücadelenin ilk adımı elbette öğrencilerin direnç davranışlarının belirlenmesidir. Bu çalışma öğrencilerin okuldaki direnç davranışlarını öğretmen görüşlerine göre belirlemede kullanılabilecek bir ölçek aracı geliştirme ihtiyacından doğmuştur. Çalışmaya altı ilkokul ve altı ortaokuldan toplam 375 öğretmen katılmıştır. Toplanan veriler üzerinde açıklayıcı ve doğrulayıcı faktör analizleri yapılmış 25 madde ve dört faktörlü bir yapı elde edilmiştir. Bu faktörler “Öğretmen Otoritesine Direnç”, “Öğretmene Karşı Düşmanca Tavrılar”, “Sürekli Öfkeli Olma” ve “Pasif Direnç” şeklindedir. Analizler sonucunda elde edilen değerler ölçeğin kullanıma uygun geçerli ve güvenilir bir araç olduğuna işaret etmektedir.

Anahtar sözcükler: Direnç, Öğrenci direnç davranışları, Ölçek geliştirme

A STUDY ON THE DEVELOPMENT OF A SCALE ON STUDENTS' RESISTANCE BEHAVIOURS

ABSTRACT

Student resistance, which can briefly be defined as the tendency to resist teaching activities, is student's reacting to the teaching-learning activities, teachers, or administrators knowingly and wilfully, many times intentionally in various ways. Resistance behaviours, which can be considered as the outpouring of the anger created by the people or cases, have serious effects on the student's academic and social development. Therefore, it is important to struggle with them in an effective way. The first step of this struggle is surely identification of students' resistance behaviours. This study derives from the need for an instrument that can be used to measure students' resistance behaviours at school according to teachers' views. The study was conducted with 375 teachers from six primary schools and six secondary schools. Data were subjected to explanatory and confirmatory factor analysis, which created a 25-item four-factor structure. These factors are “Resistance to Teacher Authority”, “Hostile Attitudes towards the Teacher”, “Continuous Anger”, and “Passive Resistance”. Analysis results indicate that the scale is a reliable and valid tool.

Keywords: Resistance, Student resistance behaviours, Scale development

ÖĞRENCİLERİN OKUMA ALIŞKANLIKLARI VE AKICI OKUMA BECERİLERİ: NİTEL BİR ARAŞTIRMA***Abdulkerim KARADENİZ**

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Çalışma Eğitim Fakültesi öğrencilerinin okuma alışkanlıklarını ve öğrencilerin okuma alışkanlığı edinmesindeki faktörlerin neler olduğunu ortaya koymak amacıyla gerçekleştirilmiştir. Çalışma 2016-2017 öğretim yılında gerçekleştirilmiştir. Araştırmanın örneklemini Ahi Evran Üniversitesi Eğitim Fakültesi'nde öğrenim gören 122 öğrenci oluşturmaktadır. Nitel desende tasarlanan çalışmada veriler görüşme yöntemi ile toplanmış ve betimsel analiz tekniği ile çözümlenmiştir. Araştırma sonuçlarına göre öğrencilerin önemli bir kısmı kitap okumaya hiç süre ayırmamaktadır. Öğrencilerin önemli bir kısmı kitap okumaya yeterince süre ayıramadıklarını ifade etmişler ve bunun nedeni olarak da diğer derslere çalışmalarını/ödevleri yapmaları, kitap okumayı sevmemelerini ve okuldaki ders saatlerinin çok fazla olmasını göstermişlerdir. Ayrıca öğrencilerin önemli bir kısmı lise döneminde kitap okuma alışkanlığı edinemediklerini belirtmişlerdir. Kitap okuma alışkanlığı edinen öğrenciler ise ailenin teşviki/baskısı, ilgi çekici/sürükleyici/merak duygusu uyandıran kitaplar ve arkadaşlarının etkisiyle kitap okuma alışkanlığı edindiklerini ifade etmişlerdir. Bunun dışında öğrenciler Türk dili ve edebiyatı dersinin okuma alışkanlığı edinilmesinde katkısı olmadığını düşünmektedirler.

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ÖĞRETMEN ADAYLARININ “SİVİLLEŞME” ALGILARININ DEĞERLENDİRİLMESİ¹

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ÖZET

Bu araştırmanın temel amacı öğretmen adaylarının sivilleşme algılarını ve eğitim fakültesindeki öğrenim hayatının başı ile sonu arasında bu algılarda bir farklılaşmanın olup olmadığını belirlemektir. Araştırma, tarama modelinde yürütülen nicel bir çalışmadır. Araştırmanın çalışma evrenini, eğitim fakültesinde öğrenim gören öğretmen adayları oluşturmaktadır. Örneklem ise toplam 498 öğretmen adaydır. Araştırmanın verileri, “Sivilleşme Algısı Ölçeği” ile toplanmıştır. Veriler üzerinde; aritmetik ortalama, t testi, Anova testi ve Scheffe testi uygulanmıştır. Araştırma sonunda öğretmen adaylarının sivilleşme algılarında bazı olumsuzlukların bulunduğu belirlenmiştir. Erkek öğretmen adaylar kızlara göre daha olumsuz değerlendirmelerde bulunmuşlardır. Diğer taraftan, eğitim fakültesinde geçen öğrenim süreci, sivilleşme algısını olumsuz yönde etkilemektedir. Sivil toplum kuruluşu ya da öğrenci kulübünde rol alan öğretmen adayları daha olumlu sivilleşme algısına sahiptirler.

Anahtar Kelimeler: Sivilleşme, algı, öğretmen adayı, eğitim fakültesi

EVALUATION OF THE PERCEPTIONS OF "CIVILIANIZATION" IN TEACHER CANDIDATES

ABSTRACT

The main objective of this research is to determine perceptions of Civilianization of students and whether the perceptions of students change between the beginning and the end of the learning life in the education faculty. The research is a quantitative study carried out in the screening model. The study group consists of the 498 teacher candidates who are studying at the faculty of education. The data of the study were collected with the "Perception of Civilianization Scale". On the data; Arithmetic mean, t test, Anova test and Scheffe test were applied. At the end of the research, it was determined that there are some negativities in the perception of civilianization of the candidates'. Male teacher candidates had more negative evaluations than females. On the other hand, the education process in the faculty of education affects the perception of civilianization negatively. Teacher candidates who take part in student clubs or civil society organizations have a more positive perception of civilianization.

Keywords: Civilization, perception, teacher candidate, faculty of education

GİRİŞ

Toplumun demokratikleşmesine paralel olarak gündeme gelen önemli kavramlardan biri, sivilleşmedir (Balkaya, 2015; Keyman, 2015; Mundy, 2008; Losen, 2011). Demokratikleşme ya da sivilleşmenin bir kültüre işaret ettiği, birçok bilim insanı tarafından sıklıkla vurgulanmaktadır (Rodall ve Martin, 2009; Yeşil, 2002, 2016). Kültürleme ya da kültürlenme ise bir eğitim sorunudur (Rockwell ve Vera, 2013; Mundy, 2008; Şişman, 2007; Gahramanova, 2012). Birey ya da toplumun kültürlenmesinden sorumlu kurumların başında okulların geldiği söylenebilir (Schulz, Ainley, Fraillon, Kerr ve Losito, 2010).

Öğrenci, öğretmen, yönetim, mevzuat, eğitim programı, mekan gibi unsurlar, okulların temel bileşenlerini oluşturmaktadır. Bu bileşenlerin arasındaki etkileşim, ortam ve ortama egemen olan atmosferi, başka bir ifade ile kültürü oluşturmaktadır (Demirel ve Kaya, 2012; Balkaya, 2015; Rockwell ve Vera, 2013). Eğitim ortamının niteliği bu bileşenlerin etkileşimine göre biçimlenmekle birlikte, diğer taraftan da, ortamda bulunan kişilerin kimliğini ve kişiliğini biçimlendirici bir etkisi bulunmaktadır (Yeşil, 2002; Gahramanova, 2012; Losen, 2011; Richardson, Tolson, Huang and Lee, 2009; Lockwood, 1997; Schulz et al, 2010).

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Eğitim süreci açısından okul kültürünü önemli kılan, öğrencileri eğitmek/kültürlemek konusundaki etki gücüdür (Şişman, 2007; Yeşil, 2002). Öğretmenlerin, öğrencilerin kültürlenmesi üzerinde okul bileşenlerinin en etkili olduğu söylenebilir (Komalasari, 2009; Kumral, 2009; Schulz et al, 2010, Yeşil, 2016). Öğretmenler, kimi zaman aktardığı bilgilerle, kimi zaman sergilediği tutum ve davranışları ile, kimi zaman da eğitim ve öğretim sürecini biçimlendirme yetki ve gücü nedeniyle öğrencinin bilişsel, duyuşsal ve davranışsal özelliklerine biçim veren kişilerdir (Kumral, 2009; Revell and Arthur, 2007). Öğretmenlerin söz, tutum ve davranışlarının, öğrencinin kişiliğini biçimlendirdiği konusunda bilim insanı ve eğitimciler hemfikirdirler (Rockwell ve Vera, 2013; Şişman, 2007; Gahramanova, 2012). Losen (2011), bu doğrultuda yapılan sivil haklar ve sivil toplum konulu birçok projenin Amerika’da uygulandığını ve çok olumlu sonuçlar verdiğini belirtmekte; yeni projelerin uygulanmasının gerekliliğine ilişkin açık bulgulara ulaşıldığını ifade etmektedir.

Eğitim fakülteleri, öğretmen yetiştiren kurumlar olarak yeni neslin kültürlenmesinde ve biçimlenmesinde çok önemli rol ve görev üstlenmiş kurumlardır (Kumral, 2009; Rockwell ve Vera, 2013). Özellikle bu kurumlardan yetişerek yeni yetişen nesil ile eğitim süreçlerini paylaşan, bu süreçleri biçimlendirerek kültür aktarımını gerçekleştiren, böylelikle toplumun kültürlenmesini temin eden ve kültüre şekil vererek toplumu biçimlenmesinde önemli bir rol oynamaktadırlar (Mundy, 2008; Revell and Arthur, 2007; Yeşil, 2016).

Bu nedenle geleceğin toplumunun mimarları olan öğretmen adaylarının zihinlerindeki sivilleşme algısının belirlenmesi; sivilleşmeye ilişkin bakış ve algı hatalarının tespit edilip giderilmesi, demokratikleşme ve sivil bir toplum oluşturma hedefini güden ülke ya da toplumlar açısından önem arz etmektedir (Rodall ve Martin, 2009; Schulz et al, 2010; Losen, 2011; Mundy, 2008). Bu nedenle, öğretmen adaylarının “sivilleşme” algılarını belirlemek ve eğitim fakültesinde geçen eğitim sürecinin başı ile sonunda öğretmen adaylarında bu algıya ilişkin nasıl bir farklılaşma oluştuğunu ortaya koymak, bu araştırmanın temel problemi olarak belirlenmiştir.

Araştırmanın Amacı

Öğretmen adaylarının sivilleşme algılarını ve eğitim fakültelerindeki eğitim sürecinin başı ile sonu arasında öğrencilerdeki sivilleşme algısının nasıl farklılaştığını ortaya koymak, bu araştırmanın temel amacını oluşturmaktadır. Kültür yayıcısı olacak olan öğretmen adaylarının sivilleşme algılarındaki yanlış ya da eksiklerin tespit edilip eğitim fakültelerindeki eğitim süreçleri boyunca giderilmesinin, toplumun sivilleşmesine önemli katkılar sunabileceği düşünülmektedir. Bu çerçevede araştırmada başlıca şu sorulara cevap aranmıştır:

1. Öğretmen adaylarının sivilleşme algıları nasıldır?
2. Öğretmen adaylarının STK ve öğrenci kulübü üyesi, velilerin ise STK üyesi olma durumları nasıldır?
3. Öğretmen adaylarının sivilleşme algıları; cinsiyet, branş, STK ve öğrenci kulübü üyelik durumlarına, ebeveynlerinin STK üyesi olma durumlarına göre farklılaşmakta mıdır?
4. Eğitim Fakültesinin başı ile sonu (1. ve 4. sınıflar) arasında öğretmen adaylarının sivilleşme algıları nasıl değişmektedir?

YÖNTEM

Araştırma Modeli

Bu çalışma, tarama modelinde yürütülen betimsel ve nicel bir araştırma niteliği taşımaktadır. Bu çerçevede Eğitim Fakültesinde öğrenim gören öğretmen adaylarının sivilleşme algıları ve eğitim fakültesi 1. ve 4. sınıf öğrencilerindeki algı değişiminin yönü ve miktarı farklı değişkenler açısından betimlenmeye çalışılmıştır.

Araştırmanın Çalışma Evreni ve Örneklem

Ahi Evran Üniversitesi Eğitim Fakültesi’nin farklı bölümlerinin 1. ve 4. sınıflarında öğrenim gören öğrenciler (öğretmen adayları) araştırmanın çalışma evrenini oluşturmaktadır. Araştırmanın örneklemini ise, Ahi Evran Üniversitesi Eğitim Fakültesi’nin 8 farklı bölümünde öğrenim gören 256’sı 1. sınıf, 242’si 4. sınıf olmak üzere toplam 498 öğretmen adayı oluşturmaktadır. Öğrenciler; Sınıf Eğitimi (SE), Türkçe Öğretmenliği (TÖ), Psikolojik Danışmanlık ve Rehberlik (PDR), Bilgisayar ve Öğretim Teknolojileri Öğretmenliği Eğitimi (BÖTE), İlköğretim Matematik Öğretmenliği (İMÖ), Fen Bilgisi Öğretmenliği (FBÖ), Sosyal Bilgiler Öğretmenliği (SBÖ) ve Okul Öncesi Eğitimi Öğretmenliği (OÖEÖ) bölüm/programlarında öğrenim görmektedirler.

Veri Toplama Araçları

Araştırmanın verileri, araştırmacı tarafından geliştirilen “Kişisel Bilgi Formu (KBF)” ve “Sivilleşme Algısı Ölçeği (SAÖ)” ile toplanmıştır.

Kişisel Bilgi Formu (KBF): Araştırmanın bağımsız değişkenlerine ilişkin verilerin toplanması için kullanılmıştır.

Sivilleşme Algısı Ölçeği (SAÖ): Öğretmen adaylarının sivilleşme algılarını belirlemek amacıyla kullanılmıştır. SAÖ, 3 faktör ve 34 maddeden oluşmaktadır. Faktörlere; “Duygusal-Eylemsel Sivilleşme”, “Düşünsel-Eylemsel Sivilleşme” ve “Sivilleşme Karşıtlığı” adları verilmiştir.

SAÖ’nin KMO değeri 0,942; Bartlett testi değerleri χ^2 : 10188,021; sd: 1485; $p < 0,001$ ’dir. Ölçeğin geçerlik özelliği faktör analizi ve madde-toplam korelasyonlarının; güvenirlik özelliği ise Cronbach alpha iç tutarlılık katsayılarının hesaplanması yoluyla test edilmiştir.

Araştırmacı tarafından geliştirilen ve veriler üzerinde ölçeğin geçerlik ve güvenirlik analizleri çerçevesinde yapılan analizler sonunda elde edilen; maddelerin faktör yükü aralıkları, varyansı açıklama oranları, özdeğerleri ve Cronbach alpha güvenirlik katsayılarına ilişkin bulgular Tablo 1’de özetlenmiştir:

Tablo 1. Sivilleşme Algısı Ölçeğinin Faktörlere Göre Geçerlik ve Güvenirlik Analizlerine İlişkin Değerleri

Faktör Adı	Madde Sayısı	Faktör Yüğü Aralıkları	Özdeğer	Açıklanan Varyans Miktarı (%)	Cronbach Alpha
Duygusal-Eylemsel Sivilleşme	21 madde	,530 - ,708	9,134	26,865	,939
Düşünsel-Eylemsel Sivilleşme	9 madde	,441 - ,732	4,802	14,124	,845
Sivilleşme Karşıtlığı	4 madde	,709 - ,762	2,353	6,921	,727
Sivilleşme Algısı Ölçeği (SAÖ)	34 madde	,441 - ,762	---	47,910	,922

Verilerin Çözümü ve Yorumlanması

Araştırma verilerinin çözümlenmesinde aritmetik ortalama, standart sapma, t testi, Anova ve Scheffe testleri uygulanmıştır. Fark ve ilişkilerin anlamlılık düzeyi için $p < 0,05$ düzeyi yeterli kabul edilmiştir. Ayrıca aritmetik ortalamaları; 0.00-0.80 arası “çok düşük”, 0.81-1.60 arası “düşük”; 1,61-2,40 arası “orta”; 2,41-3.20 arası “yüksek”; 3,20-4,00 ise “çok yüksek” şeklinde anlandırılmıştır.

BULGULAR

Araştırma sonunda ulaşılan bulgular, aşağıda tablolar halinde verilerek açıklanmıştır.

Öğretmen adaylarının sivilleşme algılarına ilişkin bulgular

Tablo 2. Öğretmen adaylarının faktörlere göre sivilleşme algıları

	N	X	Ss
Duygusal-Eylemsel Sivilleşme	466	2,84	,64
Düşünsel-Eylemsel Sivilleşme	460	2,84	,63
Sivilleşme Karşıtlığı	477	1,40	,93

Tablo 2’de öğretmen adaylarının faktörlere göre sivilleşme algılarının $x=1,40$ ile 2,84 arasında değiştiği görülmektedir. Duygusal-Eylemsel ve Düşünsel-Eylemsel Sivilleşme Faktörlerinde yer alan düşüncelere öğretmen adayları aynı düzeyde katılırken, genel olarak olumsuz bir içeriği kapsayan Sivilleşme Karşıtlığı Faktöründeki özelliklere ise öğretmen adayları katılmamaktadır.

Öğretmen adaylarının sivilleşme algılarının cinsiyetlerine göre faktörler açısından farklılaşma durumu

Tablo 3. Öğretmen adaylarının cinsiyetlerine göre faktörler açısından sivilleşme algılarındaki farklılaşma durumu

	Cinsiyet	N	X	Ss	t	p
Duygusal-Eylemsel Sivilleşme	Erkek	152	2,81	,66	-,675	,500
	Kız	309	2,86	,61		
Düşünsel-Eylemsel Sivilleşme	Erkek	146	2,84	,68	-,058	,954
	Kız	309	2,84	,60		
Sivilleşme Karşıtlığı	Erkek	151	1,54	1,05	2,290	,022
	Kız	321	1,33	,87		

Tablo 3’de, erkek öğretmen adaylarının faktörlere göre sivilleşme algılarının $x=1,54$ ile 2,81; kız öğretmen adaylarının ise 1,33 ile 2,86 arasında değerler aldığı görülmektedir. Duygusal-Eylemsel ve Düşünsel-Eylemsel Faktörleri açısından öğretmen adaylarının cinsiyetlerinin sivilleşme algılarının anlamlı düzeyde farklılaşmadığı

($p>,05$), buna karşılık Sivilleşme Karşıtlığı Faktörü açısından anlamlı düzeyde farklılaştığı ($p<,05$) belirlenmiştir. Erkek öğretmen adayları, kızlara göre anlamlı düzeyde daha olumsuz bir sivilleşme algısına sahiptirler.

Öğretmen adaylarının sivilleşme algılarının öğrenim gördükleri bölümlerine (branşlarına) göre faktörler açısından farklılaşma durumu

Tablo. 4. Öğretmen adaylarının öğrenim gördükleri bölümlerine (branşlarına) göre faktörler açısından sivilleşme algılarındaki farklılaşma durumu

	Bölüm	N	\bar{X}	Ss	K T	sd	KO	F	p	Sch.
Duygusal-Eylemsel	(1)SÖ	63	2,93	,64						
	(2)TÖ	57	2,86	,62						
	(3)PDR	54	3,04	,62						
	(4)BÖTE	64	2,64	,82	Gr. arası	7,090	7	1,013	2,562	,013
	(5)İMÖ	57	2,96	,60	Gr. içi	181,092	458	,395		3-4
	(6)FBÖ	49	2,82	,54	Top.	188,182	465			
	(7)SBÖ	62	2,79	,57						
	(8)OÖEÖ	60	2,72	,50						
	Total	466	2,84	,63						
Düşünsel-Eylemsel	(1)SÖ	63	2,93	,67						
	(2)TÖ	55	2,77	,61						
	(3)PDR	57	3,12	,58						
	(4)BÖTE	62	2,63	,82	Gr. arası	8,293	7	1,185	3,077	,004
	(5)İMÖ	61	2,84	,50	Gr. içi	174,067	452	,385		3-2
	(6)FBÖ	48	2,81	,64	Top.	182,360	459			3-4
	(7)SBÖ	58	2,78	,47						3-7
	(8)OÖEÖ	56	2,88	,54						
	Total	460	2,84	,63						
Sivilleşme Karşıtlığı	(1)SÖ	64	1,28	,89						
	(2)TÖ	60	1,35	,90						
	(3)PDR	58	0,94	,87						3-4
	(4)BÖTE	62	1,45	1,03	Gr. arası	40,386	7	5,769	7,188	,000
	(5)İMÖ	62	1,34	,77	Gr. içi	376,456	469	,803		3-6
	(6)FBÖ	49	1,83	,95	Top.	416,841	476			3-8
	(7)SBÖ	62	1,44	,87						
	(8)OÖEÖ	60	1,67	,84						
	Total	477	1,40	,93						

Tablo 4’de öğretmen adaylarının öğrenim gördükleri bölümlere göre sivilleşme algılarının Duygusal-Eylemsel Faktörü açısından $x=2,64$ ile $3,04$; ve Düşünsel-Eylemsel Faktörü açısından $x=2,63$ ile $3,12$; Sivilleşme Karşıtlığı Faktörü açısından ise $x=0,94$ ile $1,93$ arasında değerler aldığı görülmektedir. Öğretmen adaylarının bölümlerinin sivilleşme algılarında anlamlı düzeyde farklılaşmaya neden olduğu belirlenmiştir. Ortaya çıkan farklılaşmaların kaynağını belirlemek üzere yapılan Scheffe testi sonunda Duygusal-Eylemsel Faktöründe PDR bölümü öğrencilerinin BÖTE bölümü öğrencilerine göre; Düşünsel-Eylemsel Faktöründe PDR bölümü öğrencileri ile TÖ, BÖTE ve SBÖ öğrencilerine göre anlamlı düzeyde daha olumlu bir sivilleşme algısına sahip oldukları belirlenmiştir. Sivilleşme Karşıtlığı Faktöründe ise BÖTE, FBÖ ve OÖEÖ bölümü öğrencilerinin PDR bölümü öğrencilerine göre sivilleşme algılarında anlamlı farkla daha büyük bir olumsuzluğun olduğu belirlenmiştir.

Öğretmen adaylarının sivil toplum kuruluşu (STK) üyesi olma durumları ve faktörler açısından sivilleşme algılarındaki farklılaşma durumu

Tablo 5. Öğretmen adaylarının STK üyesi olma durumları ve faktörler açısından sivilleşme algılarındaki farklılaşma durumu

STK üyeliklerinin bulunma durumu	N	X	Ss	t	p
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Duygusal-Eylemsel	Evet	49	3,17	,58	3,805	,000
	Hayır	414	2,80	,63		
Düşünsel-Eylemsel	Evet	45	3,13	,58	3,216	,001
	Hayır	413	2,81	,63		
Sivilleşme Karşıtlığı	Evet	50	1,36	1,06	-,304	,761
	Hayır	424	1,40	,92		

Tablo 5’de öğretmen adaylarının, herhangi bir STK üyesi olma durumlarına göre sivilleşme algılarının Duygusal-Eylemsel ve Düşünsel-Eylemsel Faktörleri açısından STK üyesi olanlar lehine anlamlı bir farkla daha olumlu bir sivilleşme algısına sahip oldukları ($p<,01$); buna karşılık sivilleşme algısında Sivilleşme Karşıtlığı Faktöründeki olumsuz özellikler açısından bir farklılaşmanın olmadığı ($p>,05$) görülmektedir. Bununla birlikte Tablo 5’de dikkati çeken bir başka önemli yön ise, öğrencilerin pek az bir kısmının (yaklaşık %10) herhangi bir STK üyesi olduğu, buna karşılık büyük kısmının (yaklaşık %83) herhangi bir STK üyeliğinin bulunmadığıdır.

Öğretmen adaylarının üniversitelerindeki öğrenci kulübü üyesi olma durumları ve faktörler açısından sivilleşme algılarındaki farklılaşma durumu

Tablo 6. Öğretmen adaylarının üniversitelerindeki öğrenci kulübü üyesi olma durumları ve faktörler açısından sivilleşme algılarındaki farklılaşma durumu

Öğrenci kulübü üyeliklerinin bulunma durumu		N	X	Ss	t	p
Duygusal-Eylemsel	Evet	40	3,18	,46	3,530	,000
	Hayır	425	3,81	,64		
Düşünsel-Eylemsel	Evet	37	3,10	,63	2,559	,011
	Hayır	422	2,82	,62		
Sivilleşme Karşıtlığı	Evet	41	1,26	,87	1,008	,314
	Hayır	435	1,41	,94		

Tablo 6’da öğretmen adaylarının, üniversitelerindeki öğrenci kulüplerine üye olma durumlarına göre sivilleşme algılarının Duygusal-Eylemsel ve Düşünsel-Eylemsel Faktörleri açısından kulüp üyesi olanlar lehine anlamlı bir farkla daha olumlu bir sivilleşme algısına sahip oldukları ($p<,01$); buna karşılık sivilleşme algısında Sivilleşme Karşıtlığı Faktöründeki olumsuz özellikler açısından bir farklılaşmanın olmadığı ($p>,05$) görülmektedir. Bununla birlikte Tablo 7’de dikkati çeken bir başka önemli yön ise, öğrencilerin pek az bir kısmının (yaklaşık %8), üniversitesindeki herhangi bir öğrenci kulübünün üyesi olduğu, buna karşılık büyük kısmının (yaklaşık %85) herhangi bir öğrenci kulübünün üyesi olmadığıdır.

Ebeveynlerinin sivil toplum kuruluşu üyesi olma durumları ve faktörler açısından öğretmen adaylarının sivilleşme algılarının farklılaşma durumu

Tablo 7. Ebeveynlerinin STK üyesi olma durumları ve faktörler açısından öğretmen adaylarının sivilleşme algılarındaki farklılaşma durumu

Ebeveynlerin STK üyeliklerinin bulunma durumu		N	X	Ss	t	p
Duygusal-Eylemsel	Evet	32	2,94	,60	,898	,370
	Hayır	433	2,84	,63		
Düşünsel-Eylemsel	Evet	30	2,97	,64	1,109	,268
	Hayır	429	2,83	,63		
Sivilleşme Karşıtlığı	Evet	34	1,38	1,15	,142	,887
	Hayır	442	1,40	,91		

Tablo 7’de öğretmen ebeveynlerinin herhangi bir STK üyesi olma durumlarına göre öğretmen adaylarının sivilleşme algılarında faktörler açısından anlamlı bir farklılaşmanın olmadığı ($p>,05$) görülmektedir. Bununla birlikte, ebeveynleri herhangi bir STK üyesi olan öğretmen adaylarının, anlamsız bir farkla da olsa sivilleşme algılarının daha olumlu olduğunun dikkat çektiği söylenebilir. Bununla birlikte Tablo 7’de dikkati çeken bir başka önemli yön ise, öğretmen adaylarının velilerinin öğrencilerin pek az bir kısmının (%7,4), üniversitesindeki herhangi bir öğrenci kulübünün üyesi olduğu, buna karşılık büyük kısmının (yaklaşık %92,6) herhangi bir öğrenci kulübünün üyesi olmadığıdır.

Eğitim Fakültesindeki eğitim sürecinin başı ile sonundaki öğretmen adaylarının faktörler açısından sivilleşme algılarındaki farklılaşma durumu

Tablo 8. Eğitim fakültesindeki eğitim sürecinin başı (1. sınıf) ile sonundaki (4. sınıf) öğretmen adaylarının faktörler açısından sivilleşme algılarındaki farklılaşma durumu

Sınıf Düzeyi		N	X	Ss	t	p
Duygusal-Eylemsel	1. sınıf	235	2,84	,59	,008	,994
	4. sınıf	229	2,84	,67		
Düşünsel-Eylemsel	1. sınıf	238	2,83	,61	,451,	,652
	4. sınıf	221	2,86	,64		
Sivilleşme Karşıtlığı	1. sınıf	246	1,28	,89	-2,963	,003
	4. sınıf	229	1,54	,95		

Tablo 8’de eğitim fakültesinde geçirdikleri eğitim sürecinin başı (1. Sınıf) ile sonu (4. Sınıf) arasında öğretmen adaylarının sivilleşme algılarının Duygusal-Eylemsel ve Düşünsel-Eylemsel Faktörleri açısından anlamlı bir farklılaşmanın oluşmadığı ($p>,05$); buna karşılık sivilleşmeye ilişkin olumsuz özellikleri kapsayan Sivilleşme Karşıtlığı faktörü açısından, 4. Sınıf öğrencilerinde anlamlı bir farkla daha olumsuz algıların olduğu görülmektedir. Bir başka ifade ile eğitim fakültesinde geçen öğrencim süreci, öğretmen adaylarında sivilleşmeye ilişkin olumlu bir algı oluşmasına katkı sağlayamazken olumsuz algı oluşumunu beraberinde getirdiği söylenebilir.

SONUÇ, TARTIŞMA VE ÖNERİLER

Öğretmen adaylarının sivilleşme olgusuna yönelik nasıl bir algıya sahip oluklarını belirlemeyi amaçlayan araştırma sonunda ulaşılan sonuçlar aşağıda tartışılmıştır.

1. Öğretmen adaylarının sivilleşme algıları genel olarak olumludur. Bu durum, öğretmen adaylarının sivilleşme sürecini olumlu karşıladıkları; öğretmenlik yaşamları sürecinde gerek bireysel gerekse mesleklerinden aldıkları güç ve imkanları kullanmak yoluyla sivilleşme çalışmalarına destek olacakları şeklinde yorumlanabilir. Bununla birlikte Duygusal-Eylemsel ve Düşünsel-Eylemsel faktörlerindeki olumlu önermelerin “tamamen katılıyorum” yerine yalnızca “katılıyorum” düzeyinde; Sivilleşme Karşıtlığı faktöründeki olumsuz önermelerin ise “tamamen katılmıyorum” yerine “katılmıyorum” düzeyinde olması, öğretmen adaylarının zihin ve gönül dünyalarına sivilleşmenin adanmışlık düzeyinde yerleşmediği şeklinde yorumlanabilir. Bu nedenle öğretmen adaylarına sivil kültürün yapısı, önemi, gerekliliği, birey ve toplumun sivilleşme süreci ve bu sürecin nasıl biçimlenmesi gerektiği ile ilgili bilgi ve bilinçlendirme çalışmalarına yer verilmesi gerektiği söylenebilir.

2. Sivilleşme Karşıtlığı Faktörü açısından erkek öğretmen adayları kızlara göre sivilleşme olgusuna karşı anlamlı bir farkla daha olumsuz bir kanaate sahiptirler. Erkek öğretmen adaylarının kızlara göre toplum içerisinde daha uzun süreli ve farklı ortamlarda bulunuyor olmaları; ideolojik yaklaşımlara daha meyilli olmaları ve bu hareketlerin içerisinde daha aktif rol almaları gibi nedenlerle nedeniyle sivilleşme adı altında yaşanan olumsuzluklara daha fazla ve doğrudan şahit olma olasılıklarının yüksek olması böyle bir sonucu doğurmuş olabilir. Nitekim sivil toplum kuruluşlarındaki (STK) üyelerin ve aktif rol alanların cinsiyete göre dağılımları dikkate alındığında erkeklerin önemli ölçüde fazla yer aldıkları gözlenmektedir (URL-1; URL-2).

3. Bölümlerine göre öğretmen adaylarının sivilleşme algıları, her bir faktör açısından anlamlı düzeyde farklılaşmaktadır. Duygusal-Eylemsel ve Düşünsel-Eylemsel Faktörlerinde en olumlu sivilleşme algısına sahip olanlar PDR bölümü öğrencileridir. PDR bölümü öğrencilerinin alanları gereği bölümlerinde görmüş oldukları dersler ve onlara kazandırılmaya çalışılan yeterliklerin, bireyi psikolojik, zihinsel, sosyal ve diğer yönlerden tanıma; bireylere ve olaylara ilişkin daha doğru tahlil ve tespitlerde bulunabilmelerini kolaylaştırıcı nitelikte olması sivilleşme ile ilgili daha olumlu bir algıya sahip olmalarını beraberinde getirmiş olabilir. Nitekim PDR bölümü ders programında insanın psikolojisini, zihin, duygu, tutum ve davranışlarını tanıma yeterliklerini içeren daha çok ders bulunmaktadır (URL-3). Bu dersler aracılığıyla bireyin kendini gerçekleştirme özel vurgunun yapılması da (Tan ve Baloğlu, 2013; URL-3) bu sonuç üzerinde etkili olmuş olabilir. Nitekim sivilleşme kavramı ile doğrudan ilişkili olan özgünlük, özgürlük, üretkenlik gibi özellikler, bireyin kendini gerçekleştirme de olmazsa olmazlarından biri olarak değerlendirilmektedir (Tan ve Baloğlu, 2013). Diğer taraftan Sivilleşme Karşıtlığı Faktörü açısından da PDR bölümü öğrencilerinin diğer bazı bölüm öğrencilerine göre daha az olumsuz değerlendirmelerde bulunmuş olmaları da bu sonucu teyit eder niteliktedir. Bu çerçevede, eğitim fakültesi eğitim programlarında var olan derslerin programlarına sivilleşme içerikli ders ya da konular eklenmek yoluyla sağlıklı bir sivilleşme algısı oluşması açısından olabilir. Özellikle PDR bölümü programında var olan ders içerikleri model alınabilir ya da geliştirilebilir.

5. Herhangi bir STK ya da öğrenci kulübü üyesi olan öğretmen adayları, üyeliği olmayanlara göre Duygusal-Eylemsel ve Düşünsel-Eylemsel Faktörleri açısından daha olumlu sivilleşme algısına sahiptirler. Buna karşılık bu iki grup arasında Sivilleşme Karşıtlığı Faktörü açısından bir farklılık oluşturmamaktadır. Bu durum, herhangi bir STK ya da öğrenci kulübünde görev alan ya da etkinliklerine katılan öğretmen adaylarının, bu faaliyetlerin birey ve toplum açısından yararlarını gözlemlemelerinin sivilleşmeye ilişkin algılarından olumlu değişimlere neden olduğu şeklinde yorumlanabilir Eğitimbilim insanlarının sıklıkla vurguladıkları ve üzerinde hemfikir oldukları yaşayarak öğrenmenin kalıcı ve etkili olduğu düşüncesinin (Şişman, 2007; Demirel ve Kaya, 2012), bu sonuç ile teyit edildiği söylenebilir. Diğer taraftan, STK ya da öğrenci kulübü çatısı altında yaptıkları çalışmalar esnasında oluşan ortamın havasının, öğretmen adaylarını etkilemesi ve olumlu bir algı oluşturmaya da söz konusu olabilir. Zira ortamın havası, o havayı teneffüs eden bireylerin kimliği ve kişiliğini etkilediği, bilim insanlarıncı sıklıkla dile getirilmekte ve öneminin altı çizilmektedir (Kumral, 2009; Yeşil, 2002, 2016). Buna göre, öğretmen adaylarının sivilleşme algılarında olumlu değişimler kaydedebilmek için amaç ve işlevleri eğitimin genel amaçları ile tutarlı STK ve öğrenci kulübü çatıları altında görev ve rol almalarının özendirilmesi ve teşvik edilmesinin gerektiği söylenebilir.

6. Ebeveynlerinin herhangi bir STK üyesi olma durumları öğretmen adaylarının sivilleşme algılarında faktörler açısından anlamlı bir farklılaşmaya yol açmamaktadır. Ebeveynlerinin STK üyesi olmalarının, yukarıda belirtildiği gibi bizzat öğretmen adaylarının kendilerinin STK üyesi olması gibi sivilleşme algılarında olumlu bir değişime yol açmamaktadır. Bu durum, STK içinde görev alma ile bu faaliyetleri dolaylı olarak takip etme ya da rivayetlerden hareket ederek algı oluşması üzerinde aynı etkiye sahip olmadığı şeklinde yorumlanabilir. Bu sonuç, eğitimbilim alanyazınında sıklıkla vurgulanan, yapma ve yaşamaya dayalı öğrenmelerin dinleme ve izlemeye dayalı öğrenmelere göre daha etkili ve kalıcı olduğu iddiasını da doğrular niteliktedir denilebilir. Nitekim, bu araştırmada, ebeveynleri herhangi bir STK üyesi olan öğretmen adaylarının, küçük bir farkla da olsa sivilleşme algılarının daha olumlu olduğu bulgusuna ulaşılması da bu yargıyı desteklemektedir.

7. Eğitim fakültesinde geçen öğrencim süreci, öğretmen adaylarında sivilleşmeye ilişkin Sivilleşme Karşıtlığı faktöründe olumsuz yönde anlamlı bir farklılaşmaya yol açmaktadır. Başka bir ifade ile eğitim fakültesinde öğretmen adaylarının geçirdikleri eğitim yaşantıları, sivilleşme algılarına olumlu bir katkı sağlamazken onların sivilleşme karşıtı bir algı oluşturmalarını beraberinde getirmektedir. Eğitim fakültesinde geçirilen eğitim yaşantılarının sivilleşme algısında olumlu bir etkiye sahip olmamasının ötesinde sivilleşme karşıtı bir algı oluşmasına hizmet ettiği söylenebilir. Bu sonucun, dikkate değer olduğu düşünülmektedir. Buna göre eğitim fakültesinde uygulanan eğitim programlarının sivilleşme kavramı ve sivil toplum kültürünün öğretmen adayları tarafından benimsenmesi için tedbirler alınması gerektiği söylenebilir. Bu çerçevede ders programlarına sivilleşme ve sivil kültürün aktarımının yerleştirilmesi, bu doğrultuda derslerin programa eklenmesi, örtük program çerçevesinde öğrenci kulüpleri aracılığıyla etkinliklerin artırılması ve yaygınlaştırılması, STK'larla ortak projeler ve etkinlikler düzenlenmesi gibi tedbirlerin alınması önerilebilir.

8. Öğretmen adaylarının pek az bir kısmı (yaklaşık %10) herhangi bir STK üyesiyken büyük kısmı (yaklaşık %83) herhangi bir STK üyesi değildir. Diğer taraftan öğrencilerin pek az bir kısmı (%8) öğrenci kulübü üyesiyken büyük kısmı (yaklaşık %85) herhangi bir öğrenci kulübü üyesi değildir. Bu her iki durum, öğretmen adaylarının STK ya da öğrenci kulüpleri içinde görev alma ya da üye olma konusunda çok yetersiz düzeyde kaldıkları; STK'lara, öğrenci kulüplerine ve onların çalışmalarından haberdar olma, ilgi duyma ya da benimseme düzeylerinin çok düşük olduğu şeklinde yorumlanabilir. Buna göre, öğretmen adayları arasında STK ve öğrenci kulüplerinin çalışmalarına ilişkin ilgi oluşturma, içinde görev almaları doğrultusunda teşviklerde bulunma yönünde tedbirler alınıp çalışmalar yapılması önerilebilir. Bu çerçevede; toplum içinde çalışmalar yapan STK'ların üniversite kurumu, öğrenciler ve öğrenci kulüpleri ile birlikte ortak projeler yapma, etkinlikler düzenleme, çalışmaların tanıtıldığı programlar düzenleme gibi çalışmalar içine girişmesinin yararlı olacağı söylenebilir.

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ÖĞRETMEN ADAYLARININ DİL DUYARLILIĞINA YÖNELİK GÖRÜŞLERİ (PAMUKKALE ÜNİVERSİTESİ ÖRNEĞİ)

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Problem Durumu

Öğretmenlik sözlü iletişimin en önemli olduğu mesleklerden biridir. Öğretmenlerin kullandıkları, öğretim yaptıkları dilin zenginliklerini, kurallarını ve söz varlığını iyi bilmeleri gereklidir. Kurallara uygun şekilde dili kullanma becerisi kazandırma konusunda öğrencilerin rolü önemli bir noktadadır. Öğretmenlerin, öğrencilerine iyi birer örnek olması ve onları doğru ve kurallı bir dil kullanımı için yönlendirmesi gerekir.

Dil bilinci; dilin bir ulus için önemini kavrayıp dili bu önem doğrultusunda, kurallarına uygun kullanmak; ulusun kimliğine, varlığına zarar verecek kullanımlardan uzak durmak ve bu tür kullanımlara karşı duyarlı olmaktır (Karakaş vd., 2013). Öğretmenlerin ve öğretmen adaylarının dil bilincine sahip olması ve dili kullanırken duyarlılık göstermeleri, onların yetiştireceği öğrencileri etkileyecektir. Bu yolla topluma yayılmış bir dil duyarlılığı ortaya çıkartılabilir. Dil duyarlılığına sahip olan kişilerin dili daha doğru kullanma çabaları, daha etkili iletişim kurmalarını sağlar. Toplumu oluşturan bireyler arasındaki iletişimin etkin olması, bireylerin toplumsal aidiyetlerini güçlendirir.

Geçmişten bugüne Türkçe, yabancı dillerle etkileşim halinde olmuş ve bu dillerden etkilenmiştir. Türkçenin söz varlığında çokça yabancı kökenli sözcük yer almaktadır. Bu durum iletişim, dil bilgisi, sesletim ve yazım gibi çeşitli alanlarda dil kullanıcılarının karşısına sorun olarak çıkmaktadır. “Ana dil, bireyle toplum arasında en güçlü bağları oluşturan duygu, düşünce ve kültürün taşıyıcısıdır.” (Bağcı, 2012: 291). Dilin bu işlevi yönünden ortaya çıkacak sorunların kalıcı etkiler yapmaması için dil öğrenme süreci önemlidir. Bu süreçte öğrenenler kadar, öğretenler de etkilidir.

İlkokuldan üniversiteye kadar Türkçenin kullanımında özensizlik dikkat çekmektedir. Üniversite öğrencilerinin, yanlış yazdıkları sözcükler, dil bilgisi kurallarına dikkat etmeden kurdukları cümleler, yaptıkları konuşmalar; öğrencilerin ana dillerine tam olarak hâkim olmadıklarını ve Türkçeyi yanlış kullandıklarını göstermektedir. Daha kötüsü de öğrencilerin, çoğu zaman yaptıkları yanlışlıkların farkında bile olmamasıdır. Bu yüzden de dildeki kirlilik azalmak yerine her geçen gün daha fazla artmaktadır (Karakaş vd., 2013).

Bu durumu tersine çevirmek için öğretmenlerin dil duyarlılığını kazanmış olmaları ve ilk günden başlayarak öğrencilerine duyarlılık kazandırmaya çalışmaları gerekir. Yazım ve sesletim yanlışları, halk arasında yerleşmiş Türkçe sözcüklerin yerine yabancı kökenli karşılıklarının kullanılması öğretmenlerin en çok karşılaştığı sorunlar olarak öngörülebilir.

Dil duyarlılığın kazandırılmasında öğretmenlerin sorumluluğu bulunmaktadır ancak dil duyarlılığının, yalnızca öğretmenlerin duyarlı olması ile kazandırılması beklenmemelidir. Bu konuda toplumun bütün bireylerinin ve bileşenlerinin sorumluluğu bulunmaktadır. Ancak öğretmenler, bu konuda farkındalık yaratılmasında önemli rol üstlenebilirler.

Araştırma Yöntemi

Araştırma, nitel araştırma yöntemlerinden olgubilim desenine uygun şekilde hazırlanmıştır. Olgubilimsel (fenomenolojik) yaklaşım, bireyin davranışlarını anlayabilmek için, onun kendine özgü algılayışını ve yaşantısını bilmemiz gerektiğini savunur.

Evren/örneklem

Araştırmanın katılımcıları amaçlı örneklem belirleme yöntemlerinden ölçüt örnekleme yoluyla belirlenmiştir. Amaçlı örnekleme yöntemleri tamamen nitel araştırma yöntemleri içinde ortaya çıkmıştır. Amaçlı örnekleme zengin bilgiye sahip olduğu düşünülen durumların derinlemesine çalışılmasına olanak vermektedir (Yıldırım ve Şimşek, 2000: 69). Araştırmanın örneklemini, Pamukkale Üniversitesi Eğitim Fakültesinde öğrenim gören öğretmen adayları oluşturmaktadır.

Verilerin toplanması

Araştırma verileri, 110 öğretmen adayına uygulanan yapılandırılmış görüşme formu ve görüşme formunu dolduranların içinden seçilen her bölümden 2 öğrenciyle yapılan yarı yapılandırılmış görüşme yoluyla elde edilmiştir. Bu amaçla araştırmacılar tarafından 9 sorudan oluşan görüşme formu hazırlanmıştır. Görüşme formunun hazırlanmasında sorulacak soruların ana başlıklar biçiminde oluşturulmasına dikkat edilmiş ve daha sonra üç öğretmen adayı ile ön görüşme yapılmıştır. Ön görüşme yapılan bu öğretmen adayları daha sonra araştırma kapsamı dışında bırakılmıştır. Görüşme formunun içerik geçerliğini saptamak için hazırlanan görüşme formuna alandan üç uzmandan görüş alınarak son biçimi verilmiş ve form uygulamaya hazır duruma getirilmiştir. Veri kaybını önlemek ve verilerin güvenilirliğini sağlamak amacıyla görüşmeler ses kayıt cihazına kayıt edilmiştir. Kayıt edilen bu verilerin transkripsiyonu yapılarak analize hazır hale getirilmiştir.

Verilerin Analizi

Görüşme yoluyla elde edilen verilerin çözümlenmesinde, betimsel analiz tekniği kullanılmıştır. Betimsel analiz dört aşamada gerçekleştirilmiştir. Bunlar; betimsel analiz için bir çerçeve oluşturma, tematik çerçeveye göre verilerin işlenmesi, bulguların tanımlanması ve bulguların yorumlanmasıdır. Bulgular iki araştırmacı tarafından görüş birliği-görüş ayrılığı yöntemine göre değerlendirilmiş ve % 85 tutarlılık göstermiştir.

Beklenen/Geçici Sonuçlar

Teknolojinin gelişmesiyle iletişim ve ulaşım olanakları artmıştır. Bu yolla kültürlerin ve dillerin birbirini etkilemesi hızlanmıştır. İngilizcenin son yıllarda yakalamış olduğu ivme diğer bütün dilleri etkilemiş ve o dillere İngilizce kökenli bolca sözcük girmiştir. Türkçe de bu durumdan etkilenmiştir. Dilin yanlış kullanımlarının yanında yabancı dilin etkisinde kalmasının sonucunda ortaya çıkan sorunlar; basın yayın organlarındaki özensizlikler, sokak ve caddelerde bulunan tabelalardaki yabancı sözcük kullanımı, dilini kurallarına uygun ve etkili kullanamayan öğrenciler ve iletişim sorunları olarak ortaya çıkmıştır. İletişim kanallarının bu denli çoğalması, özellikle İnternet ortamında dil kullanımı konusunda yazılı kaynaklarda gösterilen özen gösterilmemektedir. Sosyal medya kullanıcıları, bu ortamlarda konuşurken gösterdiklerinden daha az özen göstermektedirler. Bu durumun yazmadan kaçınma olarak ortaya çıkacağı düşünülmektedir.

Anahtar Kelimeler

dil, duyarlılık, bilinç

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ÖĞRETMEN ADAYLARININ SOSYAL MEDYA KULLANMA DÜZEYLERİ

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Özet

Sosyal medya, bilginin, farklı bakışların/düşüncelerin ve deneyimlerin kamu oluşumlu web sitelerince paylaşımına olanak sağlayan ve internet dünyasını hızla hayatımıza yerleştiren bir uygulama alanıdır. Bu uygulama alanı ile insan yaşamında sosyalleşme anlamında değişiklikler yaşanmaktadır. Bu değişimle sosyal ağlar devreye girmektedir. Bu çalışmanın amacı İstanbul Üniversitesi Hasan Ali Yücel Eğitim Fakültesi Sınıf öğretmenliği 4. Sınıf öğrencileri ile Fen Bilgisi Öğretmenliği 4. Sınıf öğrencilerinin Sosyal Medyayı ne şekilde kullandıklarını belirlemektir. Araştırmanın çalışma grubunu 2016- 2017 Bahar döneminde HAYEF’deki Sınıf öğretmenliği ve Fen Bilgisi Öğretmenliği dördüncü Sınıf Öğrencileri Oluşturmaktadır. Araştırmaya toplam 80 Öğretmen adayı katılmıştır. Araştırmaya katılan öğretmen adaylarının yarısından fazlasının bayan öğretmen adayları oluşturmaktadır. Araştırmaya katılanların büyük çoğunluğu sosyal medya kullanmakta ve günde 1-3 saat arasında sosyal medyaya zaman ayırmaktadırlar. Araştırmaya katılan öğretmen adayları sosyal medya üzerinden yorumlar yapmakta, fakat sosyal medya da arkadaşları oldukları ile görüşmemektedirler.

Giriş

Sosyal medya, bilginin, farklı bakışların/düşüncelerin ve deneyimlerin kamu oluşumlu web sitelerince paylaşımına olanak sağlayan ve internet dünyasını hızla hayatımıza yerleştiren bir uygulama alanıdır (Weinberg, 2009). Sosyal medya, özgünlüğünü yaratan en önemli farklılığı, herhangi bir kişinin sosyal medyanın içeriğini yaratabilmesi, yorumda bulunabilmesi ve katkı sağlayabilmesidir (Scott, 2010). Bunun yanı sıra internetle birlikte sosyal ağlarda insan yaşamında yerini almıştır. İnsanların duygu, düşünce ve yaşam pratiklerini paylaşmak üzere, sanal ortamda iletişim kurma amaçlı oluşturdukları ağlara "sosyal paylaşım ağları" denilmektedir. Sosyal paylaşım ağları, sınırlı bir sistem içerisinde bireylere, herkese açık ya da yarı açık profil oluşturmaya izin veren, bağlantıda bulunduğu diğer kullanıcıların listesini açıkça ortaya koyan ve sistem içerisinde diğerlerinin bağlantıda bulunduğu kişilerin listesini gösteren web tabanlı hizmetler olarak tanımlanır (Danah M. Boyd & Nicole B. Ellison, 2007). Sosyal ağ siteleri insanların kullanıcılar tarafından hazırlanan içerikleri interaktif bir şekilde birbirlerine iletebildikleri internet siteleridir. Facebook ve Twitter en çok bilinen ve kullanıcı sayısı diğer sosyal paylaşım ağlarına göre en fazla olan sosyal medya ağlarıdır.

Araştırmanın Amacı

Bu çalışmanın amacı İstanbul Üniversitesi Hasan Ali Yücel Eğitim Fakültesi Sınıf öğretmenliği 4. Sınıf öğrencileri ile Fen Bilgisi Öğretmenliği 4. Sınıf öğrencilerinin Sosyal Medyayı ne şekilde kullandıklarını belirlemektir.

Yöntem

Araştırma tarama modelinde betimsel bir araştırmadır. Araştırmanın çalışma grubunu 2016- 2017 Bahar döneminde HAYEF’deki Sınıf öğretmenliği ve Fen Bilgisi Öğretmenliği dördüncü Sınıf Öğrencileri Oluşturmaktadır. Araştırmaya toplam 80 Öğretmen adayı katılmıştır. Araştırmadaki veriler “Solmaz, B. Tekin, G., Herzem, Z., Demir, M. (2013) İnternet Ve Sosyal Medya Kullanımı Üzerine Bir Uygulama” adlı çalışmadaki birinci bölüme yer alan maddeler kullanılarak toplanmıştır. Toplanan veriler SPSS 21 ‘de analiz edilmiştir.

Bulgular

Araştırmaya katılan öğretmen adaylarının % 62.5’i kadın % 37.5’i erkektir. Araştırmaya toplam 80 kişi katılmıştır (Tablo 1)

Tablo 1. Araştırmaya Katılan Öğretmen Adaylarının Cinsiyet Dağılımı

Değişkenler	f	%
Kız	50	62,5
Erkek	30	37,5
Toplam	80	100,0

Araştırmaya fen bilgisi ve sınıf öğretmenliği son sınıfta öğrenim gören öğretmen adayları katılmıştır. Araştırmaya katılan adayların % 55'i fen bilgisi öğretmenliği son sınıf öğrencileri iken Sınıf öğretmenliği son sınıf öğrencilerinin de %45'i araştırmaya gönüllü olarak katılmışlardır (Tablo2).

Tablo 2. Araştırmaya Katılan Öğretmen Adaylarının Branş Dağılımı

Değişkenler	f	%
Fen Bilgisi	44	55,0
Sınıf Öğretmenliği	36	45,0
Total	80	100,0

Araştırmaya katılan öğretmen adaylarının %97.5'i sosyal ağ kullandıklarını belirtirken %2.5'i sosyal ağ kullanmadığını belirtmiştir(Tablo 3).

Tablo 3. Araştırmaya Katılan Öğretmen Adaylarının Sosyal Ağ Kullanımı

Değişkenler	f	%
Evet	78	97,5
Hayır	2	2,5
Toplam	80	100,0

Sosyal ağ kullanma sıklığına bakıldığında araştırmaya katılan öğretmen adaylarının %92,5'i her gün derken, %7.5'u hafta da 3-4 gün kullandığını belirtmiştir(Tablo 4).

Tablo 4. Araştırmaya Katılan Öğretmen Adaylarının Sosyal Ağ Kullanma Sıklığı

Değişkenler	f	%
Hergün	74	92,5
Haftada 3-4 gün	6	7,5
Toplam	80	100,0

Araştırmaya katılan öğretmen adaylarının %60'ı hergün 1 ile 3 saat arasında zaman dilimini sosyal ağda geçirdiğinin belirtirken, %27.5'u hergün 1 saatten az bir süreyi sosyal ağda geçirmekte olduğunu belirtmiştir. Araştırmaya katılanların %10'u 4-6 saat arasında bir zaman dilimini sosyal medya kullanmaya ayırırken %2,5'u ise günün 7-8 saatini sosyal medya kullanmakla geçirdiğini belirtmiştir (Tablo 5).

Tablo 5. Araştırmaya Katılan Öğretmen Adaylarının Sosyal Ağ Kullanma Saati

Değişkenler	f	%
1saatten az	22	27,5
1-3saat	48	60,0
4-6saat	8	10,0
7-8saat	2	2,5
Toplam	80	100,0

Araştırmaya katılan öğretmen adaylarından %30'u sosyal ağda yorum yaptığını belirtirken %70'i sosyal ağda yorum yapmadığını açıklamaktadır.

Tablo 6 Araştırmaya Katılan Öğretmen Adaylarının Sosyal Ağda Yorum Yapma

Değişkenler	f	%
Evet	24	30,0
Hayır	56	70,0
Toplam	80	100,0

Araştırmaya katılan öğretmen adaylarının %17,5'i sosyal ağdaki arkadaşları ile görüştiklerini belirtirken, %82,5'u sosyal ağdaki arkadaşları ile görüşmediklerini belirtmişlerdir(Tablo 7).

Tablo 7 Araştırmaya Katılan Öğretmen Adaylarının Sosyal Ağda Görüşme

Değişkenler	f	%
Evet	14	17,5
Hayır	66	82,5
Toplam	80	100,0

Sonuç

Araştırmaya katılan öğretmen adaylarının yarısından fazlasının bayan öğretmen adayları oluşturmaktadır. Araştırmaya katılanların büyük çoğunluğu sosyal medya kullanmakta ve günde 1-3 saat arasında sosyal medyaya zaman ayırmaktadırlar. Araştırmaya katılan öğretmen adayları sosyal medya üzerinden yorumlar yapmakta, fakat sosyal medya da arkadaşları ile görüşmemektedirler.

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ÖĞRETMEN GÖRÜŞLERİNE GÖRE ÖRGÜN EĞİTİM VE YAŞAM BOYU ÖĞRENME SÜRECİNDE ÇEVRE EĞİTİMİ

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Öğretmenlerin örgün eğitimde uygulanan ve yaşam boyu öğrenme sürecinde uygulanması gereken çevre eğitime ilişkin görüşlerinin belirlenmesi bu araştırmanın amacını oluşturmaktadır. Araştırma nitel araştırma yöntemlerinden görüşme tekniği ile yapılmıştır. Yarı yapılandırılmış görüşme formu ile amaçlı örnekleme yöntemiyle seçilen ve ile Sakarya ili merkez ilçesinde bulunan anaokulu, ilkokul, ortaokul ve liselerde görev yapan 20 öğretmenle görüşmeler yapılmıştır. Görüşmelerden elde edilen veriler betimsel analiz yöntemiyle çözümlenmiştir ve şu sonuçlar elde edilmiştir: 1- Öğretmenlerin Türkiye’de en önemli gördükleri çevre sorunu çarpık kentleşmedir. 2- Öğretmenler çevre sorunlarının çözümünde en etkili kurumun belediyeler, en etkili kuruluşun sivil toplum kuruluşları ve en etkili olabilecek kişilerin ise politikacılar olduğunu belirtmişlerdir. 3- Çevre eğitimi en iyi okulların verebileceğini ifade etmişlerdir. 4- Öğretmenlere göre okullarda uygulanan/uygulanması öngörülen çevre eğitimi yeterli bulunmamaktadır. 5- Öğretmenlerin çoğunluğu, kendi branşlarında yer alan çevre eğitimi ile ilgili kazanımların yeterli olmadığı görüşündedir. Bununla birlikte kazanımların kısmen uygulandığı ya da hiç uygulanmadığı ifade edilmiştir. Kazanımların uygulanmasında kullanılan yöntem/teknik/etkinlikler içerisinde ilk sırada gezi-gözlem, ikinci sırada proje ve üçüncü sırada anlatım yöntemi tercih edilmektedir. Kazanımların uygulanmasında karşılaşılan sorunların başında kazanımların yaparak-yaşayarak öğrenmeye dönük olmaması gelmektedir. 6- Öğretmenlerin yarısından fazlası, yaşamımız boyunca muhtaç olduğumuz çevrenin korunması için çevre eğitiminin yaşam boyu öğrenme kapsamında uygulanmasının gerekli olduğu görüşündedir. Öğretmenlerin tamamına yakın kısmı, yaşam boyu öğrenme kapsamında çevre eğitiminin yapılması ile ilgili kitle iletişim araçları ile insanlara çevre bilinci kazandırılabilceği ve belediyelerin bu konuda farklı etkinlikler düzenleyebileceği önerilerini getirmiştir.

Anahtar Kelimeler: Çevre eğitimi, yetişkin eğitimi, örgün eğitim, yaşam boyu öğrenme

ÖZEL EĞİTİM ÖĞRETMEN ADAYLARININ ÖĞRETME VE ÖĞRENME ANLAYIŞLARININ İNCELENMESİ

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ÖZET

Tüm bilimlerin temelinde kuramsal yaklaşım yer almaktadır. Eğitim biliminin de temelinde kuramsal bir yaklaşım söz konusudur. Bu açıdan bakıldığında öğretmen adaylarının öğretme ve öğrenme anlayışları eğitim için daha fazla önem arz etmektedir. Kuramsal temellere dayalı uygulamalar çağımızda önemsenmektedir. Bu kapsamda eğitimin önemli bir alanı olan özel eğitimde görev yapacak özel eğitim öğretmen adaylarının öğretme ve öğrenme anlayışlarını incelemek bu çalışmada amaçlanmıştır. Bu çalışma Sakarya Üniversitesi eğitim fakültesi özel eğitim bölümünde 2016-2017 öğretim yılında öğrenim gören öğretmen adayları ile yürütülmüş olup veriler Aypay (2011) tarafından Türkiye uyarlaması yapılan Öğretme ve Öğrenme Anlayışları Ölçeği ile toplanmıştır. Toplanan veriler analiz edilmiştir ve özel eğitim öğretmen adaylarının yapılandırmacı öğretme öğrenme anlayışını büyük oranda benimsedikleri, bayan öğretmen adaylarının yapılandırmacı öğretme öğrenme anlayışını benimsedikleri, son sınıfta olan öğretmen adaylarının geleneksel öğretme öğrenme anlayışını diğer sınıflara göre daha fazla benimsedikleri, lise mezuniyet türünün öğrenme öğretme anlayışları tercihlerine etki etmediği, öğretmen adaylarının her iki öğretme öğrenme anlayışından birini benimsemelerinde öğretme öğrenme ile ilgili bir ders alıp almama durumlarının etkili olduğu sonuçlarına ulaşılmıştır.

Anahtar Kelimeler: Öğrenme ve öğretme anlayışı, özel eğitim öğretmen adayı, yapılandırmacı anlayış, geleneksel anlayış

PARENTAL ATTITUDES AS PREDICTORS OF SUBJECTIVE WELL-BEING OF PSYCHOLOGICAL COUNSELING AND GUIDANCE DEPARTMENT STUDENTS*

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ABSTRACT

The aim of this study is to examine parental attitudes as predictors of subjective well-being of psychological counseling and guidance department students. The *Psychological Well-being Scale* and *Child Raising Attitudes Scale* were applied to 397 students (231 females and 166 males) studying at Ondokuz Mayıs University, Education Faculty, Psychological Counseling and Guidance Department. In the data analysis process, one-way variance analysis (ANOVA) and hierarchical regression analysis were administered.

According to one-way ANOVA test results, there was no statistically significant difference in mother acceptance/care ($WelchF(1, 385.19) = .05, p > .05$), mother control/monitoring ($WelchF(1, 328.85) = .46, p > .05$), and father control/monitoring ($WelchF(1, 306.43) = .01, p > .05$) scores in terms of gender. However, it was revealed that females' parental acceptance/care assessments and subjective well-being levels were significantly higher than men's. One-way ANOVA results conducted based on class level indicates that father control/monitoring scores did not differ across class levels ($WelchF(3, 203.12) = .25, p > .05$) while there were meaningful differences in the scores of mother acceptance/care ($F(3, 393) = 2.79, p < .05$), mother control/monitoring ($WelchF(3, 209) = 3.53, p < .05$), father acceptance/care ($F(3, 197.22) = 3.55, p < .05$) and subjective well-being ($WelchF(3, 195.71) = 4.55, p < .01$) in terms of class level. To the hierarchical regression analysis results, when the gender and class levels of the participants were determined, the mother acceptance/care and father acceptance/care scores meaningfully predicted subjective well-being. Thus, interventions to improve subjective well-being levels and to increase positive parental attitudes of individuals can be focused on.

Key words: Parental attitudes, psychological well-being, counseling and guidance department students.

INTRODUCTION

Happiness, which is a psychological strength and source of joy and which facilitates the development of well-being in human life, is described as "subjective well-being" in psychology (Sarı & Özkan, 2016; Diener, 2000). Subjective well-being means that an agent assesses his own life cognitively and affectively (Diener, 2000), that he accepts his life as being mainly positive (Yiğit, 2013), and it also means positive affection, satisfaction and attachment (Diener & Seligman, 2004).

As a fundamental notion in positive psychology, there are numerous researches about subjective well-being in the literature. Subjective well-being level was found to be in correlation with variables such as self-esteem (Brynjulfson, 2004), social support (Gençöz & Özlale, 2004; Yarcheski et al., 2001), perceptions towards family support (Gülaçtı, 2010), and optimism tendency (Eryılmaz & Atak, 2011). In similar studies, evidence was found that factors such as supportive parents, overcoming challenging events, positive life events and relationships with significant people during adolescence (Park, 2004) result in a high level of satisfaction, which in turn plays an effective role in a high level of subjective well-being among university students.

The expectations from parents while they are raising a child not only include physical nutrition of the child, but also covers the attitudes towards developing his physical, social, mental, psycho-social and psychological well-being to contribute to the child's subjective well-being (Gupta & Mehtani, 2015). Baumrind (1966), who was one of the pioneers in examining the effects of parental attitudes on children, described parental attitudes as *authoritative*, *democratic* and *permissive*. Democratic parents expect mature behaviors from their children and they are sensitive about obeying the rules. Another characteristic of these sincere, patient and sensitive parents is that they also care about children's opinions about a family decision or an issue. Authoritative parents expect children to obey the rules unconditionally, do not ask about their children's opinions, and can give punishments

* Part of this study was presented as an oral paper at the International Conference on New Horizons in Education on July 17 to 19, 2017 Berlin/ Germany

to children when they encounter undesired life events. The parents displaying a permissive attitude do not control their children to whom are given too much freedom, and they have limitless tolerance for their children.

Parental attitudes are of vital significance in terms of adaptation to the society, becoming self-confident and successful in life as well as children's personal traits (Umucu-Alpoğuz, 2014). In this sense, there are many studies related to parental attitudes and its effects, and various points of views have been developed in the literature. It was proven that parental behaviors are influential on children's personality (Kapçı & Küçüker, 2006), self-confidence (Kim & Chung, 2003) and psychological well-being (Csikszentmihalyi & Schneider, 2001). Similarly, a positive correlation was found between satisfying the expectations of family and subjective well-being (Oishi & Sullivan, 2005; Pantke & Slade, 2006).

With improvements in the finance and industry fields, Turkish families have undergone several changes as well. Today, patriarchal families have started to be replaced by modern and democratic Turkish families. In association with these changes in family structure, the changes and differences in family-child relations and parental attitudes in raising child have also drawn our attention. Emphasizing to raise a child with optimal opportunities and ways is one of the most important responsibilities of Turkish parents. And this responsibility is basically depended on parents' developing positive attitudes concerning child raising. Indeed, the relationships between parents and children are quite complicated. A healthy relationship between parents and children is a crucial factor in becoming healthy children and individuals in the future. The relationships between parents and children affect children's current behaviors and also determine their future behaviors. The relationships between parents and children are basically dependent on parents' attitudes that they show to their children. Such attitudes can differ across families or cultures, but they all possess similar effects on children across all cultures (Tezel-Şahin & Cevher, 2007). The studies conducted in the guidance and psychological counseling field possess the aims to understand an agent's development process, to take precautions against possible difficulties an agent can encounter and to provide him with the most brief and functional solutions for these problems (Türkmen, 2012). This study plays an important role in psychological counseling and guidance department students' realization of the effects of parental attitudes on both their own and their future clients' subjective well-beings, since these students are expected to design preventive and constructive interventions so as to increase their clients' subjective well-beings. There is direct correlation between subjective well-being and being a happy individual. By taking precautions in determining the factors affecting subjective well-being and decreasing the negative factors on it will ensure them to be happy individuals in the future (Gündoğdu & Yavuzer, 2012).

When the guidance and psychological counseling department students graduate from their departments, they will serve as school counselors or as psychological consultants, they will influence their clients' lives and they will make an effort to improve the subjective well-beings of their clients. With the aim to ensure that they become a good role model in this sense, this study examines whether parental attitudes of the students studying at psychological counseling and guidance students predict these students' subjective well-being. Thus, the aim of the study is to analyze the relationships between these students' subjective well-beings and parental attitudes.

METHOD

Research Model: This study was designed as a relational screening model.

Study Sample and Procedure: The study sample consisted of students attending Ondokuz Mayıs University, Education Faculty, Psychological Counseling and Guidance Department, in Samsun, Turkey during the 2016-2017 academic year. The students participated in the study voluntarily, and it was implemented in classroom. Before the implementation, the necessary consents were received from Ondokuz Mayıs University Social and Human Sciences Ethics Board (Decision no: 2016-144), from the Rectorate of Ondokuz Mayıs University, from the departments and the academicians who were attending the courses at the time of the implementation. The study sample was determined with convenience sampling method among the volunteer students, and it consisted of 397 students, 231 of whom were female (58.2%) and 166 of whom were male (41.8%). The age range of the students was between 18 and 27, and the average age was 20.83 (S.D: 1.61). Lastly, 70 participants were first year (17.6%); 114 were second year (28.7%); 108 were year (27.3%) and 105 were fourth year students (26.4%).

DATA COLLECTION INSTRUMENTS

Personal Information Form: This form was used with the aim to collect information about participants' gender and class levels.

Parenting Styles Scale (PSS): This instrument was developed by Sümer and Güngör (1999) taking the suggested dimensions by Maccoby and Martin (1983) and the studies of Lamborn et al. (1991) into consideration. In the development process of the instrument and as a result of the varimax rotation analysis, two-dimension factors were obtained such as *acceptance/care* and *monitoring/control*, which consisted of 34 items. The alpha coefficients of the *acceptance/care* and *monitoring/control* sub scales were measured as .86 and .88 for the mothers report, and .88 and .87 for the fathers report, respectively. In a study with adolescents, Güngör (2000)

measured parenting dimensions within a family, and thus Sümer and Güngör (1999) developed the scale and added extra items to the parenting style scale. Thus, a 22-item PSS was applied to the adolescents in which 11 items belong to acceptance/care and 11 items belong to monitoring/control dimensions. The internal consistency coefficient of the scale for mother acceptance/care sub dimension was found as .87, and .92 for the father monitoring/control sub dimension in this study.

Psychological Well-being Scale: Aiming to assess the psychological well-being levels and consisting of 8 items, the instrument was developed by Diener et al. (2009) and adapted into Turkish culture by Telef (2013). The high scores in the scale stand for that the agent possess various psychological supports and strength. The internal consistency coefficient of the tool was found as .80 by Telef (2013). And the Cronbach Alpha internal consistency coefficient was measured as .88 for this study.

DATA ANALYSIS

Before the data analysis, the missing values, outliers and the hypothesis about the current statistical analysis were examined. Firstly, a participant who did not answer most of the instruments was excluded from the data set. Secondly, the participants' scores from the child raising styles scale, subjective well-being scale and submissive behaviors scale were transformed into standardized z-scores so as to detect the univariate outliers in parallel with the recommendations of Tabachnick and Fidell (2012). Then, five univariate outliers were excluded from the data set, one of which was from the mother acceptance/care sub dimension, two from the mother control/monitoring sub dimension in the child raising scale and five from the subjective well-being scale. In the third stage, the Mahalanobis distance was measured to reveal the multi variable outliers through using scores related to gender, class, and parental acceptance/care and control/monitoring sub dimensions, and thus many multi variable outliers were excluded from the data set (Tabachnick & Fidell, 2012). Pearson correlation analysis was conducted to see the relationships among participants' mother/father acceptance/care and control/monitoring, submissive behaviors and subjective well-being scores, and gender and class level variables. Also, a hierarchical regression analysis was conducted in order to reveal to what extent the parental acceptance/care and control/monitoring scores predicted subjective well-being scores when the effects of the socio-economic variables were controlled in the study. The variables which found to be unrelated with the dependent variable, *subjective well-being*, in the correlation analysis were not included into the hierarchical regression analysis. The hypothesis related to both tests was revised upon the recommendations of Ho (2013), and they were seen to be met. In the full statistical analysis, .05 was accepted as the maximum margin of error.

FINDINGS

Table 1 shows the correlations among the variables. As seen in Table 1, the subjective well-being scores were in weak and negative relationship with gender ($r = -.15, p < .01$) and mother control/monitoring scores ($r = -.12, p < .05$), and in weak and positive relationship with class level ($r = .15, p < .01$); and lastly in medium level and positive relationship with mother acceptance/care ($r = .44, p < .01$) and father acceptance/care scores ($r = .41, p < .01$). However, the subjective well-being scores were found not be in relation with father control/monitoring scores ($r = .02, p > .05$). Thus, the father control/monitoring scores were not included into hierarchical regression analysis.

Table 1 : The Correlation Values Among the Variables

	1	2	3	4	5	6	7
1. Gender	-						
2. Class	.06	-					
3. Mother acceptance/care	-.01	.09	.87				
4. Mother control/monitoring	-.04	-.16**	-.30**	.83			
5. Father acceptance/care	-.15**	.17**	.49**	-.22**	.91		
6. Father control/monitoring	-.01	-.01	-.05	.48**	-.21**	.92	
8. Subjective well-being	-.15**	.15**	.44**	-.12*	.41**	.02	.88

Note: $p < .05^*$, $p < .01^{**}$, The corresponding of the continuous variables are the measured Cronbach alpha internal consistency co efficiency values in this study.

Controlling the socio-demographic variables (gender, class level), the hierarchical regression analysis was used to examine to the what extent that mother acceptance/care, mother monitoring/control, father acceptance/care and submissive behavior scores predicted subjective well-being scores. In the first stage of the analysis, the variables were included, and in the second, mother acceptance/care, mother monitoring/control and father acceptance/care sub dimensions were included in the analysis. The hierarchical regression analysis results are demonstrated in Table 2 below.

Table 2 : Hierarchical Regression Analysis Results

Variable	Step 1					Step 2				
	B	SE	β	t	p	B	SE	β	t	p
Invariant	43.82	1.39		31.53	.001***	19.40	3.33		5.83	.001***
Gender	-2.36	.74	-.16	-3.12	.001***	-1.72	.66	-.12	-2.60	.010**
Class Level	1.13	.34	.16	3.29	.001***	.67	.31	.10	2.16	.031*
Mother Acceptance/Care						.38	.06	.33	6.50	.001***
Mother Control/Monitoring						.04	.05	.04	.04	.839
Father Acceptance/Care						.18	.04	.22	4.29	.001***
R^2		.05					.26			
Adj R^2		.04					.25			
SH		7.24					6.40			
$F(df_n, df_d)$		2, 394					5,391			

Note: $p < .05^*$, $p < .01^{**}$, $p < .001^{***}$.

As seen in Table 2, the contribution of the gender and class variables to the model included into the hierarchical regression analysis in the first stage was meaningful ($F(2, 394) = 9.50$, $p < .001$, $R = .22$, $R^2 = .05$, $R^2_{adj} = .04$). Both variables explained 5% of the changes in subjective well-being scores. In other words, in this sample being a female and at a high class was related with high subjective well-being scores. The variables included into the second stage regression analysis were also seen to contribute to the model significantly ($F(5, 391) = 27.80$, $p < .001$, $R = .51$, $R^2 = .26$, $R^2_{adj} = .22$). In addition to socio-demographic variables, this model explained 21% of the subjective well-being scores. As seen in Table 2, the contribution of mother acceptance/care scores ($\beta = .33$, $t = 6.50$, $p < .001$) and father acceptance/care scores ($\beta = .22$, $t = 4.29$, $p < .001$) to the model was meaningful in addition to the contributions of gender and class level variables. However, the contribution of mother control/monitoring variable to the model was not meaningful $\beta = .04$, $t = .04$, $p > .05$). In other words, when gender and class levels were controlled, the agents whose parents displayed accepting attitudes had higher subjective well-being levels in this sample.

CONCLUSION AND DISCUSSION

According to the study results, there was a positive correlation between students' parental attitudes and subjective well-being levels. It was found that the subjective well-being of students was in weak and negative relation with gender and controlling/monitoring mother attitudes; in low relations with class level; and in medium and positive relations with mother acceptance/care and father acceptance/care scores. Additionally, the students' genders and class levels, and mother acceptance/care and father acceptance/care scores were revealed to predict the subjective well-being of the students significantly.

In a review of the literature, in their study Joronen and Kurki (2005) indicated that a secure home surrounding, loving, positive and satisfying family relations served as an important factor in adolescents' wealth, and indirectly in their subjective well-being. Kocayörük (2010) emphasized the role of parents on adolescents' subjective well-being. In a study conducted by Neblett and Cortina (2006) with high school students, pointed out that the students who received from their families were more content, possessed positive inclinations for the future and were more hopeful and had positive perspectives about future. In the same study, the family contentedness was underlined as a crucial factor resulting in subjective well-being. Similarly, in a study with university students, it was found that family's social support had positive effects on students' psychological well-being (Aydın, 1999); that family's appreciation and supportive attitudes resulted in agents' feeling better psychologically (Gençöz & Özlale, 2004) while negative parenting styles and lack of social support was found to influence agents' happiness in a negative way (Cırhinlioğlu, 2006).

In the first stage of the hierarchical regression analysis of the present study, gender and class variables were seen to predict 5% of the changes in subjective well-being scores. In other words, the subjective well-being levels of females and the higher classes were higher. In the second stage, as well as gender and class level variables, the students who had accepting parental attitudes were revealed to possess high level of subjective well-being.

Clearly, positive parenting behaviors are necessary for developing a healthy emotion regulation system during childhood. Verbal aggression or rejections of parents might result in emotional dysfunctions in children, so the students who perceive their families as negative might quit communication and try to become introvert and withdraw, which in turn can be an indication of negative outcomes in child's psychological well-being in the future (Morris et al., 2007). The evidence from these studies also showed that positively perceived parental attitudes had specific effects on subjective well-being level (Sarı & Özkan, 2016; Eryilmaz, 2012), and parental care and approvals plays certain roles on adolescents' psychological wealth (Özdemir, 2012). However, there are other studies indicating differences between subjective well-being and gender (Dilmaç & Bozgeyikli, 2009; Tümkaya, 2011; Gündoğdu & Yavuzer, 2012), just like this study, while there are other studies revealing no such difference (Kulaksızoğlu & Topuz, 2014; Tuzgöl-Dost, 2010 Saygın & Arslan, 2009; Tuzgöl-Dost, 2006). The reason for these different outcomes can be explained with the idea that there can be individual factors affecting subjective well-being. This study has some limitations. Firstly, a correlation research design was used in this study, so a cause and effect relationship cannot be established from these findings. Secondly, the generalizability of the study to the other students is low since it was only conducted with undergraduate students studying at Psychological Counseling and Guidance Department. And lastly, since the information related to parental attitudes was gathered from student by means of self-report type scale, the participants' responds might be affected from specific errors which can be seen in this type of scales such as social favorability. In light of the results, these implications can be suggested: the practitioners in psychological counseling and guidance fields can utilize these results and develop preventive guidance services. Training programs which emphasize the effects of parental attitudes of children's psychological well-being can be organized.

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PARTICIPANTS' NEEDS FROM CULTURE AND ARTS EDUCATION PROGRAMS FOR SENIOR CITIZENS

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Korea is currently an aging society; as a result, there is growing interest in the older generation. Having retired from work and formed new relationships with their families, most seniors have found they are free from obligation and routine, and now enjoy more leisure time. Consequently, seniors begin to plan their second life, making good use of this additional spare time. This study therefore aims to analyze activities for senior citizens with the intention of developing an appropriate culture and arts education program. From the examples of culture and arts education for senior citizens in the Andong area of Gyeongsangbuk-do Province, we selected the Youth Choir of Andong Arts Center and the Pungnyu Salon Culture Club of Andong Old Market, which encompass both cultural elements and activities. Based on interviews with and observation of participants, we analyzed the perceptions and expectations of culture and arts education for senior citizens. Our analysis of the Youth Choir and Pungnyu Salon revealed the elements of these culture and arts programs that were sought by the older participants were emotional well-being, social role, self-esteem, personal development, skill acquisition, and sense of belonging. This study therefore emphasizes the necessity for and suggests a way to improve culture and arts education programs for senior citizens.

PAZARLAMANNIN YÜKSEKÖĞRETİMDE KULLANILIŞI

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ÖZET

Bu çalışma, pazarlama yöntemlerinin yükseköğretim sektörüne (üniversiteler ve yüksekokullar) uygulanmasını ele almıştır. Çalışma, temel pazarlama kavramlarını kısaca incelemiş, bu kavramların yükseköğretim sektöründe nasıl faydalı şekilde kullanılabileceğini genel olarak değerlendirmiştir. Çalışmada, bu uygulamanın boyutu ve sınırı belirlenip tartışılmaktadır. Aynı zamanda hangi pazarlama yöntemlerinin yükseköğretim sektöründe sıklıkla kullanıldığını, hangilerinin geliştirilmesi gerektiğini ve günümüzde popüler olan yöntemlerin hangileri olduğunu ortaya koymaya çalışmaktadır.

Anahtar kelimeler: Pazarlama, Yüksek Öğretim

1. GİRİŞ

Son yıllarda bütün dünyada yükseköğretim yapı ve statüsünde büyük değişiklikler meydana gelmektedir. Özelleştirme, çeşitlendirme, yönetimin yerleştirilmesi, uluslararasılaşma ve yükseköğretimdeki rekabetin artması gibi çevresel değişiklikler birçok ülkede yaygındır. Bu değişikliklerin, günümüzde yükseköğretim kurumlarının faaliyetleri üzerinde bir etkisi bulunmaktadır ve yükseköğretime pazara açmak için bu değişiklikler itici güçler olarak görülmektedir (Maringe, 2006).

Bu çalışma, başlangıç noktasını pazarlama kavramını esas alıp, pazarlama fikirlerinin yükseköğretime ne ölçüde uygulanabileceğini belirtmeye çalışmaktadır: Tüketicilerin ihtiyaçlarını karşılamak istediği gerçeği. Bu çalışma, iş sektörü için geliştirilen başlıca pazarlama yaklaşımlarını ve kavramlarını incelemeye başlayıp, bunların yükseköğretime nasıl uygulanabilecekleri tartışmalarıyla devam etmektedir.

2. PAZARLAMA YAKLAŞIMLARI VE TEMEL PAZARLAMA KAVRAMLARI

Bu bölümde farklı pazarlama kavramlarının yükseköğretim sektörüne nasıl uygulandığını daha iyi analiz edebilmek için; belli başlı genel pazarlama yaklaşım ve kavramlarını kısaca gözden geçirilecektir.

Pazarlama kavramının bir takım evrimsel aşamalar geçirdiği ve bu aşamaların, pazarlama yaklaşımları veya pazarlama felsefeleri olarak yaygın olarak kabul görmektedir. Kotler (1991) pazarlama aktivitelerinin yürütülebileceği beş konsept olduğunu varsaymaktadır, ki bunlar; üretim konsepti, ürün konsepti, satış konsepti, pazarlama konsepti ve toplumsal pazarlama konseptidir. Bunların son ikisi daha fazla ilgi alanımıza girmektedir çünkü bugün pek çok organizasyon tarafından kullanılan pazarlama kavramının temelini oluşturur: *“Pazarlama kavramı hedef pazarların ihtiyaç ve isteklerini belirlemek ve istenen memnuniyeti rakiplerden daha etkili ve verimli bir şekilde sağlamanın da içinde bulunduğu hedeflere ulaşmanın anahtarını elinde bulundurur (Kotler, 1991: 16)”*.

Pazarlama yaklaşımı, organizasyonun faaliyet alanının, yani tüketicinin ve onun istek ve ihtiyaçlarının tam merkezinde yer almaktadır. Böylesine tüketici odaklı bir felsefe, bu yaklaşıma, sadece satış yapma felsefesinin zıttı olarak, tüketici davranışı, pazar segmentasyonu, konumlandırma, pazarlama karması etkinlikleri gibi, pazarlamacı yönelime özgü ürün politikası, fiyat politikası, dağıtım politikası ve tanıtım politikası gibi diğer kavramları da dahil etmektedir.

3. YÜKSEKÖĞRETİME UYGULANAN PAZARLAMA KAVRAMLARI

Yükseköğretim sektörü, uygulanabilecek pazarlama fikirlerini etkileyen iki temel özelliğe sahiptir. Her şeyden önce, yükseköğretim sektörü birçok ülkede kâr amacı gütmeyen bir sektördür, bu nedenle sektörde uygulanan pazarlama kavramları, temel amacın kâr sağlamak olduğu iş sektöründeki gibi işlev görmemektedir. İkincisi, yükseköğretim bir hizmettir, bu yüzden hizmet pazarlaması için uygulanabilir olan tüm özellikler yükseköğretim için de geçerlidir. Bu iki bakış açısını öz önünde bulundurarak, daha önce bahsedilen pazarlama kavramlarının yükseköğretim için ne ölçüde geçerli olduğuna bakacağız.

Öğrenci, okul tarafından eğitim ve öğretim programları çerçevesinde yeni davranışlar kazanılması beklenen ve okulun asıl nüfus yoğunluğunu oluşturan kesimdir ve kendisine sunulan eğitim öğretim hizmetlerinin alıcısı konumundadır. Öğrencinin ilgi, yetenek ve gereksinimlerini dikkate almayan bir yükseköğretim anlayışının yararlı olması, yani kalıcı öğrenmeler doğurması beklenemez. Bu nedenle öğretimde her şey öğrenciye yönelik

olmak durumundadır (Uluğ, 1999: 30). Bunu sağlayacak olanlar ise öğretim elemanları ve yöneticilerdir. Öğretim, belirli bir alanda, belirli bir amaca göre o alanın gerektirdiği bilgileri öğretme işidir. Öğretim elemanları okullarda planlı etkinlikler düzenleyerek öğretme işini gerçekleştiren kişilerdir (Erdem, 2003: 361). Genel olarak öğrencilerin öncelikli müşteriler olarak belirlenip gerçek ihtiyaçlarının karşılanmaya çalışılması yükseköğretimde kalite programları geliştirmenin önemli bir adımı olmasına rağmen diğer müşteri gruplarının ihtiyaçlarının farkına varmakta önemlidir. Bir görüşe göre öğrenciler eğitim sisteminin ürünü iken işverenler gerçek müşterilerdir. Diğerleri müşterilerin, yükseköğretime kaynak sağlayan hükümeti ve de çocuklarının eğitimini finanse eden ebeveynleri de kapsadığını belirtmektedir. Ancak çoğunun benimsediği görüş eğitim sisteminde çok katılımcıların çoklu rolü olduğudur. Bir eğitim kurumunun müşteri grupları devleti, özel şirketleri, endüstrileri, yerel toplulukları, vatandaşları, mezun grupları vb. içerebilir. (Hwang ve Teo, 2001: 200-201).

Tüketici olarak ‘öğrenci’ kavramı bütünüyle eleştirileri çekse de, öğrenci; yükseköğretim hizmetlerinin doğrudan ve dolaysız müşterisidir. Mezunların eğitim sırasında kazandıkları becerileri ve yetenekleri kullandıklarından, işverenler de yükseköğretim süreçlerinin sonuçlarından yararlanmaktadır. Bazı kişiler, yükseköğretim mezunlarını “ürün” olarak adlandırırken, işverenler müşteri (Conway v.d. 1994) olarak görülmektedir. Öğrenciler temel tüketiciyken (Stensaker ve D’Andrea, 2007), işverenler yükseköğretim hizmetlerinin ikincil ya da dolaylı tüketicileri olarak görülebilir. Sonuç olarak toplum da bir bütün olarak yükseköğretimin sonuçlarından faydalanmaktadır. Bu üç kategori, yükseköğretimin ana paydaşları ve başlıca müşterileri olarak görülürken, öğrenciler birincil kişilerdir. yükseköğretimde sektörlerin birincil müşterileri öğrenciler için pazar segmentasyonu ve hedefleme çalışmaları yapılmaktadır; ancak memnun edilmesi gereken ve tipik pazarlama bölümlerinin tam olarak uygulanmadığı çok daha fazla paydaş bulunmaktadır.

Çalışmamızda *tüketici davranışı*, birincil müşteriler ve yükseköğretim paydaşları olarak öğrenci davranışlarına atıfta bulunmaktadır ve bu da üzerinde çalışmaya değer bir durumdur. Öğrenci beklentileri ve öğrenci seçimi gibi boyutlar yükseköğretimde tüketici davranışına özgü bir durumdur. Öğrencilerin beklentileri değerli bir bilgi kaynağı olarak görülür, çünkü onların memnuniyeti, beklentilerine ve gerçeğe dökülmüş performans algısı arasındaki ilişkiye bağlıdır. Benzer şekilde, başvuranların üniversiteleri ve bu müfredat programını seçmelerinin nedenlerini bilmek kurumsal konumu geliştirme açısından önemlidir (Maringe, 2006). Karar verme sürecini ve potansiyel öğrencilerin bilgi arayışlarını inceleyerek yükseköğretim seçimlerinde yapılan araştırmalar, genellikle, bu pazarlama kavramlarının yükseköğretim sektörüne uygulandığını göstermektedir..

Konumlama stratejileri kavramına bakıldığında, kurumsal konumlandırmanın özü, kendini rakiplerden ayırmaktır. Bunun yapılması yükseköğretimde oldukça zordur. Yükseköğretim sektöründe konumlandırma, kurumsal imajı etkili bir şekilde sunmak ve farklılaşmaktan ziyade halkın (Hemsley–Brown ve Oplatka, 2006) zihnindeki yerini geliştirmeyi gerektirir. Yükseköğretim ürünlerinin benzerliğine karşın, üniversiteler tarafından ayırt edici konumlarda bulunmak için kullanılacak öğretim odaklı ve araştırma odaklı, bilim odaklı ve sanat odaklı, temel eğitim ve yükseköğretim gibi kilit unsurlar öne sürülmüştür (Chapleo, 2004, s. 17). Ama bu faktörler bile özellikle ulusal yükseköğretim sektörünü sürdürecektir fazla üniversitenin olduğu yerlerde, üniversitelerin tamamen farklılaşmış pozisyonlarını garantiye alamamaktadır.. Bu nedenle, yükseköğretim sektöründe gerçek anlamda konumlandırma kavramının kullanılmasında kısıtlamalar olduğunu söyleyebiliriz.

Öte yandan yükseköğrenim sektörünün mesleki doğası müşteriler konusunda bazı zorluklar doğurur; öğrenciler (üniversitenin oluşturduğu bölüm ve derslerin) müşteri olarak kabul edilebilirken (işveren müşteriler için üretilen) ürün olarak da kabul edilebilir. Hangisinin tercih edileceği üniversitenin stratejik planlaması ve konumlandırmasını büyük ölçüde etkileyecektir (Nicholls vd., 1995: 33). En basit düzeyde üniversiteler öğrencileri müşterileri gibi görebilirler. Ne de olsa üniversitelerle ilişkiye giren onlardır. Fakat bu yaklaşım bazı sorunlara yol açabilmektedir. Öncelikle pazarlamanın amacı yeni müşteriler bulmak için sürekli araştırma yapmak yerine var olanları muhafaza etmekse, bu eğitim alanına nasıl uygulanacaktır? Kabul etmek gerekir ki, aynı üniversitede lisansüstü öğrenime devam eden öğrencilerin oranı oldukça düşük olacaktır. Bu nedenle öğrencileri müşteri olarak görmek biraz zorlama bir tavır olarak görülürken tüketici olarak görmek daha kabul edilebilirdir (Naude, 1999: 127).

Pazarlama karması etkinlikleri veya 4P modeli (ürün, fiyat, dağıtım ve tanıtım), yükseköğretimde sınırlı ölçüde kullanılan; farklı bileşenleri sektörde farklı dikkat seviyelerine sahip olan bir pazarlama yöntemidir. Fiyatlandırma ve tanıtım politikaları, yükseköğretimde pazarlama kavramları (Hemsley–Brown ve Oplatka, 2006) olarak daha çok kullanılır, ürün politikası her zaman bu şekilde tanımlanmamakta ve yükseköğretim kurumlarında (program portfolyosu, ürün kalitesi, markalaşma olarak) oldukça sık kullanılmaktadır; dağıtım

politikası ise bu sektör için tam anlamıyla geçerli değildir. *Dağıtım politikası*, yükseköğretim sektörüne uygulanabilirliği çok düşük olduğu için daha ziyade dikkate alınmamaktadır. Fakat dağıtım politikaları olarak, yükseköğretim eğitim hizmetinin müşterinin yani öğrencinin rahatlıkla ulaşabileceği uygun bir coğrafi konuma götürülmesi hizmetin dağıtım politikası içinde değerlendirilebilir.

Yükseköğretimde *ürün politikası*, sektörün sunduğu hizmetler anlamına gelmektedir. Yükseköğretim kurumları hizmetlerinin kalitesi, müşteri memnuniyetinin tetikleyicisi olarak önem kazanmaktadır. Örneğin, öğrencilere verilen eğitim hizmetlerinin kalitesinden bahsederken, öğretim ve öğrenim faaliyetleri aynı madalyonun iki ayrı yüzüdür ve sonuçlar nitelikli bir hizmet elde etmek için sürece katılmak zorunda olan öğretmenlere ve öğrencilere (Temple ve Shattock, 2007)'de bağlıdır.

Hizmet işletmeleri tarafından üretilen malların tüketicilere nasıl ulaştırıldığı ve/veya sunulduğu sorusunu cevaplayan kalite boyutu ise fonksiyonel kalitedir. Ayrıca, hizmet işletmelerinin önem verdiği, geleneksel pazarlama faaliyetleriyle destekleyip yarattığı işletme imajı da tüketiciler tarafından teknik ve fonksiyonel kalitenin bir bütünü olarak değerlendirilmektedir. Bu çerçevede, hizmet işletmeleri güvenilirlik, duyarlılık, yeterlilik, ulaşılabilirlik, nezaket, iletişim, inanılabilirlik, güvenlik, anlama ve farkında olma ve fiziksel unsurlar gibi elemanları içeren hizmet kalitesi ölçeğini kullanarak, tüketicilerin hizmet kalitesi algılamalarını daha kolay anlayıp, ihtiyaç duyulan iyileştirmeleri uygulayabilme imkânına sahip olurlar (Parasuraman, Zeithaml ve Berry 1985: 47).

Kalite yönetiminin geniş kapsamlı olarak yükseköğretime uygulanması konusunda Mergen vd. (2000) farklı bir bakış açısı getirmişlerdir. Bu çalışmada kalite yönetimi bir bütün halinde yüksek öğretime uyarlanmıştır. Mergen vd. (2000) kalite yönetimi konusunu, kalite dizaynı, kalite uyumu ve kalite performansı açısından irdelemişlerdir. Mergen (2000)'e göre kalite dizaynı üniversitenin sunduğu hizmetin ve bu hizmet sürecinin belirli bir pazar diliminde ve belirli bir maliyette karakteristik özelliklerini belirleme faaliyetidir. Kalite uyumu ise üniversitenin sunduğu hizmetin belirlenen kalite dizaynına ne kadar uyum sağladığı ile ilgilidir. Kalite performansı ise sunulan hizmetin öğrenci memnuniyeti, hizmet maliyeti, kalite uyumu ve dizaynı gibi konularda diğer eğitim faaliyetiyle uğraşan organizasyonlara göre kıyaslanmasıdır.

Markalaşma (marka bilinci oluşturma), yükseköğretim kurumları tarafından kullanılmaya başlanan başka bir pazarlama konseptidir. Markalaşma; hem ürün politikası, hem de tanıtım politikasının bir parçası olarak görülebilir ve yükseköğretim sektöründe belirli özellikleri vardır.

Brookes (2003), günümüzde yükseköğretim kurumlarının gittikçe birer işletme gibi davrandığını, diğer taraftan da eğitim veren kuruluşların neredeyse hizmet sektöründe faaliyet gösteren işletmeler gibi, faaliyetleri esnasında markalaşma ve itibar yönetimi konularının etkisinde kaldıklarını ortaya koymuştur. Bu açıdan bakıldığında, üniversitelerin markalaşma çabalarının temelinde, marka mesajı yardımıyla potansiyel öğrencilerin, ailelerinin, işveren konumundaki yöneticilerin ve işletmelerin dikkatinin çekilmesi, onlarla iletişim kurulması yatmaktadır.

a) Yükseköğretimde markalaşmaktan bahsederken; marka, itibar ve imaj gibi kavramlar arasındaki ilişki göz önüne alınmalıdır. İtibar, yakın zamanda, kurulmuş bir kurumun geçmiş imgelerinin kolektif sunumu olacaktır, fakat imaj; belirli bir kurumla ilişkili anlık anlamlar kümesidir (Kantanen, 2007). İtibar, markanın yaptığından daha iyi yansıtmak için, üniversitelerin yöneticileri tarafından da görülmektedir (Chapleo, 2004). Üniversiteler için itibar, kendi var olma sebepleridir ve aslında sattıkları şey de bir nevi budur (Temple & Shattock, 2007). Bu yüzden markalaşma yerine itibar, yükseköğretim sektörü için kullanılması daha uygun bir kavramdır.

b) Markalaşma, genellikle, satış artırma amacıyla imaj yaratma ile de bağlantılıdır. Kurumsal imaj ve itibar kavramlarının yükseköğretimde diğer sektörlerle kıyasla farklı yorumlanabileceği düşünülmektedir, çünkü bir şirketin artan satışları iyi bir üne sahip olmasıyla ilişkilendirilirken, yükseköğretimde yüksek itibar sıklıkla asgari "satış" ile bağlantılıdır (Hemsley-Brown ve Oplatka, 2006), çünkü bir üniversite ne kadar prestijli ise eğitim programlarına kabul edilen öğrenci o kadar az olur. Bu da, işletme sektörüne uygulanan pazarlama kavramları ile yükseköğretim sektörüne uygulanan pazarlama kavramları arasındaki farklılıkları göstermektedir.

c) Yükseköğretim sektörü, sektörün yüksek derecede tekdüzeliği ve dolayısıyla çoğu yükseköğretim kurumu için benzersiz imaj farklılıkları yaratma zorluğu sebebiyle markalaşmada zorluklarla karşılaşmaktadır. Temple ve Shattock'un da belirttiği gibi, "Çoğu üniversite, aslında markalaşma konusunda birçok diğer üniversiteye benziyor (veya öyle olduğu söyleniyor). Hepsi "mükemmellik", "kalite" ve "başarının" bir karışımını sunmak ister ve fakat hiçbirinin "eşsiz" olmakla ilgisi yoktur."

Promosyon politikası, yükseköğretimde pazarlama iletişimi ve bilginin yaygınlaştırılması, özellikle de potansiyel öğrencilerin yaptığı seçimler bağlamında yoğunlaşmaktadır. Öğrencileri cezbetmek için iletişim araçlarını (reklamcılık, halkla ilişkiler, kişisel satış gibi) kullanmaya vurgu yapan bu tür etkinlikler, yükseköğretim kurumları ve onların hizmetleri hakkındaki kabul bilgileri gerçekliğe uymuyorsa, satış yaklaşımıyla ilişkilendirilebilir. Öğrencilerin öğretim deneyimleri ve hizmetleri aracılığıyla deneyim kazanmalarını sağlamak ve onları mesleğe hazırlamak için (Voss, Gruber ve Szmigin, 2007), gerçek ile bize tebliğ edilen imaj arasındaki benzeşmeyi sağlamak ve tüketiciye yoğunlaşan pazarlama felsefesi içinde tanıtım politikasını sürdürmek için birbirini izleyen bazı çalışmalar yapılmalıdır.

Eğitim hizmetlerinin fiyatlarının belirlenmesiyle ilgilenen fiyatlandırma politikası, yükseköğretim sektöründe birtakım özelliklere sahiptir. Her şeyden önce, on yıl öncesine kadar, birçok ülkede yükseköğretim tamamen devlet tarafından karşılanıyordu ki bu da öğrenciler nazarında ücretsiz anlamına gelmekteydi. Öğrenim ücretleri uygulamaya sokulduğundan beri, farklı ülkelerde farklı formlarla karşılaştılar, ancak devlet öğrenim ücretlerini belirlemede hala önemli bir rol oynamaktadır. Örneğin, İngiltere’de lisans öğrencileri için yapılan kısmi eğitim ücretlerinin üst sınırları hükümet tarafından belirlenmiştir ve bunun sonucunda çoğu yükseköğretim kurumunun ücreti aynı seviyeye getirilmiştir. Bu da pazarlama konseptinin uygulanmasının yükseköğretimde sınırlamaları olduğunu göstermektedir, çünkü sektör her zaman kendi fiyatlarını belirleme özgürlüğüne sahip değildir. Fakat bu fiyatla ilgili hususların öneminin de ihmal edilmemesi gerektiği anlamına gelmektedir. Yükseköğretim tercihinde son zamanlarda artan tüketicilik göz önüne alındığında, fiyatla ilgili bilgilere, potansiyel öğrencilerin tercihindeki programın özellikleri kadar eşit önem verilmektedir (Maringe, 2006).

Yükseköğretimde teknoloji kullanımı ve yenilikçilik açısından bakıldığında Türkiye’de de yükseköğretimde yeni teknolojilerin kullanımı istenilen düzeyde değildir. Bunun temel nedenleri arasında maddi yetersizlikler, yükseköğretimde arzulanan eğitim ve öğretim seviyesine erişilmemiş olması, üniversitelerde görev yapan akademisyenlerin bilgi ve uygulama altyapısı yetersizlikleri, bilgi teknolojilerinin değerinin yöneticiler tarafından tam anlamıyla kavranamamış olması, kültürel olarak ülkemizde akademisyenler ve öğrencilerin yeniliklere pek açık olmaması ve teknik alt yapı eksikliği gelmektedir. Öğretim elemanlarının dersi kontrol altında tutamama endişeleri ve teknolojinin kullanımına olan yabancılıkları da temel teknolojiyi kullanmama nedenleri arasında sayılmaktadır (Gökdaş, 2005). İnternet eğitimi, geleneksel üniversitelerin ulaştığı kişi sayısını önemli ölçüde artırmış, kişilerin bilgiye özelleştirilmiş bir şekilde ulaşması imkânını tanımıştır. İnternet üniversitelere, daha önce olmayan bir şekilde eğitimlerinin kapsam ve erişimini artırıp, daha çok ticari bir odaklanma yapabilme imkânı tanımıştır. Yeni teknolojiler üniversite eğitiminin daha esnek bir ortamda yapılabilmesi imkânını öğretmenlere ve yöneticilere tanımış ve yükseköğrenimin işbirliği ve paylaşım ortamı içerisinde gerçekleşmesine de imkân tanımıştır. Yeni teknolojiler bu işbirliği ve paylaşım ortamı için uygun alt yapıyı ucuza temin edebilme imkânı tanımıştır. Bilginin bireyler arasında değil de, bilgisayarlar arasında değişimi, eğitim amaçları açısından oldukça uygun sonuçlar doğurmuştur. (Campbell, 2000). Kısa dönemli eğitim amaçları artık sosyal ihtiyaçların yanı sıra, pazarlama hedefleri doğrultusunda da şekillenmeye başlamıştır. Tüm bunlara paralel olarak, yeni teknolojik uygulamalar ve eğitim öğretim alanındaki yenilikler, yüksek öğrenim kurumlarına, maliyetlerini düşürme imkânının yanı sıra, öğrenci sayılarını artırma imkânını da vermiştir (Ikenberry, 1997).

Pazarlamaya özgü kavramların yükseköğretimde kullanılması ülkeden ülkeye büyük farklılıklar göstermektedir. Amerika’da, Avrupa’ya kıyasla, yükseköğretimdeki pazarlama kavramları daha büyük ölçüde asimile olmuştur, çünkü Amerika 10 yıl önceki geleneksel akademik değerler ve piyasa odaklı değerler arasındaki kültür çatışmasına girmiştir (Chapleo, 2004). Avrupa’da bile farklılıklar vardır; İngiltere, yükseköğretime daha fazla pazar benzeri yaklaşımlar getiren, Avrupa’nın ilk ülkelerinden biri olmuştur (D’Andrea, Stensaker ve Allison, 2007). Ancak birçok ülkede, pazarlamayla ilgili faaliyetler yükseköğretimin ilk aşamalarıdır ve iletişim genellikle kurumda bir pazarlama yönlendirmesi yapmak için ilk adımdır.

Sonuç olarak, üniversitelerin yürüttüğü pazarlama faaliyetlerinin en sık karşılaşılan türü, personel alımı ve işe kabul olunma ile ilgili potansiyel başvuru sahiplerine yönelik güçlü tanıtım ve iletişimdir. Bununla birlikte, pazarlamaya özgü eylemler burada durdurulmamalıdır; tüketici, birincil tüketici olarak öğrenciler, memnuniyetinin özü kaliteli hizmet, eğitim ve destek hizmetleri sunmaktır. Bu nedenle, iyi öğrenci deneyimleri sağlamak, öğrencinin memnuniyetini sağlamada önemli bir rol oynamaktadır. Kurumsal imaj ve itibar üzerine kurulmuş markalar da öğrencileri çekmek için önemlidir. İmaj, itibar ve marka da öğrencilere ve diğer menfaat sahiplerine kaliteli hizmet sunmak üzerine kurulmuştur. Yükseköğretim içinde ürünün kendisi yani öğretim,

araştırma, destek hizmetleri, müşteri memnuniyetini sağlamak için diğer pazarlama faaliyetlerinden daha da önemlidir.

4. SONUÇ

Bu makale yükseköğretimde farklı pazarlama kavramlarının yani tüketici memnuniyetini vurgulayan pazarlama yaklaşımına özgü kavramlarının nasıl kullanıldığını göstermiştir. Genel anlamda, temel anlamını göz önüne alırsak birçok pazarlama kavramının yükseköğretim sektörü için geçerli olduğunu söyleyebiliriz. Diğer bir deyişle, pazarlama ilkeleri ve pazarlama fikirleri eğitim sektörüne uygulanabilir ancak iş sektöründe olduğu gibi uygulanamaz. Sunulan ürün/hizmet farklılığı, hedef pazarların kapsamı ve belirli pazarlama aktivitelerinin organizasyonu arasındaki farklar, pazarlama kavramlarını yükseköğretim sektörü için kısmen geçerli kılmaktadır. Bu, diğer sektör veya ticari pazarlamadan alınan yaklaşımların yükseköğretime kolaylıkla transfer edilemez olduğu konusunda diğerlerinin görüşleriyle uyumludur. Bununla birlikte, yükseköğretimin işletme sektöründen öğrenebileceği dersleri de unutmamak gerekir ve pazarlama kavramlarını mantıklı ölçüde kullanmak yükseköğretim sektörüne bağlıdır ve bu; faydalı sonuçlar sağlar.

Bununla birlikte, günümüzde yükseköğretimin pazarlanması ve tüketici davranışları üzerine önemli bir literatürün varlığına rağmen, bu literatür tutarsızdır ve yükseköğretimin özel içeriği ve hizmetlerinin niteliğini yansıtacak teorik modellerden yoksundur (Hemsley–Brown ve Oplatka, 2006). Birçok pazarlama aktivitesi üzerine yapılan araştırma, markalaşmanın öncü bir aşamada olduğunu göstermektedir (Hemsley–Brown ve Goonawardana, 2007). Pazarlama alanı geliştirilmeli ve işletme sektöründekinden farklı olarak yükseköğretim sektöründe benimsenmelidir.

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PDR GRUP REHBERLİK ÇALIŞMALARININ LİSE ÖĞRENCİLERİNİN SINAV KAYGI DÜZEYLERİNE ETKİSİ

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ÖZET

Sınav kaygısı öğrenciler için önemli bir sorundur ve akademik performansı olumsuz şekilde etkilemektedir. Orta düzeydeki sınav kaygısı akademik başarıyı olumlu yönde etkilerken, yüksek düzeydeki kaygı performans üzerine olumsuz etki yapmaktadır. Yüksek kaygı taşıyan öğrenciler sınav süresince sınav sorularını kavrayamama, okuduğu şeyleri o anda anlayamama ve hatırlayamama gibi tepkiler gösterdikleri ifade edilmektedir. Sınav kaygısının birçok nedene bağlı olduğu bilinmektedir. Kişinin kendisinden, beslenme şekline, başkalarından etkilenmesi boyutuna kadar farklı nedenler sınav kaygısını yükseltmektedir. Sınav kaygısı taşıyan öğrencilere bu kaygıyı azaltmaları için yapılacak grup rehberliği çalışmalarının etkili olup olmayacağı konusunda hareket ederek, öğrenciler üzerinde uygulamalı bir araştırma gerçekleştirildi. Grup rehberliği, öğrencilerin kendi başarılarının farkındalığını artırmada, sorunları çözebilme becerileri geliştirmelerine ve kendini gerçekleştirmelerine yardımcı olmayı amaçlayan bir programdır.

Bu araştırmanın amacı, grup rehberliğinin öğrencilerin sınav kaygısı düzeyini azaltmada etkili olup olmadığı incelemektir. Lise onbirinci sınıf öğrencileri üzerinde grup rehberliği programı çerçevesinde, bilişsel ve davranışsal tekniklerden yola çıkarak, sınav kaygısı ile ilgili bilinçlendirme, gevşeme egzersizleri ve sınav alma becerileri gibi yöntemleri okul ortamında uygulamak ve öğrencilerin kullanabileceği kalıcı ve sınavlarda başarının yükselmesinde etkili olan tekniklerin elde edilmesini sağlamaktır.

Araştırma, 2016- 2017 Eğitim -Öğretim yılında öğrenimlerine devam eden, Sakarya Hendek Atike Hanım Anadolu Lisesi onbirinci sınıf öğrencileri arasından seçilen biri deney diğeri kontrol olmak üzere 20’ er kişilik grup üzerinde gerçekleştirilmiştir.

Deney grubu öğrencilerine, sınav kaygısına ilişkin teknikler ve yöntemler 7 oturumluk grup rehberliği programı uygulanmıştır.

Grup rehberliği öncesinde deney ve kontrol gruplarına ayrı ayrı Spielberger tarafından düzenlenmiş olan (orijinal) ve 50 maddeden oluşan sınav kaygısı envanteri uygulanmıştır. Ölçek ilk test olarak her iki gruba da uygulandıktan sonra deney grubu üzerinde deneysel işlem gerçekleştirilmiş, kontrol grubu üzerinde ise hiçbir işlem yapılmamıştır. Deney grubunun oturumlarının bitmesiyle, tekrar aynı ölçek son test olarak her iki gruba da uygulanmıştır.

Bulgular alt problemlere göre elde edilmiş ve analiz edilmiştir. Daha sonra bulgulara göre araştırmanın sonuçları yorumlanmıştır.

Anahtar Kelimeler: Sınav kaygısı, grup rehberliği, kaygı düzeyi

1.GİRİŞ

Öğrencilerin sınav kaygılarının, sınavlarda gerçek başarılarını ortaya koymada etkili olduğu bilinmektedir. Sınav kaygısı öğrencilerde, sınav sorularını kavrayamama, okuduğu şeyleri o anda hatırlayamama gibi nedenlerle sınav öncesinde başlayıp gerçekçi olmayan tercihler yaparak istenmedik şekilde başarısızlıklarla sonuçlanmaktadır.

Grup rehberliğinin bu konuda etkili yöntemlerden biri olabileceği bu çalışmada gerçekleştirilen deney grubu ve kontrol grubunun karşılaştırılmasıyla elde edilmeyi amaçlanmaktadır.

Grup rehberliği, öğrencilerin kendi başarılarının farkındalığını artırmada, sorunları çözebilme becerileri geliştirmelerine ve kendini gerçekleştirmelerine yardımcı olmayı amaçlayan bir programdır.

Sınav kaygılarını azaltmaya yönelik Grup rehberliği çalışmaları araştırmaları Psikolojik danışmanlık ve Rehberlik hizmeti alanında önemli derecede etkiye sahiptir. En kısa anlatımıyla grup rehberliği; okullarda öğrencilere yapılan rehberlik faaliyetlerinin bireysel olarak değil de gruplar halinde yapılmasıdır. Tan, eğitimde ekonomik olma ilkesini ve yetersiz danışman bulunmasını göz önünde bulundurarak “okullarda yetişmiş danışmanlar bulunmadığına göre, bireysel rehberlik faaliyetlerinden ziyade rehberlik amacını güden grup faaliyetleri, rehberlik programlarının ağırlık merkezini oluşturabilir”9 şeklinde grup rehberliğini önermiştir.

Grup rehberliği, okullarda öğrencilere yapılan rehberlik faaliyetlerinin bireysel olarak değil de gruplar halinde yapılmasıdır. Tan, eğitimde ekonomik olma düşüncesini ve yetersiz danışman bulunmasını varsayarak “okullarda yetişmiş danışmanlar bulunmadığına göre, bireysel rehberlik faaliyetlerinden ziyade rehberlik

amacını güden grup faaliyetleri, rehberlik programlarının ağırlık merkezini oluşturabilir” (Tan, 1992, S.314) şeklinde grup rehberliğini önermiştir.

Grup rehberliğinin (group guidance) temel amacı davranışı ve karar vermeyi kolaylaştırmak için bilgi sağlamaktır. Grup rehberliği yaklaşımı tabiatında koruyucudur; grubun üyeleri daha çok bilgi kazanma, yeni problemlere yönlendirilmiş olma, planlama ve öğrenci etkinliklerini yerine getirme, meslekî ve eğitimsel kararlar için bilgi toplamaya ilgilidir. Gazda, bu konuyu ayrıntılı açıklamıştır: Grup rehberliği, problemlerin gelişmesini önlemek ve eğitimsel-meslekî bilgi vermeyi amaçlayan yaklaşık 20 ila 35 sayıdaki üyenin sınıf içindeki organizasyonudur şeklinde açıklanabilir (Uşaklı ve Yapıcı, 2001).

Sınav kaygısına ilişkin çeşitli tanımlar yapılmış olmakla beraber, literatürde yaygın olarak kullanılan tanımın Spielberger (1995)’in tanımı olduğu gözlenmektedir. Spielberger (1995)’e göre sınav kaygısı, formal bir sınav veya değerlendirme durumunda yaşanan, bireyin gerçek performansını ortaya koymasını engelleyen bilişsel, duyuşsal, davranışsal özellikleri olan, bireyde gerginlik yaratan hoş olmayan bir duygu durumudur. Sınav kaygısının “kuruntu (worry)” ve “duyuşsallık (emotionality)” olmak üzere iki boyutu vardır. “Kuruntu” sınav kaygısının bilişsel boyutudur. Bireyin kendisi hakkındaki olumsuz değerlendirmelerini, başarısızlığına ve yetersizliğine ilişkin olumsuz düşüncelerini ve iç konuşmalarını içerir. Kuruntu, bireyin sınav sırasında yapılması gerekeni yapamayacağına, karşılaştığı problemi çözemeyeceğine inandığı, “ya başaramazsam, ya yapamazsam” gibi olumsuz düşüncelerle dikkatinin dağılmasına neden olan bir süreçtir. “Duyuşsallık” ise sınav kaygısının duyuşsal fizyolojik yönünü oluşturan otonom sinir sisteminin uyarılmasıdır. Duyuşsallık, hızlı kalp atışları, terleme, ani ateş basması ve ardından üşüme, kızarma, mide bulantıları, sinirlilik ve gerginlik gibi bedensel tepkilerin bulunduğu bir süreçtir. (İzgi ve Gücüm, 2012).

Kaygı her insanda olabilir. Bireyin sanki kötü bir şey olacaktı gibi hissettiği bir sıkıntı duygusu olarak tanımlanabilir. Bu duygu hafifi bir tedirginlikten, panik derecesine varan yoğunluklarda yaşanabilir. Kaygı, hızlı kalp atışı, terleme, kas gerginliği, hızlı nefes alıp verme gibi duyuşsal-bedensel süreçleri etkilediği gibi, bireyin net biçimde düşünmesini engelleme veya sorunlarını çözmesini güçleştirme gibi zihinsel süreçlerini de etkiler (Kutlu, 2001).

Baltaş ve Baltaş’a (1997) göre sınav kaygısı ile sınavdan korkmak ayrı kavramlardır. Sınavdan korkan bir öğrenci, yaklaşan bir sınava göre zamanını programlayarak çalışır ve zaman içinde de korkusu azalır. Kaygı ise temelde, bireye rahatsızlık veren olayın kendisinden değil, olayın birey için taşıdığı anlamdan ileri gelmektedir. Birçok öğrenci, sınavla birlikte kendi kişiliğinin ve varlığının değerlendirildiğini düşünmektedir (Kutlu, 2001)

1.1.PROBLEM

PDR grup rehberliği programının Lise onbirinci sınıf öğrencileri üzerinde sınav kaygısı düzeyini azaltmada etkili midir?

1.1.1.Alt Problemler

1. Grup rehberliği uygulanan Deney grubu öğrencilerinin İlk-Test ve Son-Test puanları arasında fark var mıdır?
2. Kontrol grubu öğrencilerinin İlk-Test ve Son-Test puanları arasında fark var mıdır?
3. Kontrol grubu öğrencileri ile Grup rehberliğinin uygulandığı deney grubu öğrencilerinin sınav kaygı düzeyleri arasında istatistiksel olarak anlamlı bir fark var mıdır?
4. Grup rehberliği uygulanan erkek ve kız öğrencilerle uygulanmayan erkek ve kız öğrencilerin ilk test ve son test puanları ortalamaları arasında anlamlı bir farklılık var mıdır?

2.METHOD

Bu bölümde araştırmanın amacı ve yöntemine dayalı olan kullanılan envanter hakkında detaylı bilgi, grup rehberlik programının işleyişi hakkında bilgiler sunulmuştur.

2.1.Araştırmanın amacı

Araştırma, grup rehberliği çalışmalarının Lise onbirinci sınıf öğrencilerinin sınav kaygılarının azaltılmasına etkisinin belirlenmesi amacı ile yapılmıştır.

Sınav kaygısı hangi yaş grubu olursa olsun başarıyı etkileyen bir kavram olmuştur. Belirli bir yaş grubu olmaksızın kişinin başarısını etkileyebilmektedir. Dış faktörler,(örn. aile baskısı, rekabet ortamı, öğretmen baskısı), zihinsel ve bedensel tepkilerle karşılaşan bireyler erken yaşlardan itibaren sınav kaygısıyla tanışmaktadırlar. Kaygı düzeylerin farklı olabileceği gibi, kaygının varlığından haberdar olmayan kişi, başarısızlığına sebep olan bu olumsuzluğu çözememektedir. Bu çalışmada sınav kaygısıyla karşı karşıya olan öğrencilerin sorunun kaynaklarını düşünmelerini sağlanması, bu durumla nasıl baş edebileceklerini ve sınav kaygısı kavramını anlamaları, Grup rehberliği programı çerçevesinde, sağlanacaktır. Bas etme yöntemlerinin ve becerilerinin öğrenilebilir ve uygulanabilir olduğunu göstermeyi amaçlayan grup rehberliği programı Lise okullarında (ayrıca ilköğretim ve üniversite düzeyinde) görevli olan Rehber öğretmenlere bir fikir ve katkı sağlayacağı umulmaktadır.

2.2.Araştırmanın deseni

Tablo 1 de de görüldüğü gibi desenlenmiş olan deney grubu ve kontrol grubuna uygulanan sınav kaygı envanteri (SKE) ilk-test olarak uygulanmıştır. Sonrasında sadece deney grubu 7 oturum süresince grup rehberlik programına alınmıştır. Bu süreç içerisinde kontrol grubuna herhangi bir işlem yapılmamıştır. Oturumlar sonucunda deney ve kontrol grubuna son-test olarak tekrar sınav kaygısı envanteri uygulanmış ve envanter sonuçlarına göre deney ve kontrol grubu karşılaştırmalı olarak incelenmiştir.

Tablo 1: Araştırmanın Deseni

Gruplar	İlk-test	Deneyisel işlem	Son-test
Deney grubu	Sınav kaygısı envanteri	Grup rehberliği Programı (7 oturum)	Sınav kaygısı envanteri
Kontrol grubu	Sınav kaygısı envanteri	-----	Sınav kaygısı envanteri

2.2.1.Verilerin toplanması

Ülkemizde Sınav kaygısı envanterinin ilk geliştirilme cabaları Boğaziçi Üniversitesinde yapılan bir yüksek lisans tezi çalışması ile başlamıştır. (Yurdabakan,1999)

Bu araştırmada, öğrencilerin sınav kaygı düzeylerini belirlemek için ilk-test ve son-test olarak orijinali Spielberger tarafından 1980’lerde geliştirilen ve maddelerin Türkçeye çevrilmiş ve uyarlanmış (1990) olan sınav kaygısı envanteri uygulanmıştır.

Envanter sınav ve sınamayla ilgili olumsuz duygu ve düşünceleri ölçmeyi amaçlayan bir ölçektir. Toplam 50 madde ve 7 faktörden oluşmaktadır.

Faktörler “Başkalarının sizi nasıl gördüğü ile ilgili endişeler”, “Kendinizi nasıl gördüğünüzle ilgili endişeler”, “Gelecekle ilgili endişeler”, “Yeterince hazırlanamamakla ilgili endişeler”, “Bedensel tepkiler”, “Zihinsel tepkiler” ve “Genel sınav kaygısı” olarak 7 bölüme ayrılmaktadır.

2.2.1.1. Sınav kaygısı envanteri (Spielberger)

Sınav kaygısı envanteri (SKE), Spielberger ve bir grup doktora öğrencisi tarafından Güney Florida Üniversitesinde, 1974-1979 tarihleri arasında gerçekleştirilen, beş yıllık bir araştırmanın ürünüdür. İlk kez el kitabıyla birlikte 1980 yılında yayımlanmıştır.

Spielbergerin Sınav kaygısı envanteri (SKE), bireylerin kendi kendilerini değerlendirmelerini esas alan bir psikometrik ölçektir. Belirli duruma özgü bir kişilik boyutu olan sınav ya da değerlendirme kaygısını ölçmek amacıyla geliştirilmiştir. Kavramlaştırılması (kuramsal algılanışı) ve yapısı yönüyle, gençlerde ve yetişkinlerde genel kaygıya yakınlığı belirleyen Spielberger Durumluk-Sürekli Kaygı Envanteri Sürekli Kaygı Ölçeğine çok benzemektedir. Ülkemizde yaygın olduğu izlenimi veren sınav kaygısının ve kaygı düzeyinin saptanabilmesi için Türkçeye uyarlanmış olan bu envanter, Liebert ve Morrisin (1967) önerilerinden yararlanılmıştır. (Yurdabakan,1999)

2.2.2.Grup rehberliği programı

2.2.2.1.Programın hazırlanması

Deney grubu envanter sonuçlarına göre seçildikten sonra rehberlik programının amacını ve içeriğini oluşturmak için sınav kaygısı ile ilgili kaynaklar ve araştırmalar yapılmış, baş etme yöntemleri ve amaca ulaşmak için oturumlar süresince izlenecek yollar planlanmıştır. Grup rehberliğinin gidişatı grup dinamiğine göre şekillenebileceği göz önünde bulundurularak oturumların esnek ve planın tam olarak istenilen süreye uygulanmadığı görülmüştür. Grup rehberliğinin amaçları ve içeriği kısaca şöyle ifade edilebilir:

- 1.Oturum: Grup rehberliğinin amacını ve uygulamadan bahsedilmesi. Grupta uyulması gereken Kuralların oluşturulması. Sınav kaygısı nedir sorusuna öğrencilerle birlikte yanıt bulma
- 2.Oturum: Kaygıyı azaltma ve bedeni kontrol etmenin öneminin konuşulması. Gevşeme ve nefes egzersizleri yöntemlerin kullanımı.
- 3.Gergin ve Gevşemiş insan arasındaki farkın tartışılması ve yorumlanması
- 4.Zamanı etkili kullanma konusu sözel fikirlerin oluşturulması. Sınav kaygısının davranışsal bilişsel ve duyuşsal yönlerini tanıtmak. Hayatla ilgili yapmak istedikleri hedefleri uzun orta ve kısa dönem planı olarak hazırlama yöntemi hakkında bilgilendirme
- 5.Çalışma ortamının hazırlanışı ve etkin çalışma biçimlerinin öğretilmesi. Sınav alma becerilerinde önemli noktaların hatırlanması ve başarıya ulaşmış öğrencilerin yorumlarıyla düzenleme yapma
- 6.Zihinsel olumlu düşünmeyi sürdürmenin önemi konusunda bilinçlendirilmelerinin sağlanması.
- 7.Oturumlar hakkında genel bir değerlendirmenin yapılması ve amaçlara ulaşıp ulaşılmadığının kontrol edilmesi.

2.2.2.2. Programın uygulanması

Grup rehberliği programı Sakarya/Hendek Atike Hanım Anadolu Lisesi onbir E sınıfı öğrencilerine uygulanmıştır. Toplam 25 öğrenciden oluşan deney grubu 2017 Mart ayında başlamış olan ve Nisan ayında sonlanan program, 50 dakikalık oturumlar halinde ve 7 hafta sürmüştür. Program kendi sınıflarında okul müdürünün de bilgisi ve müsaadesiyle sınıfın ders dışındaki saatlerine göre ayarlanmıştır.

2.2.2.3. Kullanılan teknikler

Grup rehberliği programının uygulanmasında öğrencilerin bilgilendirilmesi, bilgilerin grupça tartışılması ve tecrübelerin paylaşılmasını sağlanmış, bilişsel ve davranışsal tekniklere ve ev ödevlerine yer verilmiştir.

Bu araştırmada ilk aşamada deney grubunda bulunan öğrencilerin ilk-test ve son-test bulgularında sınav kaygı düzeyinin hiç olmaması, orta ve yüksek düzeydeki puanları arasındaki fark araştırılmıştır. Aynı işlem kontrol grubunda bulunan öğrencilerin ilk-test ve son-test puanları tespit edilmiştir. Veriler öğrenci sayısının azalması ve yükselmesine göre, yedi ayrı sınav kaygı faktörüne göre yorumlanacaktır. Faktörler öğrencilerin başkalarının görüşlerinden etkilenmeleri, kendi görüşlerinin etkisi, gelecekle ilgili kaygıları, bedensel tepkiler, zihinsel tepkiler ve genel sınav kaygısı olarak kategorize edilmiş ve öğrencilerin cevaplarına göre bulgular elde edilmiştir.

Deney grubu öğrencileriyle kontrol grubu öğrencilerin ilk-test ve son-test puanları arasındaki farkların önemliliği için yapılan istatistiksel çözümlemeler araştırmanın ilk hipotezini test etmesi amaçlamaktadır. Hipotezde, deney grubu öğrencilerinin ilk-test ve son-test puanları ortalamaları arasındaki farkın, kontrol grubu öğrencilerinin ilk-test ve son-test ortalamaları arasında önemli düzeyde fark olduğu düşünülmüştür.

Cinsiyete göre kadın ve erkek arasında sınav kaygısı ile yapılan teste anlamlı bir ilişki olup olmadığını test etmek amacıyla yapılan işlemlerde, ilk önce grup rehberliği alan kız ve erkek öğrencilerin ilk-test ve son-test puanları ve grup rehberliği almayan kız ve erkek öğrencilerin puanları ortalamaları arasındaki farkın önemliliği ‘t’ istatistiği ile test edilmiş ve sonuçlar karşılaştırmalı değerlendirilmiştir.

3.1. Verilerin Analizi ve Değerlendirilmesi

3.1.1. Deney Grubu

Tablo 2: Deney grubunda bulunan öğrencilerin başkalarının görüşü ile ilgili kaygı düzeyi

Düzy	Başkalarının görüşü İlk-Test		Başkalarının görüşü Son-Test	
	Sayı	Yüzdelik	Sayı	Yüzdelik
Kaygı yok	4	22,2	10	55,6
Orta	5	27,8	4	22,2
Yüksek	9	50,0	4	22,2
Toplam	18	100,0	18	100,0

Tablo 2’de görüldüğü gibi deney grubunda bulunan öğrencilerin başkalarının görüşü ile ilgili kaygı düzeyindeki ilk-test ve son-test puanları arasında anlamlı bir ilişki söz konusudur. İlk-test bulgularında başkalarının görüşü ile ilgili kaygısı hiç olmayan öğrenci sayısı 4 iken grup rehberliği çalışmasından sonra uygulanan son-test verilerine göre sınav kaygısı olmayan öğrenci sayısının 10’ a çıktığını göstermektedir. Tablodaki bulgular sınav kaygısının orta düzeyinde 5 iken 4’e Yüksek düzeydeki öğrencilerin ise 9’dan 4 öğrenciye düştüğünü göstermektedir.

Tablo 3: Deney grubunda bulunan öğrencilerin kendilerinin görüşü ile ilgili kaygı düzeyi

Düzy	Kendi görüşü İlk-Test		Kendi görüşü Son-Test	
	Sayı	Yüzdelik	Sayı	Yüzdelik
Kaygı yok	7	38,9	9	50,0
Orta	7	38,9	5	27,8
Yüksek	4	22,2	4	22,2
Toplam	18	100,0	18	100,0

Tablo 3’deki veriler incelendiğinde deney grubunda bulunan öğrencilerin kendilerinin görüşü ile ilgili kaygı düzeyindeki ilk-test ve son-test puanları arasında anlamlı bir ilişki söz konusu olduğu görülmektedir. İlk-test bulgularında kendi görüşleri ile ilgili kaygısı hiç olmayan öğrenci sayısı 7 iken grup rehberliği çalışmasından

sonra uygulanan son-test verilerine göre sınav kaygısı olmayan öğrenci sayısının 9' a çıktığını göstermektedir. Tablodaki bulgular sınav kaygısının orta düzeyinde 7 iken 5'e düştüğünü ve yüksek düzeydeki öğrencilerin ise 4 öğrenci olarak aynı kaldığını göstermektedir.

Tablo 4: Deney grubunda bulunan öğrencilerin gelecekle ilgili görüşlerinin kaygı düzeyi

Düzye	Gelecekle ilgili İlk-Test		Gelecekle ilgili Son-Test	
	Sayı	Yüzdelik	Sayı	Yüzdelik
Kaygı yok	1	5,6	1	5,6
Orta	8	44,4	8	44,4
Yüksek	9	50,0	9	50,0
Toplam	18	100,0	18	100,0

Tablo 4'e bakıldığında deney grubunda bulunan öğrencilerin gelecekle ilgili görüşlerinin kaygı düzeyindeki ilk-test ve son-test puanları arasında anlamlı bir ilişki bulunamamıştır. İlk-test bulgularında gelecekle ilgili kaygısı hiç olmayan öğrenci sayısı 1 iken grup rehberliği çalışmasından sonra uygulanan son-test verilerine göre sınav kaygısı olmayan öğrenci sayısının yine 1 olarak kaldığını göstermektedir. Tablodaki bulgular sınav kaygısının orta düzeyinde 8 iken yine 8 olarak kaldığı ve yüksek düzeyinde 9 iken yine 9 öğrenci olarak kaldığını göstermektedir.

Tablo 5: Deney grubunda bulunan öğrencilerin sınava hazırlanmak ile ilgili kaygı düzeyi

Düzye	Hazırlanmakla ilgili İlk-Test		Hazırlanmakla ilgili Son-Test	
	Sayı	Yüzdelik	Sayı	Yüzdelik
Kaygı yok	6	33,3	7	38,9
Orta	4	22,2	9	50,0
Yüksek	8	44,4	2	11,1
Toplam	18	100,0	18	100,0

Tablo 5'de görüldüğü gibi deney grubunda bulunan öğrencilerin sınava hazırlanmak ile ilgili kaygı düzeyindeki ilk-test ve son-test puanları arasında anlamlı bir ilişki söz konusudur. İlk-test bulgularında sınava hazırlanmak ile ilgili kaygısı hiç olmayan öğrenci sayısı 6 iken grup rehberliği çalışmasından sonra uygulanan son-test verilerine göre sınav kaygısı olmayan öğrenci sayısının 7'e çıktığını göstermektedir. Tablodaki bulgular sınav kaygısının orta düzeyinde 4 iken 9'a yükseldiği, Yüksek düzeydeki öğrencilerin ise 8'den 2 öğrenciye düştüğünü göstermektedir.

Tablo 6: Deney grubunda bulunan öğrencilerin bedensel tepkiler ile ilgili kaygı düzeyi

Düzye	Bedensel tepkiler İlk-Test		Bedensel tepkiler Son-Test	
	Sayı	Yüzdelik	Sayı	Yüzdelik
Kaygı yok	7	38,9	12	66,7
Orta	5	27,8	3	16,7
Yüksek	6	33,3	3	16,7
Toplam	18	100,0	18	100,0

Tablo 6'da görüldüğü gibi deney grubunda bulunan öğrencilerin bedensel tepkiler ile ilgili kaygı düzeyindeki ilk-test ve son-test puanları arasında anlamlı bir ilişki söz konusudur. İlk-test bulgularında bedensel tepkileri hiç olmayan öğrenci sayısı 7 iken grup rehberliği çalışmasından sonra uygulanan son-test verilerine göre sınav

kaygısı olmayan öğrenci sayısının 12' e çıktığını göstermektedir. Tablodaki bulgular sınav kaygısının orta düzeyinde 5 iken 3'e, Yüksek düzeydeki öğrencilerin ise 6'dan 3 öğrenciye düştüğünü göstermektedir.

Tablo 7: Deney grubunda bulunan öğrencilerinin zihinsel tepkiler ile ilgili kaygı düzeyi

Düzy	Zihinsel Tepkiler İlk-Test		Zihinsel Tepkiler Son-Test	
	Sayı	Yüzdelik	Sayı	Yüzdelik
Kaygı yok	1	5,6	4	22,2
Orta	11	61,1	10	55,6
Yüksek	6	33,3	4	22,2
Toplam	18	100,0	18	100,0

Tablo 7’de görüldüğü gibi deney grubunda bulunan öğrencilerinin zihinsel tepkiler ile ilgili kaygı düzeyindeki ilk-test ve son-test puanları arasında anlamlı bir ilişki söz konusudur. İlk-test bulgularında zihinsel tepkileri hiç olmayan öğrenci sayısı 1 iken grup rehberliği çalışmasından sonra uygulanan son-test verilerine göre sınav kaygısı olmayan öğrenci sayısının 4’ e çıktığını göstermektedir. Tablodaki bulgular sınav kaygısının orta düzeyinde 11 iken 10’a, Yüksek düzeydeki öğrencilerin ise 6’dan 4 öğrenciye düştüğünü göstermektedir.

Tablo 8: Deney grubunda bulunan öğrencilerin genel sınav kaygı düzeyi

Düzy	Genel Sınav kaygısı İlk-Test		Genel sınav kaygısı Son-Test	
	Sayı	Yüzdelik	Sayı	Yüzdelik
Kaygı yok			1	5,6
Orta	10	55,6	9	50,0
Yüksek	8	44,4	8	44,4
Toplam	18	100,0	18	100,0

Tablo 8’e bakıldığında deney grubunda bulunan öğrencilerin genel sınav kaygı düzeyindeki ilk-test ve son-test puanları arasında anlamlı bir ilişki söz konusudur. İlk-test bulgularında genel sınav kaygısı hiç olmayan öğrenci sayısı 0 iken grup rehberliği çalışmasından sonra uygulanan son-test verilerine göre sınav kaygısı olmayan öğrenci sayısının 1’ e çıktığını göstermektedir. Tablodaki bulgular sınav kaygısının orta düzeyinde 10 iken 9’a düştüğünü ve yüksek düzeydeki öğrencilerin ise 8 iken yine 8 öğrenci olarak aynı kaldığını göstermektedir.

3.1.2.Kontrol Grubu

Tablo 9: Kontrol grubunda bulunan öğrencilerin başkalarının görüşü ile ilgili kaygı düzeyi

Düzy	Başkalarının görüşü İlk-Test		Başkalarının görüşü Son-Test	
	Sayı	Yüzdelik	Sayı	Yüzdelik
Kaygı yok	9	50,0	9	50,0
Orta	3	16,7	2	11,1
Yüksek	6	33,3	7	38,9
Toplam	18	100,0	18	100,0

Tablo 9’da görüldüğü gibi kontrol grubunda bulunan öğrencilerin başkalarının görüşü ile ilgili kaygı düzeyindeki ilk-test ve son-test puanları arasında anlamlı bir ilişki söz konusu değildir. İlk-test bulgularında başkalarının görüşü ile ilgili kaygısı hiç olmayan öğrenci sayısı 9 iken son-test bulgularına göre sınav kaygısı olmayan öğrenci sayısının 9 olarak aynı kaldığını ve değişmediğini göstermektedir. Tablodaki bulgular sınav kaygısının orta düzeyinde 3 iken 2’e düştüğünü ve Yüksek düzeydeki öğrencilerin 6’dan 7 öğrenciye yükseldiğini göstermektedir.

Tablo 10: Kontrol grubunda bulunan öğrencilerin kendi görüşü ile ilgili kaygı düzeyi

Düzy	Kendi görüşü İlk-Test		Kendi görüşü Son-Test	
	Sayı	Yüzdelik	Sayı	Yüzdelik
Kaygı yok	10	55,6	10	55,6
Orta	5	27,8	5	27,8
Yüksek	3	16,7	3	16,7
Toplam	18	100,0	18	100,0

Tablo 10'da görüldüğü gibi kontrol grubunda bulunan öğrencilerin kendi görüşü ile ilgili kaygı düzeyindeki ilk-test ve son-test puanları arasında anlamlı bir ilişki söz konusu değildir. İlk-test bulgularında kendi görüşü ile ilgili kaygısı hiç olmayan öğrenci sayısı 10 iken son-test bulgularına göre sınav kaygısı olmayan öğrenci sayısının 10 olarak aynı kaldığını ve değişmediğini göstermektedir. Tablodaki bulgular sınav kaygısının orta düzeyinde 5 iken 5 olarak kaldığını ve Yüksek düzeydeki öğrenciler 3 iken aynı sayıda kaldığını göstermektedir.

Tablo 11: Kontrol grubunda bulunan öğrencilerin gelecekle ilgili görüşü ile ilgili kaygı düzeyi

Düzy	Gelecekle ilgili İlk-Test		Gelecekle ilgili Son-Test	
	Sayı	Yüzdelik	Sayı	Yüzdelik
Kaygı yok	2	11,1	2	11,1
Orta	11	61,1	8	44,4
Yüksek	5	27,8	8	44,4
Toplam	18	100,0	18	100,0

Tablo 11'de görüldüğü gibi kontrol grubunda bulunan öğrencilerin gelecekle ilgili görüşü ile ilgili kaygı düzeyindeki ilk-test ve son-test puanları arasında anlamlı bir ilişki söz konusu değildir. İlk-test bulgularında gelecekle ilgili kaygısı hiç olmayan öğrenci sayısı 2 iken son-test bulgularına göre sınav kaygısı olmayan öğrenci sayısının 2 olarak aynı kaldığını ve değişmediğini göstermektedir. Tablodaki bulgular sınav kaygısının orta düzeyinde 11 iken 8'e düştüğünü ve Yüksek düzeydeki öğrencilerin 5'den 8 öğrenciye yükseldiğini göstermektedir.

Tablo 12: Kontrol grubunda bulunan öğrencilerin hazırlanmak ile ilgili kaygı düzeyi

Düzy	Hazırlanmakla ilgili İlk-Test		Hazırlanmakla ilgili Son-Test	
	Sayı	Yüzdelik	Sayı	Yüzdelik
Kaygı yok	6	33,3	6	33,3
Orta	5	27,8	8	44,4
Yüksek	7	38,9	4	22,2
Toplam	18	100,0	18	100,0

Tablo 12'de görüldüğü gibi kontrol grubunda bulunan öğrencilerin hazırlanmak ile ilgili kaygı düzeyindeki ilk-test ve son-test puanları arasında anlamlı bir ilişki söz konusu değildir. İlk-test bulgularında hazırlanmakla ilgili kaygısı hiç olmayan öğrenci sayısı 6 iken son-test bulgularına göre sınav kaygısı olmayan öğrenci sayısının 6 olarak aynı kaldığını ve değişmediğini göstermektedir. Tablodaki bulgular sınav kaygısının orta düzeyinde 5 iken 8'e yükseldiğini ve Yüksek düzeydeki öğrencilerin 7'den 4 öğrenciye düştüğünü göstermektedir.

Tablo 13: Kontrol grubunda bulunan öğrencilerin bedensel tepkiler ile ilgili kaygı düzeyi

Düzy	Bedensel tepkiler İlk-Test		Bedensel tepkiler Son-Test	
	Sayı	Yüzdelik	Sayı	Yüzdelik
Kaygı yok	10	55,6	9	50,0
Orta	3	16,7	4	22,2
Yüksek	5	27,8	5	27,8
Toplam	18	100,0	18	100,0

Tablo 13’de görüldüğü gibi kontrol grubunda bulunan öğrencilerin bedensel tepkiler ile ilgili kaygı düzeyindeki ilk-test ve son-test puanları arasında anlamlı bir ilişki söz konusu değildir. İlk-test bulgularında bedensel tepkileri hiç olmayan öğrenci sayısı 10 iken son-test bulgularına göre sınav kaygısı olmayan öğrenci sayısının 9’a düştüğünü göstermektedir. Tablodaki bulgular sınav kaygısının orta düzeyinde 3 iken 4’e yükseldiğini ve Yüksek düzeydeki öğrenciler 5 iken 5 öğrenci olarak aynı kaldığını göstermektedir.

Tablo 14: Kontrol grubunda bulunan öğrencilerin zihinsel tepkiler ile ilgili kaygı düzeyi

Düzy	Zihinsel Tepkiler İlk-Test		Zihinsel Tepkiler Son-Test	
	Sayı	Yüzdelik	Sayı	Yüzdelik
Kaygı yok	2	11,1	4	22,2
Orta	9	50,0	7	38,9
Yüksek	7	38,9	7	38,9
Toplam	18	100,0	18	100,0

Tablo 14’de görüldüğü gibi kontrol grubunda bulunan öğrencilerin zihinsel tepkiler ile ilgili kaygı düzeyindeki ilk-test ve son-test puanları arasında anlamlı bir ilişki söz konusu değildir. İlk-test bulgularında zihinsel tepkileri hiç olmayan öğrenci sayısı 2 iken son-test bulgularına göre sınav kaygısı olmayan öğrenci sayısının 4’e yükseldiğini göstermektedir. Tablodaki bulgular sınav kaygısının orta düzeyinde 9 iken 7’e düştüğünü ve Yüksek düzeydeki öğrenciler 7 iken 7 öğrenci olarak aynı kaldığını göstermektedir.

Tablo 15: Kontrol grubunda bulunan öğrencilerin genel sınav kaygısı ile ilgili kaygı düzeyi

Düzy	Genel Sınav kaygısı İlk-Test		Genel sınav kaygısı Son-Test	
	Sayı	Yüzdelik	Sayı	Yüzdelik
Kaygı yok	3	16,7	3	16,7
Orta	4	22,2	5	27,8
Yüksek	11	61,1	10	55,6
Toplam	18	100,0	18	100,0

Tablo 15’de görüldüğü gibi kontrol grubunda bulunan öğrencilerin genel sınav kaygısı ile ilgili kaygı düzeyindeki ilk-test ve son-test puanları arasında anlamlı bir ilişki söz konusu değildir. İlk-test bulgularında genel sınav kaygısı hiç olmayan öğrenci sayısı 3 iken son-test bulgularına göre sınav kaygısı olmayan öğrenci sayısının 3 olarak aynı kaldığını göstermektedir. Tablodaki bulgular sınav kaygısının orta düzeyinde 4 iken 5’e yükseldiğini ve Yüksek düzeydeki öğrenciler 11 iken 10 öğrenciye düştüğünü göstermektedir.

Tablo 16: Deney grubu öğrencileri ile Kontrol grubu öğrencilerinin İlk-Test ve Son-Test puanlarına ilişkin karşılaştırmalı bulgular**Kontrol grubu**

	Başkalarının		Kendinin		Gelecek		Hazırlık		Bedensel		Zihinsel		Genel	
	İlk	Son	İlk	Son	İlk	Son	İlk	Son	İlk	Son	İlk	Son	İlk	Son
Kaygı Yok	9	9	10	10	2	2	6	6	10	9	2	4	3	3
Orta	3	2	5	5	11	8	5	8	3	4	9	7	4	5
Yüksek	6	7	3	3	5	8	7	4	5	5	7	7	11	10
toplam	18	18	18	18	18	18	18	18	18	18	18	18	18	18

Deney grubu

	Başkalarının		Kendinin		Gelecek		Hazırlık		Bedensel		Zihinsel		Genel	
	İlk	Son	İlk	Son	İlk	Son	İlk	Son	İlk	Son	İlk	Son	İlk	Son
Kaygı Yok	4	10	7	9	1	1	6	7	7	12	1	4	10	1
Orta	5	4	7	5	8	8	4	9	5	3	11	10	8	9
Yüksek	9	4	4	4	9	9	8	2	6	3	6	4	18	8
toplam	18	18	18	18	18	18	18	18	18	18	18	18	13	18

Tablo 16'daki bulgulara göre, grup rehberliğine katılan deney grubu öğrencilerinin grup rehberliğinden sonra sınav kaygı puanlarının düştüğü net olarak görülmektedirken, grup rehberliğine katılmayan kontrol grubu öğrencilerinin sınav kaygı puanlarının çok az düştüğü yada aksine çıktığı bulunmuştur. Bu durumda, ilk-test puanlarına göre son-test puanlarında gözlenen düşüş, kontrol grubu öğrencilerine göre deney grubu öğrencilerinde daha fazladır. Verilere bakıldığında, deney grubundaki ilk-test ve son-test arasındaki büyük fark grup rehberliği çalışmalarının sınav kaygısını azaltmada etkili olduğunu açıklamakta. Kontrol grubu öğrencileri ile Grup rehberliğinin uygulandığı deney grubu öğrencilerinin sınav kaygı düzeyleri arasında istatistiksel olarak anlamlı bir farkın olduğunu doğrulamaktadır.

Tablo 17: Grup rehberliği alan (Deney) ve Grup rehberliği almayan (Kontrol) kız ve erkek öğrencilerin İlk-Test ve Son-Test Puanları ortalamalarının karşılaştırılması

		İLK-TEST			SON-TEST		
		N	Mean	Std. Deviation	N	Mean	Std. Deviation
DENEY	Kız	13	16,7692	2,42053	13	14,8462	3,99679
	Erkek	5	11,6000	2,79285	5	9,8000	1,09545
KONTROL	Kız	14	2,0816	,60014	14	2,0612	,64308
	Erkek	4	1,7857	,68512	4	1,8214	,57588

Tablo 17'de görüldüğü gibi, deney grubunda bulunan kız öğrencilerin ilk-test puanları ortalaması 16,76 iken son-test puanları ortalaması 14,84'e düşmüştür. Deney grubunda bulunan erkek öğrencilerin ise ilk-test puanları ortalaması 11,60 iken son-test puanları ortalaması 9,80 olarak bulunmuştur. Yapılan araştırma sonucunda sınav kaygı düzeyinin erkeklere kıyasla kız öğrencilerde daha yüksek olduğu görülmektedir.

Yine aynı işlem, kontrol grubunda bulunan kız ve erkek öğrencilerinde uygulandığında, kız öğrencilerin ilk-test puanları ortalaması 2,08 iken son-test puanları ortalaması 2,06 olarak görülmektedir. Kontrol grubunda bulunan erkek öğrencilerin ise ilk-test puanları ortalaması 1,78 iken son-test puanları ortalaması 1,82 olarak görülmektedir. Kontrol grubunda yapılan çalışmada kız öğrencilerin ilk-test ve son-test arasındaki puan farkında çok az bir düşüş izlenmektedir. Erkek öğrencilerde ise ilk-test ve son-test arasındaki farkta son-test puanlarının çıktığı yani kaygının arttığı görülmektedir.

İstatistiklere göre bu bulgular "grup rehberliği" çalışmasına katılan kız ve erkek öğrencilerin sınav kaygı düzeylerinin, katılmayan kız ve erkek öğrencilere göre daha düşük olduğunu göstermektedir.

Ayrıca her iki grubun değerlendirmesinden anlaşıldığı üzere kadınların erkeklere göre sınav kaygısı düzeyinin daha yüksek olduğudur.

Bu bulgular grup rehberliği programının kız ve erkek öğrencilerde etkili olduğunu göstermektedir bu nedenle her iki cinsiyete göre yapılmış olan grup rehberliğinin, bilişsel terapi tekniklerinin, sınav alma becerilerinin, gevşeme egzersizlerinin ve sınav kaygısını azaltmada etkili olan tekniklerin kullanımıyla, sınav kaygısını düzeyinde etkili olduğunu doğrulamış bulunmaktadır. Fakat hangi cinsiyete göre daha etkin işlediği konusu merak uyandırmakta olup ayrıca bir çalışma tavsiye edilebilmektedir.

Özetle grup rehberliği okullarda rehber öğretmenler tarafından her seviyeye göre, yıl içerisinde mutlaka uygulamaya geçirilmesi yararlı olacaktır. Kişinin Sınav kaygısında başa çıkma yöntemlerini, kaygı ve strese yol açan faktörleri kontrol edebilmesi ve olumsuz duygulara yoğunlaşmamayı engelleyebilmesi gibi becerilerin öğretilmesiyle daha iyi başarılar ve sonuçlar elde edebileceği gibi yaşamını daha uyumlu ve kaliteli halde devam ettirebilecektir. Bu durum bireyin hayat kalitesini artıracak gibi okulların da genel başarı düzeyini yüksek tutma hedeflerinde de fayda sağlayacaktır.

4.SONUÇ ve ÖNERİLER

Eğitim sisteminde uygulanan sınavların önem derecesi yüksek olması ve öğrenci üzerinde artan baskı nedeniyle sınav kaygısının yaygınlığı artabilmektedir.

Araştırma sonuçlarına dayanarak, Lise düzeyinde öğrencilerin sınav kaygılarının çoğu öğrencide yüksek ve orta derecede olduğu görülmüştür. Bu sonuçlara göre sınav kaygısının başarılarını olumsuz yönde etkilediğini de var sayılabilir. Bu çalışmada uygulanan grupların öncelikle sınav kaygılarının olup olmadığı incelenmiştir ve Grup rehberliğinin uygulandığı deney grubunda değişiklikler tekrar ölçümlenmiştir. Grup rehberliğinin uygulandığı sınıfta sınav kaygısına ilişkin sonuçların değiştiği kaydedilmiştir. Grup rehberliği, sınav kaygı düzeylerini azaltmada diğer öğrencilere göre daha fazla etkili olmuştur. Sınav kaygı düzeylerinde düşme gözlenen bu öğrencilerin sonraki dönemlerdeki sınav başarıları izlenerek farklı araştırmalar yapılabilir.

Grup rehberliği programı, çalışmaya katılan Lise on birinci sınıf öğrencilerinin sınav kaygı düzeylerini azaltmada etkili bir yöntem olduğu bu çalışmayla doğrulandığı söylenebilir.

Elde edilen sonuçlara göre kız öğrencilerin sınav kaygısı erkek öğrencilere göre daha yüksektir. Ayrıca grup rehberliği programı erkek ve kız öğrencilerin sınav kaygı düzeylerini azaltmada etkili olmuştur. Ancak cinsiyete göre daha etkili olup olmadığı bu çalışmada merak uyandırmış fakat ölçümlenememiştir. Araştırmayı daha geniş ele almak isteyen PDR alanındaki araştırmacılara araştırmanın problemi olarak fikir oluşturabilir.

Grup rehberliği programının sınav kaygısı üzerindeki etkisi, sadece Lise düzeyi değil ilköğretim ve üniversite düzeyindeki öğrenciler üzerinde de incelenebilir.

Okullarda görev yapan rehber öğretmenler, öğrencilerin sınav kaygı düzeylerini azaltma konusunda bu çalışmada denenmiş olan Grup rehberliği çalışmasını, içeriğinin geliştirilmiş yada değiştirilmiş programı ile yararlanabilirler.

Bu çalışmada, sınav kaygı düzeyinde azalma gözlenmiş olmasına rağmen beklenenin altında bir düşüş olduğu görülmüştür. Bu durumun Grup rehberliği oturumlarının az ve kısa süreli olmasından dolayı olduğu kanaatine varılmaktadır. Benzeri konuda araştırma yapacak olan sonraki araştırmacılar, oturum sürelerini ve oturumları daha uzun tutmaları tavsiye edilir.

Uygulamanın gözlenebilir olması için ve öğrencilerin sınav almalarından sonra Son-test uygulaması yapılmasına dikkat edilebilir. Son test uygulamasının okulun kapanmasına yakın bir tarihe denk gelmemesi için, grup rehberliği programının birinci dönemin ilk iki ayı içerisinde yapılması daha uygun olacaktır.

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PECULIARITIES OF THE INFORMATION STRUCTURE OF WRITTEN DISCOURSE AND ITS USE IN FLT CLASSROOM

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ABSTRACT

This paper is a report on the findings on the topic of peculiarities of the information structure of written discourse especially in the context of investigating the developing and using discourse competence in the FLT classroom. A short analysis of syntactic peculiarities of the information structure is given. Authors come to the conclusion that written discourse makes use of a variety of syntactic structures. The investigation of forms of providing discourse competence in the FLT classroom were demonstrated. The direct relationship among the three concepts as only through the use of texts skills can be integrated and only through an integrated, holistic approach to text can we develop the discourse competence in the classroom.

INTRODUCTION

Studying the ways people communicate is a very complex matter because it entails various aspects of different disciplines. Aspects of media use may also be involved as well as social and psychological dimensions. The different factors of grounding, the participants of the communication and the setting have to be considered as well as the dimensions of cognitive frames and idealized cognitive models, which language users have internalized. These complex phenomena have been the concern of discourse analysis for the past five decades. The different approaches and perspectives adopted to study human communication make it difficult to present an exact definition of discourse analysis and clear understanding what discourse, discourse analysis and its peculiarities are. In everyday language, the word *discourse* usually means conversation or discussion. However, scholars mean that discourse is far more than this. Discourse can provide all forms of communication. In general, discourse theory is concerned with human expressions, often in the form of language. It demonstrates the links such expressions and human knowledge. A shared argument is that the things people say or write draw from a pool of generally accepted knowledge in a society, while at the same time feeding back into society to shape or reinforce such knowledge. The term “discourse analysis” has come to be used with a wide range of meanings which cover a wide range of activities. It is used to describe activities at the intersection of disciplines as diverse as sociolinguistics, psycholinguistics, philosophical linguistics and computational linguistics. Scholars working centrally in these different disciplines tend to concentrate on different aspects of discourse. Identifying and analyzing structural peculiarities of the information structure of written discourse, especially the peculiarities of theme and rheme, we can go into the question of discourse competence in the classroom and the ways, how it can be developed and used in FLT classroom.

THE STUDY

Nowadays, discourse analysis is used as one of the instrument which helps the scholar to take into account the information hidden in both written and oral texts. First of all, it is necessary to understand what discourse is and how linguists are defining it. Discourse is the creation and organization of the segments of a language above as well as below the sentence. It is segments of language which may be bigger or smaller than a single sentence but the added meaning is always beyond the sentence. T. A. van Dijk says that “discourse is generally understood as text in social environments. Relations between sentences in a discourse cannot be described in semantic terms alone” (Van Dijk, 1977, p. 80). The later approaches to the discourse of Cook defines discourse as “*language in use, for communication*” (Cook, 1989). It shows us that discourse cannot be classified as a description of linguistic forms independent of the purposes/functions which they are designed to serve. Also one of the important definitions of the discourse is definition given by D.Schiffrin that “*discourse is utterances*” (Schiffrin, 1994). Discourse is seen as a linguistic construction that is larger than other units of language. In other words, the utterance (not the sentence) is positioned as the smallest unit, of which discourse is comprised, meaning that discourse arises as a collection of inherently contextualized units of language use. Summarizing the above, it is necessary to say that discourse cannot be confined to any boundaries. These varieties of discourse definitions are the best proof for the describing discourse as the expression of thought through language. The study of naturally occurring connected sentences, spoken or written, is one of the most promising and rapidly developing areas of modern linguistics.

Also it is important to mention the differences in linguists' views on a question if definition of discourse is similar with the definition of the text. Actually, we can provide the information about the division linguists into two groups where one group of linguists gives us the idea that discourse can be described as a similar with text object and the second group is positioning the opinion that meaning of the discourse can be separated with the meaning of the text. According to Matthews, discourse is "any coherent succession of sentences, spoken or written" (Matthews, 2005). This definition of the term "discourse" has no clearly meaning if discourse is the text or not, however the Matthews was trying to position discourse as a written sentences that are connected one by one with its own meaning. Here is clearer position: "discourse is the text but that type of text that consists of communicative language units – sentences and its constructions with continuous semantic relations" (Thornton, 2008). This definition that was given by a group of linguists show us the new way of understanding the discourse as a text demonstrating it as a unique and separate type of text. The definition "discourse is the logically created text that exists in concrete context" shows us the varieties of usage of discourse in concrete context and situation. And the last found definition "discourse is a random text unit that consists of more than one sentence" (Coulthard, 1985) makes the shortest clear understanding of a discourse in the opportunity of being similar as a text. However, as we had mentioned before, the second group of linguists shows us the differences between text and discourse. Let's start this part with the definition of discourse given by Stubbs: "Discourse is language above the sentence or above the clause" (Stubbs, 1983, p. 149). It means that discourse can be shown just as a sentence or clause because of its wideness. Harris claimed explicitly that discourse is the next level in a hierarchy of morphemes, clauses and sentences. He also argued that what opposes discourse to a random sequence of sentences is precisely the fact that it has structure. Van Dijk distinguishes basically between common sense-definitions and theoretically elaborated definitions of discourse. While "discourse" is synonymous to social or institutional language use in everyday speech, theoretical definitions cover over three dimensions of communicative events: language use, communication of opinions and cognition, interaction. Habermas was positioning the "discourse as processes of argumentation and dialogue in which the claims implicit in the speech act are tested for their rational justifiability as true, correct or authentic" (Habermas, 1981, p. 243). On the other hand, Salkie does not differentiate between text and discourse at all: "A text, or discourse is a stretch of language that may be longer than one sentence. Thus text and discourse analysis is about how sentences combine to form texts" (Salkie, 1995, p. 53). Summarizing the above, text can refer to any written material that can be read, but discourse is the use of language in a social context; also, text can be defined as an object that can be read, whether it is a work of literature, a lesson written on the blackboard, or a street sign, but discourse was first interpreted as dialogue – an interaction between a speaker and a listener, however, text usually refers to the written material, but discourse referred to authentic daily communications, mainly oral, included in the wide communicative context.

However, our point is to discover the peculiarities of written discourse. Everyday people come into contact with written texts and interpret their meanings so as to get what they intend. We can never think of a literate man who never writes or tries to write something. Written discourse is not only permanent but also visible. An important consequence of this is that the writer may look over what he has already written, pause between each word with no fear of his interlocutor interrupting him. He may take his time in choosing a particular word, even looking it up in the dictionary if necessary. Written language makes possible the creation of literary works of art in ways comparable with the creation of paintings or sculpture. Speech, of course, retains functions which writing will never be able to fulfil, such as quick, direct communication with immediate feedback from the addressee. The speaker must monitor what it is that he has just said, and determine whether it matches his intentions, while he is uttering his current phrase and monitoring that, and simultaneously planning his next utterance and fitting that into the overall pattern of what he wants to say and monitoring, moreover, not only his own performance but its reception by his hearer. The view that written discourse and spoken discourse serve, in general, quite different functions in society has been forcefully propounded by scholars whose main interest lies in anthropology and sociology. Goody suggests that analytic thinking followed the acquisition of written language 'since it was the setting down of speech that enabled man clearly to separate words, to manipulate their order and to develop syllogistic forms of reasoning' (Goody, 1977, p. 178). But we cannot deny the fact that speech is an everyday activity for almost everyone, whereas written discourse may not be. Nor can we state that spoken and written discourse are not complementary in function and one is more important than the other.

In our research we were studying the peculiarities of written discourse and let's speak about the aforementioned definitions as an important point of written discourse. The aforementioned definitions may be used as a starting point for discourse analysis, especially in case of syntactic peculiarities of the certain text, or set of texts which are presupposed by their discourse characteristics. Thus, in accordance with the approach manifested by Cook, it is possible to analyze the extracts from the book "The Help" by Kathryn Stockett. Syntax of the given text is very specific because it is based mostly on the syntax of Vernacular English i.e. English used by Afro-Americans in the frame of certain language community. E.g.: "Miss Leefolt seen me at it too. *She ain't but twenty-three years old and she like hearing herself tell me what to do; Miss Skeeter real tall and skinny. Her hair be yellow and cut short above her shoulders cause she get the frizz year round. She twenty-three or so, same as Miss Leefolt and the rest of em*". Here we can see various discourse characteristics of Vernacular English which will be perceived by the members of that language community whereas for recipients who are outside of it those peculiarities are not clear at all.

Moreover, such characteristics as compression of the text, omission of auxiliary verbs which are typical for that community can be treated as obstacles in the process of text perception by non-native speakers of English. E.g.: “Miss Leefolt *don’t pay but ninety-five cents an hour*, less than I been paid in years. But after Treelore died, I took what I could. Landlord wasn’t gone wait much longer. And even though it’s small, Miss Leefolt done the house up nice as she can”. For the recipient related to another culture such syntactic characteristics (which contain the important background information) are not familiar.

One of the most interesting points about the discourse is its information structure and its peculiarities based on the peculiarities of written and spoken discourse. Information structure satisfies two communicative goals: making the information conveyed by the discourse easier for the reader/hearer to understand and indicating what the enunciator considers to be the most important or salient items of information. Generally speaking the writer or speaker will place at the beginning of the clause what he is speaking about, the *theme*, which usually contains given elements, New elements of information concerning this theme will figure afterwards in the *rheme*. This can also be demonstrated on the basis of «The Help». Thus, in the emotional utterances given below we observe specific position of theme and rheme. E.g.: «My grass be kind a spotty and I still got a big yellow mark (rheme) where Treelore’s pickup sat for three months after the accident (theme). AROUND LUNCHTIME, when my stories come on tee-vee (rheme), it gets quiet out in the carport (theme)”.

The integration of the four skills in relation to texts, one of the basic tenets of modern language teaching, depends on the development of the discourse competence in the classroom. There is a direct relationship among the three concepts as only through the use of texts can we integrate skills and only through an integrated, holistic approach to text can we develop the discourse competence in the classroom. First, the discourse competence will be defined in relation to the most relevant models of the communicative competence. Second, a number of teaching procedures will be discussed to develop the discourse competence in FLT. Third, evaluation will be considered as an important aspect in the learning and teaching process, providing criteria and procedures to evaluate the discourse competence. Finally, some further issues related to the discourse competence will be studied which represent innovations for research and avant-garde language instruction. Goals, aims and objectives can help us make real the general purpose of language learning. In particular, that threefold distinction lies under the use of the communicative competence as the goal in language learning. Taking Chomsky’s dichotomy of “competence” and “performance”, language teaching theorists have defined competence as the main goal in language learning assuming that control of underlying rules of language is the basis of language performance (Chomsky, 1965, p. 39). “Competence” in the chomskian original referred to “linguistic competence”, a set of organized knowledge which consists of several sub-competences, the phonological, morphological, syntactic, semantic and lexical components (Belinchón, Mercedes, José Manuel Igoa y Ángel Rivière, 1994, p. 261).

FINDINGS

The discourse competence had to await until the communicative competence was broken into sub-competences to appear as a goal in FLT. However, there is not a total agreement about the analysis of the communicative competence. Munby defends a model with four distinct elements: “linguistic encoding”, “sociocultural orientation”, “sociosemantic basis of linguistic knowledge” and “discourse level of operation”(Munby, 1978, p. 70). One of the most relevant models of the communicative competence, Canale and Swain and Canale, took up this notion of communicative competence and distinguished four aspects of communicative competence: a. Grammatical or linguistic competence, which includes knowledge of the lexicon, syntax and semantics (mastery of language codes); b. Sociolinguistic competence, concerned with the appropriateness of communication depending on the context including the participants and the rules for interaction; c. Strategic competence, a set of strategies devised for effective communication and put into use when communication breaks down (grammatical and sociolinguistic strategies); d. Discourse competence, which is concerned with the cohesion and coherence of utterances or sentences (Canale & Swain, 1980, p. 47). The discourse competence is, then, defined as “the ability of a user/learner to arrange sentences in sequence so as to produce coherent stretches of language. It includes knowledge of and ability to control the ordering of sentences in terms of: topic/focus, given/new, “natural” sequencing: e.g. temporal: He fell over and I hit him, as against I hit him and he fell over; cause/effect (invertible) – prices are rising – people want higher wages, ability to structure and manage discourse in terms of thematic organization, coherence and cohesion, logical ordering, style and register, rhetorical effectiveness, the “co-operative principle”(Canale & Swain, 1980, p. 60).

Thus, discourse competence can be seen as the ability to understand, create and develop forms of the language that are longer than sentences (stories, conversations, letters) with the appropriate cohesion, coherence and rhetorical organization to combine ideas. The study of the discourse competence owes discourse analysis and text linguistics the repertoire of notions, concepts and terms language teaching theorists may use to understand the role of discourse in language learning and teaching. There are many introductions to discourse analysis the reader may turn to for a more detailed account of that repertoire (Martínez Cabeza, 2002) but we would like to highlight here some important concepts which may help us deal with discourse competence instruction and evaluation. Llobera summarizes some important notions in relation to the discourse competence. He starts with the distinction between “discourse

conveyed in the FLT classroom” and “discourse generated in the FLT classroom”, which calls our attention towards the fact that discourse competence is a dynamic procedural competence which is constantly in action during the teaching and learning processes. Then, he goes on commenting upon some important concepts in the field of relationships between participants: status (as exemplified in the use of forms of address), social roles, distance (as related to the categories of intimate, acquaintance and stranger), politeness and face, theme and rheme, new and given information, genre, turn-taking and repairing (Llobera, 1996).

Concerning the specificity of the discourse competence, a number of exercises have been suggested that could help the transfer from text to text. Madrid and McLaren describe the following activities: completing texts with missing words, open dialogues, completing a text by choosing the appropriate information from another source, building a text by choosing the most appropriate option in a multiple-choice format, role playing and simulating, finding mistakes and differences, filling in forms, memorizing and reciting a poem, a song, etc., analyzing and interpreting discourse elements (metalinguistic activity), punctuating texts, acting out, for instance, a joke, narrating events and expressing sequence with visual support, describing with visual support, transforming colloquial discourse into narrative discourse, and arranging sentences to form texts that describe processes (Madrid and McLaren, 1995). Pérez Martín points out some examples of exercises to develop the discourse competence: lexical cohesion devices in context (e.g. use of synonyms), grammatical cohesion devices in context (e.g. ellipsis, logical connectors, parallel structures), identify the clauses which has the thesis statement, oral discourse patterns (e.g. the normal progression of meanings in a casual conversation), link a paragraph with the following one, written discourse patterns (e.g. the normal progression of meanings in a formal letter), to be able to work out an introduction/development/conclusion of a piece of oral or written language.

The section “Assessment of the discourse competence” will deal with two main topics in relation to the evaluation of the discourse competence: criteria and procedures for evaluation. About criteria, we will focus basically on the Council of Europe’s Common European Framework of Reference for Languages. About procedures, we will concentrate on portfolios as a teaching and assessment device. The evaluation of the discourse competence is one of the most challenging aspects of language teaching. Parallel to the complexity of its definition, its evaluation requires from the teacher a global perspective on the learner’s communicative use of the language. Thus, the traditional predominance of grammar in our classroom, reinforced by the liaison among grammatical pedagogical objectives, grammatical interpretation of textbooks, grammar teaching in the classroom and grammar assessment (even if these are hidden behind a “communicative look”) is confronted by the change in perspective of the discourse competence. As Llobera states, “innovation in FLT is based on a model of language which is increasingly influenced by discourse concepts” (Llobera, 1996). Furthermore, the assessment of the discourse competence may be the factor teachers need to implement a real evaluation of the four skills through the use of texts. One of the more repeated criticisms about foreign language teaching in our educational system is related to the unbalanced presence of the four skills in the daily practice and the evaluation procedures. However, the consideration of the discourse competence as a teaching goal may help to break the uneven use of written and oral texts, of receptive and productive skills. However, evaluating any competence is not a straightforward task. As the Council of Europe states in the Common European Framework of Reference for Languages, ‘unfortunately one can never test competences directly. All one ever has to go on is a range of performances, from which one seeks to generalize about proficiency. Proficiency can be seen as competence put to use. In this sense, therefore, all tests assess only performance, though one may seek to draw inferences as to the underlying competences from this evidence’. That is, the measurement of a competence is operated at three levels: performances are tested, proficiency is assessed and competence is, inferentially, evaluated. The same happens to the discourse competence.

If variety (of texts, of activities, of topics, etc.) is a must in language teaching, it is particularly important in relation to the discourse competence. Discourse competence is deeply related to the concepts of genre and register, both of which are the technical terms used to label variety in language use. Furthermore, the Common European Framework of Reference for Languages proclaims the importance of a variety of testing techniques: “It is increasingly recognized that valid assessment requires the sampling of a range of relevant types of discourse. For example, in relation to the testing of speaking, a recently developed test illustrates this point. First, there is a simulated Conversation which functions as a warm up; then there is an Informal Discussion of topical issues in which the candidate declares an interest. This is followed by a Transaction phase, which takes the form either of a face-to-face or simulated telephone information seeking activity. This is followed by a Production phase, based upon a written Report in which the candidate gives a Description of his/her academic field and plans. Finally there is a Goal-oriented Co-operation, a consensus task between candidates”. Thus, the evaluation of the discourse competence requires a device for continuous assessment using a variety of text types and skills. The portfolio may be that tool. A portfolio is a selection of some of the learner’s task outcomes so as to document and illustrate their progress and achievement. The portfolio is a dossier where the learner and the teacher can “watch” what was done at different periods of the learning process and, thus, it is a personal document collected by the learner with the help (and the feedback) of the teacher. Brown writes that ‘portfolios include essays, compositions, poetry, book reports, art work, video- or audiotape recordings of a student’s oral production, journals, and virtually anything else one wishes to specify’ (Council of Europe, 2001).

CONCLUSIONS

Summarizing the above, it is necessary to say that discourse cannot be confined to any boundaries. These varieties of discourse definitions are the best proof for the describing discourse as the expression of thought through language. The study of naturally occurring connected sentences, spoken or written, is one of the most promising and rapidly developing areas of modern linguistics. Discourse and discourse analysis engage scientists in the exploration of texts and talk. Analysis of discourse data encourages scientists to reflect upon and critically evaluate knowledge acquired in the study of, for example, syntax and semantics as well as naturally drawing students to the investigation of socially-situated language use. Discourse is the opportunity to examine how meaning is constructed and negotiated in discourse and to reflect on the role that language plays in social life. Discourse also demonstrates us the relevant theories and ways how it can be guided in the application of these theories to real life language use. After this brief research it is understandable that discourse plays different roles in different social contexts that's why it may have different meaning and relevance when it occurs in different situations and also this different situations and the context of discourse from the scientific view shows us the importance of studying and understanding the peculiarities of information structure of spoken and especially written discourse. Written discourse is not only permanent but also visible. An important consequence of this is that the writer may look over what he has already written, pause between each word with no fear of his interlocutor interrupting him. He may take his time in choosing a particular word, even looking it up in the dictionary if necessary. Written language makes possible the creation of literary works of art in ways comparable with the creation of paintings or sculpture. Speech, of course, retains functions which writing will never be able to fulfil, such as quick, direct communication with immediate feedback from the addressee. The speaker must monitor what it is that he has just said, and determine whether it matches his intentions, while he is uttering his current phrase and monitoring that, and simultaneously planning his next utterance and fitting that into the overall pattern of what he wants to say and monitoring, moreover, not only his own performance but its reception by his hearer. The view that written discourse and spoken discourse serve, in general, quite different functions in society has been forcefully propounded by scholars whose main interest lies in anthropology and sociology. Taking into consideration the point about developing and using discourse competence in FLT classroom, we came to such results of our investigation: the discourse competence can be defined in relation to the most relevant models of the communicative competence. Then, a number of teaching procedures will be discussed to develop the discourse competence in FLT. Also, evaluation will be considered as an important aspect in the learning and teaching process, providing criteria and procedures to evaluate the discourse competence. Finally, some further issues related to the discourse competence will be studied which represent innovations for research and avant-garde language instruction. Goals, aims and objectives can help us make real the general purpose of language learning. In particular, that threefold distinction lies under the use of the communicative competence as the goal in language learning.

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PEDAGOJİK FORMASYON SERTİFİKA PROGRAMINA KATILAN EDEBİYAT FAKÜLTESİ ÖĞRENCİLERİNİN ÖĞRETMENLİK UYGULAMASI DENEYİMLERİNİN İNCELENMESİ: FENOMENOLOJİK BİR ÇÖZÜMLEME

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Bu araştırmada, pedagojik formasyon sertifika programına katılan edebiyat fakültesi öğrencilerinin kendi yaşantı ve deneyimlerine dayalı olarak öğretmenlik uygulamasının anlamı incelenmiştir. Nitel araştırma yöntemi ve fenomenolojik desende kurgulanmış bu çalışma, pedagojik formasyon sertifika programına katılan edebiyat fakültesi öğrencilerinin öğretmenlik uygulaması deneyimini nasıl anlamlandırdıklarını belirlemek açısından önemli görülebilir. Araştırmanın çalışma grubunun belirlenmesinde amaçlı örnekleme yöntemlerinden ölçüt örnekleme ve maksimum çeşitlilik örnekleme birlikte kullanılmıştır. Araştırmada veri toplama amacıyla açık uçlu sorulardan oluşan yarı yapılandırılmış bir görüşme formu kullanılmıştır. Araştırma verilerinin analizinde ‘parantezleme’, ‘fenomenolojik redüksiyon’, ‘imgesel çeşitleme’ ve ‘anlam ve özlerin sentezlenmesi’ olarak isimlendirilen dört farklı süreç izlenmiştir. Araştırma an itibarıyla yapılan veri analizleri sonucu ortaya konan bulguların raporlaştırılması sürecindedir. Araştırma sonucu elde edilen sonuçlar ilgili alan yazınla ilişkili bir biçimde tartışılacak ve bazı öneriler sunulacaktır.

PEER LEARNING IN HE: STUDENTS' PERCEPTIONS OF THE BENEFITS AND CHALLENGES IN BECOMING PEER LEADERS IN A PEER ASSISTED LEARNING PROGRAMME

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ABSTRACT

The Peer Assisted Learning Programme (PALP) was implemented at Sunway University to support students who are transitioning into their first year undergraduate programmes. Under PALP, peer assisted learning sessions for “at risk” subjects are facilitated by academically successful and trained peer leaders. In 2016, 35 peer leaders facilitated peer learning sessions for 8 undergraduate subjects, with a total of 718 peer learners. This paper reports peer leaders’ perception of their experience and the challenges that they faced in facilitating peer learning sessions. It also reports on the overall benefits that peer leaders perceived to have gained from the programme. Data was derived from peer leaders’ feedback at different stages of the programme and an online survey administered at the end of the programme. Peer leaders reported that their participation in the programme had enabled them to improve their knowledge and skills in five areas: subject matter, learner diversity, time management and project planning, communication skills and leadership skills. The peer leaders also reported 5 challenges during the programme: peer learners’ absence, irregular attendance and unpreparedness, late-joiners to the programme and high student number. Some suggestions on how the programme could be improved further are also discussed.

Keywords: peer-assisted learning, supplemental instruction, higher education

INTRODUCTION

One of the many challenges that academics face in ensuring that their students receive the necessary learning support for their subjects is the limited amount of time that they have with their students. With face-to-face interaction during class time being limited due to the number of students in class, the different pace at which students learn and the volume of learning materials that students need to engage with, additional support for both academics and their students are needed. Such support helps students manage their learning without at the same time over-burdening their lecturers. In that respect, students who have successfully transitioned into their first year of undergraduate and have performed well academically during their first year can become that needed learning resource and support for their peers. The implementation of peer learning support that is effectively managed within the institution enables students to gain additional learning support outside the classroom without overburdening the already stretched university resources and academic staff’s time (Boud, Cohen & Sampson, 2014).

Research has shown that peers have considerable influence on each other. At undergraduate level, it has been found that peers have significant and meaningful impact on each other. They are found to have an impact on their peers’ intellectual development, academic engagement, the discovery and establishment of academic and social concept, interpersonal skills and critical thinking skills (Greenfield, Keup & Gardner, 2013; Pascarella & Terenzini, 2005)

In peer learning sessions that are facilitated by other students, the benefits are not restricted to peer learners only. Academically successful senior students who undertake the role of peer leaders/ facilitators during the learning sessions also derive benefits from their role. In one study, peer leaders reported an increase in confidence in their own ability to manage group dynamics and facilitate peer learning; they also reported an increase in empathy with peer learners (Harmon, 2006). In other studies, peer leaders reported that their participation in peer assisted learning sessions had led to improved interpersonal skills, organisational skills, time-management, presentation skills, written communication and academic skills (Keup, 2010; Newton & Ender, 2010). Peer leaders are also found to have gained benefits through improved ability in managing groups, interpersonal skills, critical thinking and problem solving skills (Wawrzynski & Beverly, 2012).

Peer Assisted Learning Programme (PALP) at Sunway University

Informed by the benefits of peer assisted learning sessions to students who regularly attend such sessions and the peer leaders who facilitate the sessions, PALP at Sunway University was first implemented in 2013. The programme was based on Supplemental Instruction and Peer Assisted Study Session model by the University of Wollongong. Within supplemental instruction sessions, the learning sessions are facilitated by more senior students and these sessions support subjects that are considered “high-risk” (Dawson, van der Meer, Skalicky & Cowley, 2014).

PALP and PALP peer leader role were developed fitting with the definition by Newton and Ender (2010, p.6) who state that peer leaders are:

Students who have been selected and trained to offer educational services to their peers. These services are intentionally designed to assist in the adjustment, satisfaction, and persistence of students toward attainment of their educational goals. Students performing in [such] paraprofessional roles are usually compensated in some manner for their services and are supervised by qualified professionals.

The initial two years (2013-2014) was considered the pilot phase, with a very small number of peer leaders and peer learners selected. Beginning 2015, the programme was open to undergraduate students who were enrolled in the first year subjects that it supported. Subjects identified to be supported by PALP were those deemed to be “at risk” due 20% or more failure rates, a large number of students enrolled onto the subjects or both. Another reason for selecting first year subjects was also to support the undergraduates’ transitioning process from their previous level of study into their undergraduate programmes and help them develop learning skills needed for higher learning. Such support has helped with student retention beyond first year and students’ ability to move to higher level (Keup, 2013).

Programme Structure

Sunway University’s academic calendar comprise a 7-week semester that begins in January and two 14-week semesters that begin in March and August respectively. PALP-supported subjects, and as such, PALP itself, are offered in the March and August semesters. Recruitment process for peer leaders begins in January with programme promotion. Students who are interested and meet the set criteria are invited to submit their application. Criteria for eligibility are (1) completion of the first year of undergraduate studies (2) an average of B for subjects taken in the first year, and (3) at least a B for the subject(s) that the applicants wish to facilitate. Applicants are also required to include their personal statement and obtain a written support from at least one academic staff who had taught the students either during their first year or during their pre-university programmes.

There are two components to the peer leader selection process. Applicants who meet the criteria are called for an interview to determine their readiness for the peer leadership role. This is based on their academic performance (determined through their application and supporting evidence), their communication and problem solving skills (assessed during the interview). The second component is the 2-day training peer leader training programme. During this training, applicants are observed while they engage in the activities to further determine their communication and problem solving skills. In addition, their ability to work in a group is also assessed. Applicants who have successfully undergone the interview and the training programme are then formally appointed to become peer leaders of the programme. Peer learners are recruited at the commencement of the semester and peer learning sessions are then scheduled throughout the week during the semester. In performing their responsibilities, the peer leaders are supervised by the programme manager and are also given an allowance for attending trainings, meetings with the programme supervisor, session preparation and facilitation.

PALP Programme in 2016

In 2016, the Peer Assisted Learning Programme at Sunway University continued to support two schools within the university – the Business School and School of Science and Technology, with a total of 8 subjects supported. The programme had grown significantly in terms of the number of peer leaders, the number of peer learners and the number of peer learning sessions conducted within that year. The growth in number, in comparison to when the programme first began in 2013, is reflected in the table below.

Table 1: Number of peer leaders, peer learning sessions and peer learners in 2013 and 2016

	Peer Leaders		Sessions / week		Peer Learners	
	2013	2016	2013	2016	2013	2016
March	7	35	2	28	11	389
August	7	26	2	27	51	329
Total for the year	7	35	40	522	62	718

The table shows that in 2016, the number of peer leaders in the programme had increased from 7 to 35 while the number of peer assisted learning sessions had increased from 40 to 522. The number of peer learners had also increased from 62 to 718. The peer leaders for March semester that year were the same peer leaders who facilitated peer learning sessions in August but there was an attrition. A few peer leaders who moved into the final year of their study resigned from their position to focus on their final year while others cited personal commitments. Most peer leaders facilitated at least 2 groups of peer learning each semester. A small number facilitated either 3 groups per week or one group only. The maximum number of peer learners for each group was 10.

Given the increase in student involvement, as reflected by the table above, and the fact that the programme had stabilised, it was deemed important to explore the experiences of students who participated in the programme – both the peer leaders and the peer learners. However, for this study, the focus was on the peer leaders and their perception of the value of the programme to them.

RESEARCH QUESTIONS

The study was undertaken to explore the answer to the following questions

1. What benefits did peer leaders gain from their role in PALP?
2. What challenges did peer leaders face when facilitating peer assisted learning sessions for PALP?
3. How can the programme be improved?

METHODOLOGY

This study took on a qualitative approach. Thirty-five students who were appointed as PALP peer leaders in 2016 agreed to participate in the study. However, only data collected from 26 peer leaders were included in the analysis as nine peer leaders had resigned after one cycle of the programme, as mentioned earlier. Five stated the need to focus on their final year studies as the reason and 4 stated personal reasons. Data collected from these peer leaders were not included as they did not have a full peer leader experience. Three methods of collecting peer leader feedback were carried out at different intervals during the programme. The first one was in the peer form of a “one-minute paper”. This was an open-ended feedback collected at the end of the 2-day training, before peer assisted learning sessions began in March 2016. The second peer leader feedback was collected through “poll-everywhere”, an online survey response system. It was administered after a one-day professional development workshop for the peer leaders, before the 2nd cycle of the peer assisted learning sessions began in August 2016. For both, the focus was on the value that peer leaders found from the 2-day training and the 1-day professional development workshop. Participants were asked what they had learned from the training/workshop, how they could apply what they learned to their role as a peer leader and further development they felt they needed to become effective peer leaders. The third method of collecting peer leader feedback was through a peer leader satisfaction survey. This was administered through Survey Monkey at the end of 2016, after the programme had ended for that year. The online satisfaction survey contained three open-ended questions on the peer leaders’ experience in the programme, what they had gained from it and how the

programme could be improved. Feedback collected from the peer leaders was also correlated with data on PALP maintained by the institution.

FINDINGS AND DISCUSSION

Peer leaders' responses were analysed and emerging themes were identified. Findings indicated that peer leaders perceived clear benefits from the programme and at the same time encountered several challenges. These are identified and discussed below.

1. Benefits gained from being a Peer Leader in the Peer Assisted Learning Programme

Peer leaders perceived their participation in the Peer Assisted Learning Programme had helped them to be more self-aware about their own personal development needs as undergraduates and their role as peer leaders. All peer leaders reported self-improvement in 8 areas:

- (1) Confidence
- (2) Interpersonal communication
- (3) Presentation skills
- (4) Understanding of learner diversity
- (5) Mentoring skills
- (6) Planning and time management
- (7) Leadership skills
- (8) Understanding of subject matter

Peer leaders attributed the benefits they gained to the training and professional development that they had undertaken and from carrying out their role as peer learning facilitators.

In relation to confidence, 23 per cent of the 26 peer leaders reported an improvement in their self-confidence. These peer leaders, at the start of the programme, perceived themselves to be introverts who were not usually comfortable among other people. They cited wanting to improve and their belief that the programme could help them improve as part of the reasons for signing up for the programme. One peer leader, for example, stated at the start of the programme, that she needed to improve her confidence and "not be so intimidated" by others. Another peer leader stated that he had signed up to become a peer leader to push himself: He said that he needed to "develop by opening up" himself and by understanding others more. He acknowledged having "shut" himself off from others due to his constant struggle "with a lot of failures" in his past. This peer leader, at the end of the programme, stated:

I have a long way to go. I still have to force myself to talk to other people, not to be so inward. But I signed up for it, so even when I didn't want to, I had to prepare for my sessions and go...I think it wasn't so bad. I tried, my group was nice to me. And when they see me [at other times], they smile or wave or come and talk to me. And I have to do the same. I'm their peer leader. I'm a little bit more confident now but still feel awkward.

In contrast to the 23 per cent who needed to improve their self-confidence and did by the end of the programme, one participant who already perceived himself to have high self-confidence learned that having high self-confidence included being able to take a step back so that others could step-up. He stated the following: "One area which I received feedback on at the beginning and agreed I needed to improve on was that I tended to be too dominant in certain situations. I learned that I needed to take a step back and allow my peers to take over from time to time."

The second, third and fourth areas of improvements identified by the peer leaders were interpersonal communication skills, presentation skills and understanding of learner diversity, which they perceived to be closely related. While only 50 per cent of the peer leaders stated that they needed to improve their communication and presentation skills at the beginning of the programme, all of them reported improvements in these areas, albeit to a varying degree. Additionally, 69 per cent perceived that they had learned to develop empathy, be more open and patient, which helped in their communication with their peers. Peer leaders attributed these improvements directly to their role as a peer learning facilitators. The following are responses extracted from different peer leaders:

It helped me to understand that everybody has different learning method and that how little things we say may have great impact on them.

I think I am now able to understand the body language and facial expressions the mentees would give when they understand or do not understand something.

People have different ways of thinking, so understanding each of their personality is very important.

As illustrated in the examples above, having peer learners who learned differently and who might have had different learning needs emphasised to the peer leaders that they needed to be more open to learner diversity. They mentioned that they were more conscious of the need to empathise and be more flexible in the way that they facilitated learning sessions and the choice of learning strategies to be demonstrated during the learning sessions. The need to explain things in different ways to support their peers and pace the sessions to fit their needs, and the effort that they had put in, contributed to the peer leaders' communication skills and presentation skills improvement. As stated by a peer leader, "I believe that my communication skills have improved as I try to find different ways to explain my answers if they do not understand it when I explain using the first method." Another pointed out, "These mentees would expect us [peer leaders] to be able to lead and guide them in the subject matter. As such, I would think of ways to be able to communicate effectively and cater to the needs of each mentee." One peer leader summarised how he learned to be more open, to empathise and be more patient clearly by saying:

I've learnt that easy things... for me, may not be that easy for others. It's linked to not taking things for granted. I've tried to look into the perspective of my peers, that maybe a topic that is easy for me, is magnified 5 times harder for my peers. They may be uncertain, scared, upset and disappointed with themselves for not [being] able to learn the same as others. The gap between people who get things easily and people who don't get things easily is quite huge. Thus, I've learnt that I should see things not just from my point of view.

In addition to improving their communication skills, presentation skills and understanding of learner diversity, 42.3 per cent of the peer leaders felt that they had learned to become a mentor or to become a better mentor. Peer leaders reported the need to be "approachable" and "friendly" with their peer learning group. They also reported the importance of "listening" to their peers to try and understand the difficulties that their peers faced, instead of making assumptions. Peer leaders also highlighted that being a mentor and a facilitator of the programme meant that they had to get their peers to interact more with each other and contribute to the sessions. They felt that as a mentor, they had learned to be "encouraging" so that there was more participation. However, they might not have been as successful as they wanted due to challenges that will be discussed in the next section.

The sixth and seventh areas of improvements identified by the peer leaders were planning and time management, and leadership skills, which were perceived to be inter-related. Sixty-nine percent of the peer leaders perceived that they had improved in these areas at the end of the two-cycles of the Peer Assisted Learning Programme. Further analysis of the data showed that the peer leaders saw the improvement of leadership skills as being directly connected to the training that they received and their role as learning facilitators for their peers. However, they did not attribute specific elements of the training or professional development that they were given as the reasons for the improvement in planning and time-management skills. Instead, this was attributed as an outcome from having to manage their own studies, assignments, other leadership roles or co-curricular activities that they might have undertaken, as well as their own personal lives. As mentioned by some of them:

It has taught me to manage my time wisely between my studies, PALP, clubs and societies as well as the relationship I have with the people around me.

As I have to juggle between my studies, involvement in clubs and societies and PALP, PALP has contributed to helping me manage my time better and taught me to plan ahead.

Time management and organisational skills are very important and being a peer leader enabled me to refine those skills.

Finally, peer leaders also perceived improvement in their understanding of the subject matter. In this area, the peer leaders reported that they had become more aware of the learning strategies that they had used because they needed to share the learning strategies that worked for them. Having to articulate the learning strategies to their peers helped the peer leaders to become more conscious of their own learning strategies. Sharing of learning strategies, either with other peer leaders or with their own peer learning group also helped the peer leaders to have a bigger selection of learning techniques that they could adopt for themselves. Twenty-seven per cent of the peer leaders felt that facilitating peer learning sessions on a basic accounting subject that they had successfully completed helped them revise the subject and understand it better. This was useful preparation for them as they had other accounting subjects to take at a higher level. As stated by one peer leader, “While guiding my peers, I happen to learn and remember new things as well and this helps me in my own studies.”

2. Perceived challenges in facilitating peer-assisted learning sessions

Based on their experience facilitating peer assisted learning sessions for two 14-week semesters, the peer leaders identified 5 main challenges that they had faced, the causes they had attributed to each challenge and the impact the challenges had on the peer leaders and their peer learning group. These are reflected in the table below.

Table2: Peer leader challenges, perceived attributed causes and impact on peer leader and peer learning sessions

Challenges	Perceived attributed causes	Impact	
		<i>On peer leader</i>	<i>On learning session</i>
Absence	Lack of commitment	Demotivated Upset Frustrated	Limited discussion Lack of participation Lack of response
Irregular attendance	Lack of interest in learning		
Unprepared peer learners	Lack of interest in topic		
Late joiners	Unstated	Challenge in addressing basic topics and inability to proceed to more challenging topics	
High student number	High maximum capacity allowed	Difficulty to manage each session and to finish completing topics that needed to be covered	

As can be seen in the table above, the peer leaders attributed each challenge to a specific cause. Peer learners' absence and irregular attendance were perceived to be caused by a lack of commitment or a lack of interest on the part of the peer learners. Peer learners being unprepared was also seen as a sign of a lack of interest in the topic.

It was noted that the causes identified for peer learners' absence, irregular attendance and being unprepared were assumed causes that might not have been verified by the peer leaders. For example, one peer leader, in referring to students' irregular attendance to the learning sessions, stated, “It showed that those students are not interested in learning.” Another peer leader made a similar statement, “It shows their lack of interest...” The first three challenges identified by the peer leaders impacted them emotionally. Peer leaders reported that they felt “demotivated”, “upset” and “frustrated”. For example, one stated, “It was very demotivating and upsetting when a handful of mentees do not let us know [of their absence] in advance and do not come.” Another felt frustrated because it meant that she could not carry out what she had planned for the learning sessions because of the absence.

Peer learners' absence, irregular attendance and unpreparedness also impacted the learning sessions. Peer leaders felt that often, discussions became limited and that there was a lack of participation or response. One peer leader made an observation that as a result of these challenges, “I feel like have to spoon feed them. It is difficult for me to carry out any fruitful discussion as there will be little to no reply.” The peer leaders perceived this challenge caused them to be less effective as mentors.

The fourth challenge identified by the peer leaders was students who joined the programme late into the semester. Twenty per cent of the peer leaders reported that they had peer learners who joined their sessions late in the semester. However, in this case, an assumption was not made and no reason was given. Peer leaders felt that some of those who joined their sessions late were also very weak. It was challenging for them to help these peer learners with the basic topics while at the same time needing to support peers who have moved ahead to other topics. The peer leaders observed that a number of them were unable to catch-up while the peer leaders themselves felt that they were in a difficult situation. For example, a peer leader stated that she felt she “did not do well enough as a mentor” to ensure that those who joined her sessions later had “a better understanding of the subject.”

The fifth and final challenge identified by the peer leaders was high student number in their learning sessions. Forty-six per cent of the peer leaders felt that the number of peer learners in their sessions was too high. One peer leader stated that it was difficult to manage her session because there was “almost 20 peer learners in her group”. Another peer leader cited that the maximum number allowed should be less than 10, while a third stated that it should not be more than 7 per peer leader. Peer leaders stated that a high number of mentees in their sessions meant that they were not able to “cover” or “finish” all the topics for the subjects.

Data maintained by the institution showed that of the 28 peer-assisted learning sessions that were held each week in March semester, 2016, only three sessions had more than 10 peer learners – one session had 18 peer learners, the other two had 17 and 16 respectively. These numbers, which were higher than the maximum of 10 students per peer learning session was to accommodate some peer leaders who requested to combine their peer learners and co-facilitate their sessions with another peer leader. As such, the actual number of peer learners per peer leader was still not exceeding 10. This applied to August 2016 semester as well. Of the 27 peer-assisted learning sessions held each week during that semester, 4 had between 15-17 peer learners in the group but each of these sessions was facilitated by two peer leaders. As such, the peer leaders’ perception of high student number in the peer learning sessions seemed to indicate that an ideal number per session is much lower than that set by the institution.

3. Suggestions for programme improvements

Overall, the peer leaders provided 3 main suggestions to improve the programme – (1) to reduce the number of peer learners per session; (2) to increase the time allocated for each peer-assisted learning session; and (3) to increase peer leader “payment” for their services. There seemed to be a general consensus on the main reasons for asking to reduce the number of peer learners and to increase the time allocated for each session – that there was a lot to cover but there was insufficient time and too many students. This could be linked to the challenges that peer leaders had identified earlier. Peer leaders also suggested that the “payment” or “allowance” for peer leaders be increased from the current amount, although none gave a recommendation of a suitable figure. One peer leader mentioned that “peer leaders could be motivated through an increase in the earnings per hour.” Another peer leader mentioned that “a raise in allowance” might be able to “compensate” peer leaders for their mileage as some might have to come to the campus just for their sessions when they had no lectures or tutorials.

Apart from the 3 main suggestions, there were other suggestions. Peer leaders also suggested that peer leaders be given access to eLearn for the subjects they had been assigned to for the programme. The peer leaders had access to eLearn for the subjects when they were enrolled on the subjects but at the time they were facilitating PALP peer learning sessions, they no longer had access to it. As one peer leader stated, “the lecturer may have changed the learning materials, changed emphasis or they may be new materials. It would help if we know what is going on in the subject.” Another suggestion was to provide more training to help them deal with different learners better. A final suggestion was to give students who were interested to sign up as peer learners for the programme a trial class so that they understood what peer-assisted learning sessions were and that these sessions were not meant to be tutorials. This might help reduce attrition rate as only students who understood what they would get out of the sessions would sign up.

CONCLUSION AND RECOMMENDATIONS

The experience of peer leaders of the Peer Assisted Learning Programme appears to have benefitted the peer leaders in gaining better understanding of the subjects that they facilitated – which helped their own studies. Beyond that, being peer leaders seemed to have contributed towards an increased self-awareness and positivity

in their personal attitudes towards other learners who may be different to them and to each other. This could be gathered from the accounts provided by the peer leaders on the different methods that they had tried to support peer learning. Finally, but equally important, the peer leaders completed two cycles of the programme with improved communication and presentation skills, were better at leadership and had improved their own efficiency in time-management and project planning. All these, combined with increased positivity in their personal attitude, are traits and transferrable skills which employers look for. The peer leaders, through their engagement in the programme, had essentially engaged in continuous learning, where they learned to become a mentor, to help others develop and to take initiative to analyse and evaluate their effectiveness in order to solve both learning problems as well as manage their peer learning group. They had also improved their mastery of their subject matter. These are some of the meta-competencies for employability (Gardner, 2011).

However, peer leaders' feedback also indicated that there are also important considerations for programme improvements, specifically in training to prepare peer leaders better for their role and to provide continuous support for them. Firstly, from the peer leader feedback, it can be deduced that some peer leaders might not have been as open and as empathetic as they believed themselves to be. By assuming that peer learners' absence, irregular attendance and lack of preparation were due to the peer learners' lack of interest and commitment, some of the peer leaders might not have considered that there could be other reasons that were related to their peer learners' workload, personal matters or even how the learning sessions were facilitated. A request that "peer leaders should have more training" was supported by the reason that "communicating with **those peers** who are lazy to do any work by themselves is tough" [emphasis added]. Although this was the strongest statement of blame, a similar perception had been communicated by others. Secondly, the peer leaders' choice of words indicated that some of them still viewed their role to be the teacher during their sessions and that it was their responsibility to cover all the topics, or at least, all the important topics for the subject. It also appeared that they felt their responsibility included having to explain, demonstrate or do other things that were necessary to help their peers understand the subject better. While their role carried some elements of teaching, explaining and demonstrating, in a peer learning environment, it should be a collaborative effort which they facilitate.

There are some recommendations to improve future leaders' experience with the programme and increase the benefits that they derive from it. (1) Increase the number of interim support for peer leaders. Short sessions with peer leaders should include self-reflection and group problem-solving strategies. Such sessions might help provide needed support to peer leaders while at the same time help engage them in critical reflection in order to develop openness to different learners and the challenges these learners may have. (2) Future peer leader trainings and continuous development need to continue to emphasise the differences between peer leader role and the teacher role. As peer leader feedback has indicated, putting an emphasis on the differences may not be enough. Peer leaders need to be trained and continuously supported so that they could use different active learning strategies which enabled their peer learners to contribute to learning sessions and for the peer leaders to genuinely facilitate the sessions. With their ability to adopt more and different learning strategies, peer leaders may learn to be more flexible in managing peer learners who missed some sessions. (3) Reducing the number of peer learners per learning session from the current 10 may not be possible. It puts more constraints on physical resources such as availability of venues and scheduling more sessions which were compatible with both the peer leaders and peer learners. However, a workable solution would be to provide specific training and support for peer leaders to be able to manage the number effectively. Finally, the decision on whether to increase the allowance given to peer leaders will need to be considered carefully to ensure that the programme can continue to be sustainable as student numbers to undergraduate programmes continue to increase.

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PERIPHERAL STUDIES OF MUSLIM IDENTITY IN ISLAMIC WORLD: MALAY MUSLIM CASE STUDY

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ABSTRACT

Muslims are facing an identical crisis as the image portrayed by current Muslim community's life seems inconsistent or in contrary with the Islamic value. These conditions creating problem of identity crisis among Muslims, which is seen to be real and clear as shown through Islamic Index, the country that has been listed as the first, parallel to Islamic index is New Zealand of all countries worldwide while Malaysia has topped the chart of Islamic countries (OIC members) parallel to Islamic Index at the 38th place which means the country inhabited by Muslim is left far behind in Islamic values aspects. This paper tries to show the form of Islamic identity deviation and the current situation of Muslims identity that marginalizes the Islamic value. The methodology used in this paper is qualitative, in which data about the marginalization of Islamic value in performing today's Muslim identity is based on data obtained from research report, academic papers, journals, books, magazines and newspapers. The results showed the Muslims identity are faced with faith problems, where faith had not been able to be the driving force to the Muslim behavior, but faith is also not able to be a barrier of sin or evil.

Key words: Identity, Image, Muslim, Islamic values

INTRODUCTION

Muslims come from the prophetic era of the Prophet Muhammad, beginning from Mecca, evolving into Medina until the foundation of the hearts of Muslims throughout the world. The early history of the emergence and development of Islam shows the essence of the Muslim identity formed through the appreciation of Islam embedded in every Muslim. The formation of Muslim identity is important in Islam, but Islam is the indicator of the identity of the Muslim community. In general, Islam is built into three main components, namely Islam (Way of life), Faith (Belief), and Ihsan (God Conscious) (Muhammad Noor Ibrahim et al, 1995). These three components are embodied in the primary sources of Islam and agreed upon by Islamic scholars who exist in the history of Islamic civilization (Nasruddin Yunus et al., 2014). The Muslim community built Islamic civilization since about 600 years (Hillenbrand, 2015) by integrating the components of Islam, Iman and Ihsan. Similarly, with the process of establishing a Muslim identity, the identity is formed through Islam, Iman and Ihsan of the Muslim (Mohd Yusof Othman, 2013).

Islam as stated in its primary source of Quran and Sunnah (Qamihah, 1984), is a religion of peace, this statement was also agreed upon by Muslim scholars (Mohd Zin, 1997). The statement also implies that a Muslim (Muslim

person) must have a good identity or identity that gives rise to the benefits of goodness and well-being. According to a study conducted by Lori Peek (2005), the identity of a society can be formed and changed into three situations, first starting with the establishment of a religious identity that is attributed to one's self as a child who is influenced by the life of parents and guardians. The second is followed by the creation of a person's own identity, at this stage, one not only accepts the identity that is attributed to one's self as a child, but the person will establish his identity based on his own thoughts and lives. Having chosen identity in itself, the identity will be strengthened by continuing to learn the deepening of religious knowledge, while maintaining the identity it possesses from being determined or altered by outside elements.

After more than 1400 years, today the number of Muslims grew larger than the early days of Islam. With today's total number of Muslims worldwide 1.6 billion people (Drew and David, 2017) is undoubtedly a big challenge to different Muslim identities in one place with different places and different from time to time. If observed in the current reality of the Muslim community, it may be noted that today's Muslims are faced with a crisis of identity critique, where the images born out of the lives of Muslim societies today seem to be irrelevant or contrary to the value of prosperity. The situation reflects the continuing evolution of Muslim identity in the future, which will change and evolve to create a crisis of identity diversity among Muslims.

The problem of the identity crisis of Muslim societies seems to be true and clear, as demonstrated by the results of the Islamic Index study conducted by Rehman, SS and H. Askari (2010), where in that study, the country ranked first in line with the Islamic index is New Zealand, the Muslim nation (OIC member) in the first position in parallel with the Islamic index is Malaysia, ie at thirty eight (38), this means the country inhabited by Muslims far behind in the aspect of Islam, on the contrary the country inhabited by the people Non-Muslims appear to be higher in terms of their Islamic values degree. From the data of the study, it can be stated that the reality of development of Islamic civilization which continues today is reflected in the living condition of Muslims living in the condition of Islam, especially in the form of life systems. Ironically, a non-Muslim community who does not know and does not understand what is meant by Islam, has been viewed more closely with the practice of Islamic values.

From the above data, an interesting and important point of view is the position of Malaysia as the first and highest Islamic state of the country. What is significant is Malaysia as a country located in the Malay Archipelago, not the first country to accept the influence of Islam, nor the pure state against the origin of Islam (Wan Abdul Kadir, 2002), but Malaysia has won the first position among Muslim countries (OIC members). While the Arab world countries are well-known as the earliest Islamic beneficiaries and are purer than Malaysia, have been left behind in the positions provided by Rehman, S. S. and H. Askari (2010) above.

THE STUDY

Based on the above issue, the Muslim identity discussed in this paper focuses only on the Muslim community in Malaysia. While the track used to view and measure the identity of the Muslim community is based on the identity formed through the Islamic history, as determined by the Prophet Muhammad. Which defines the elements of Islam, Iman and Ihsan as the essence of the essence and support of every Muslim's identity. These three elements are integrated and appreciated by the term Islamic faith.

Al-Qaradawi (1997) gives 4 specific features to the Islamic faith. The first of these creeds must come from the understanding of the sensible mind, the basis of that understanding is based on the maximal divine revelation. Secondly, once understood, the belief must be believed strongly and will not be broken or impaired by any form of suspicion. Thirdly, after being believed with absolute certainty, the faith must be followed by the obedience of the heart and surrender to execute all the commands of Allah and abandon all the prohibitions of Allah without any objection. Fourth, after the accumulation of all three of the above, the owner of the faith must be eager to carry out all instructions with all the abilities.

The four characteristics of this creed will be a gauge in assessing the status of the identity of the Malaysian Muslim community, discussed in this paper. Therefore, this paper attempts to present the empirical data of the practice of Malay society as measured by the four characteristics of the Muslim faith above.

FINDING

When viewed from the aspect of Islamic history, during the time of Mecca, when Islam was very foreign in the Arab world, the Islamic teachings conveyed by the Prophet only revolved around the formation of a Muslim faith, such as believing and dying, not associating God, believing in the hereafter and Etc. In fact, the formation of the Muslim community of Mecca does not touch the aspects of sharia such as prayer, fasting, zakat and so on. Sharia affairs, just set and developed in the next era of the establishment of a Muslim community in Medina.

The formation of Islamic creeds in every Muslim in Mecca created a very strong Muslim community in their faith, without changing even though challenged or tested by various challenges and all kinds of threats. This is evident through the existence of a series of tortures of early Muslims during the time of Mecca (al-Buti, 1999). All of these events show that the faith of early Muslims in Mecca was strong, strong and steady, so that the faith could not be condemned and even kept in such a neat and intact manner, despite the numerous threats and challenges that could jeopardize security and their lives.

The result of the true and steadfast Islamic faith has given the peaceful and harmonious Medina community. Religious affairs which involve the special relationship between man and his creator that God is executed well and neatly, for example, the event when Saidina Umar al-Khattab drank wine and at that time, he recently realized the ban of wine was revealed by Allah, then Umar Continued to dump the wine without any objection and was willing to do so (Majma 'al-Buhuth al-Islamiyyah bi al-Azhar, 1992). While the affairs of human relations are peaceful and harmonious, for example, the events of the muhajirin are willing to give up all the possessions that they possess during the process of promoting Muhajirin and Ansar (Jawiah Dakir, 2008). All of this happened after the Islamic faith which was owned by the Muslims when it was held very strongly and steadily, this event also became a translation of the early faith of the early Nation of Islam (al-Buti, 1999).

One of the community groups formed with a strong Islamic faith in the early days of Islam was the youth. They also hold firmly with their Islamic faith. The faith of the adolescent when it is able to move or strive to be the factor that drives the teenager to do something. For example, the event of Saidina Ali Karramallahu Wajhah dared to risk his own life by replacing the Prophet in his bed, while at the time the bed was replaced, the idolaters were neatly designed to kill him. But Saidina Ali survived because His blanket was thrown first and the sleeping man was not a prophet. From this incident, it is understandable that a teenager named Ali is willing to risk his life because of his Islamic faith. The faith could have been a driving force for Saidina Ali to replace the Prophet's bed that might have been killed when Saidina Ali slept on the bed. Examples of such reality prove the faith that Ali's teenager possessed could be a driving factor for Ali's actions.

This shows that the Islamic faith which is owned by the early Muslims in Mecca on the other hand in Medina is a solid faith, unable to be compromised, and even the faith of the faith is capable of producing good behavior among Muslims (Zakaria Stapa 2001). This was a great impression on the life of the society at that time.

Hence, it can be understood that the spine of a Muslim's identity is an Islamic faith. Every Muslim is obliged to maintain their faith; the faith also plays a major role in forming a whole Muslim way of life. Owned Islamic beliefs have the driving force or repulsion of a Muslim to do something. Therefore, the example of the adoption and preservation of the faith which was practiced in the early days of Islam should be the follower of the Muslims throughout the ages.

Speaking of Muslim society today, especially in Malaysia, the Islamic faith brought by traders and Islamic preachers, has been accepted for a long time by Malays throughout the Malay Archipelago (Wan Abdul Kadir, 2002). In Malaysia, Islam is embodied in the Federal Constitution of Malaysia as a federal religion. Today, part of the Islamic system has been applied in Malaysia's administrative, financial, banking, business and legal affairs. This can be seen through the implementation of the Implementation Policy of Islamic Values, the National Integrity Plan, the Islamic financial and banking system, the Tabung Haji, the zakat, the halal certificate rating and so on.

However, with all forms of Islamic religious development in Malaysia as described above, the identity of the Malaysian Muslim community is confronted with the problem of faith. The Muslim faith in Malaysia is not strong and shaky, in which the faith is incapable of being a force or a driving force for goodness and obedience to God in all manner of conduct. The severity of the social phenomenon among Muslims in Malaysia today (Zainudin Sharif and Norazmah Mohamad Roslan, 2011) reflects that their faith is in a weak and problematic situation, and it is difficult to be a driving force to practice obedience to God and to avoid all the prohibitions of God. For example, social illness called Mat Rempit (Rozmi Ismail, 2008), full of immoral and destructive practices has become a popular phenomenon among Malaysian Muslim teenagers, these negative symptoms make them involved as Mat Rempit feel proud and passionate as a mat (Muhamad Fuad Bin Abdul Karim, Rokiah Ismail and Mohamad Fauzi Sukimi, 2009). This means that Mat Rempit is proud and eager to commit immorality and is far from obedient as a servant of God. More seriously, the faith can change to a hold on other beliefs. It has been warned by recent silver mufti by calling on all parties to unite to curb the movement believed to convert Malays in Malaysia until the number of apostate Muslims reach hundreds of thousands (Sayed Hesham Idris 2016). The Muslim phenomenon of Malaysia changed the faith due to the fragility of the faith

which resulted in the deviation of faith and apostasy (Jawiah et al 2011, Helwa and Jasri 2013), atheism, liberalism, pluralism, secularism, and various deviant teachings (Zakaria Stapa, 2016).

It can be concluded that the Muslim faith in Malaysia is not strong, this statement is measured according to at least two conditions. First of all, in view of the characteristic of al-Qaradawi's faith, a review of the life of Muslim Malaysians today is that their faith has not been steady because they have not been able to be a trusted belief with a dead knot and will not be able to be sued. This can be seen in the apostasy phenomenon among Muslims in Malaysia, the number of thousands of apostates showing Malaysia's Muslim faith in a fragile and dangerous state. The faith is easily broken down when tested and challenged with current challenges such as romance and other religion. Secondly, the Muslim faith of Malaysia today is unable to become a force to obey God's command and abandon all the prohibitions of Allah. Malaysian Muslims are not able to refrain from being influenced by religious teachings other than Islam which eventually became influenced and accepted teachings other than Islam. If analyzed in more detail, generally the belief that it possesses is very difficult to be a repudiation to the owner in order to rage and earnestly devote to obedience to Allah SWT. Compared with the early Islamic faith of the Muslim Nation, the Muslim faith of Malaysia today is far different and is in a state of disrepute. In Malaysia today, it is difficult to find people like Saidina Umar al-Khattab and Saidina Ali as described above.

CONCLUSION

Refers to the perspective of Islamic creed, the Islamic identity in the Malaysian Muslim community today is faced with the phenomenon of Islamic marginalization in life. If left untouched, this problem will also contribute to the formation of a more complicated Malaysian future further farther from the claims of Islam. Hence, the development of Islamic identity towards the Muslim community in Malaysia needs to be strengthened from time to time so that the Islamic faith is really strong and inherent in the owner of the Islamic faith itself.

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PERSONALITY TRAITS, ATTITUDES, MOTIVATION AND USE OF SOCIAL MEDIA TOOLS IN A BLENDED COURSE

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ABSTRACT

In this paper, we present the results of a study of students' attitudes and motivation towards the field of statistics, and their level of anxiety when writing exams of different formats, focusing on an intermediate level statistics course taught in a blended environment in a Canadian University. Specifically, the study examined whether students' personality traits and gender impacted these attitudes and motivation. The study also investigated students' use of social media tools in the course, and whether these differed according to gender. Results indicate that different levels of agreement for the statements presented concerning attitudes and motivation were based on gender and personality traits. They also indicate that most students use social media tools, mainly Email messaging, but also Facebook, Text messaging, Phone calls and also rely on Face-to-Face, which also varied according to gender. The average number of social media tools used is almost the same for both males and females but the distribution is different. The research also shows that the level of anxiety of female students before exams of different formats is always higher than that of male students.

Keywords: Social Media, Personality Traits, Students' Attitude, Students' Motivation, Blended Learning, Quantitative Course

INTRODUCTION

Many years have passed since teaching any subject was limited to a blackboard and a chalk, no less so than in the teaching of statistics. The field of education has seen a major expansion in terms of pedagogical tools and approaches (Thomas, Morin & Ly, 2015). Whether the course is offered in a traditional setting (in-class), completely online with no access to professors, or in a blended fashion, studies have shown that in terms of student attitudes and motivation, personality traits and gender may have an impact on the learning. To this is now added the potential impact of social media usage which students are increasingly expecting to be part of their learning experience (Yuwakosol 2017; Oktavia, Prabowo, Meyliana & Supangkat 2016; Neier & Zayer, 2015; Blair & Serafini, 2014). A study by Everson, Gundlach & Miller, 2013, however, found that students had concerns regarding privacy issues and engaging with teachers online, preferring more professional platforms such as Google Apps, emails or Google drive for academic purposes rather than other social media tools like Facebook (Smith, 2016).

In addition to students' expectations, instructors are likewise seeing the benefits of integrating social media tools. In fact, Chromey, Duchsherer, Pruett & Vareberg 2106 and Cooke 2017 found that they also have the potential to impact students' motivation and attitudes. Other research has shown that personality traits and the choice of social media use are related (Correaa, Hinsley & De Zuniga, 2010) and that gender may play a certain role (Sponcil & Gitimu, 2013; Morahan-Martin & Schumacher, 1997; 1999: Schumacher & Morahan-Martin 2001).

Learning Statistics can be a challenge for many students. The fear of this quantitative field has often generated feelings of anxiety and apprehension (Slootmaeckers, 2012; Chiou, Wang, & Lee, 2014). This is a very important issue for instructors to address, since statistics courses are part of many disciplines, such as business, economic, computer science and engineering, as well as used in various aspects of industry. Although students like their area of study in general, they can feel very nervous with such mandatory courses. The aim of this study is to shed additional light on the potential impacts of this issue, as well as the aforementioned variables, in an intermediary statistics course which used a blended approach to course delivery. Anything that contributes to understanding and ameliorating the course experience for students in this area of study is worthy of study and discovery, which is the aim of the current study.

THE STUDY

In this paper, we studied students' attitudes and motivation towards the field of statistics focusing on an intermediate level statistics course taught in a blended environment in a Canadian University. The impact of

gender and personality traits on attitudes, motivation and anxiety level towards examinations were investigated. Students' selection of social media tools to use in their learning was also examined.

The following five research questions were studied:

1. Are the personality traits and gender of students in the course independent?
2. Do students with different personality traits exhibit a different level of agreement with statements related to attitude and motivation towards statistics, mathematics and exams?
3. Do gender and personality traits have an impact on the anxiety level for different exam formats?
4. Did students enlist social media tools to assist in the course? What were they?
5. Is the choice and number of social media tools different according to gender?

The Course

The course, Statistical Models for Data Analysis, was an intermediate Statistics course that is mandatory for the major in Supply Chain Management and the minor in Data Intelligence. It was a one-semester course assuming a previous course in Introductory Statistics. The topics covered included modern statistical thinking, linear regression analysis, logistic regression, and experimental methods in product and process designs. The course involved mostly analyses of real-life data using statistical program SAS Enterprise Guide.

The research Instrument

An online survey instrument was used to collect the required information. There were four parts to the research instrument used for the study. Students' demographics were collected in the first part, the second part consisted in tapped students' agreement / or disagreement with a set of thirty-four (34) phrases found in Korzaan & Boswell 2008 to identify their personality traits among five possibilities: Extraversion, Agreeable, Conscientious, Neuroticism and Intellect. The third part of the survey was about attitudes, motivation and anxiety towards learning statistics and exam formats. The fourth part is about the use of social media tools.

RESULTS

Demographics

A sample of 101 students participated in the study, where 45.5% were female and 54.5% were male. Also 68.4% of students were between 20 and 24 years of age, 26.7% between 24 and 30 years of age, while 3.9% were older than 30 and only 1% were younger than 20.

Personality Traits

Students were classified according to the results of their answers on the Big Five survey. Students were asked to indicate as honestly as possible the level of their agreement / or disagreement with a set of thirty-four (34) phrases found in Korzaan & Boswell 2008. Students must rate their support for the statement on a scale from 1 to 5, where 1 corresponds to 'Strongly Disagree', 2 'Disagree', 3 'Neither Agree nor Disagree', 4 'Agree' and 5 'Strongly Agree', except for reversed statements where the score is inverted. An average score for each personality trait is calculated and the respondent is assigned to the trait corresponding to the highest average score.

This section was completed by 89 students. Table 1 presents the distribution of students according to their personality traits and gender. It was found that the proportion of students with Agreeable personality is 47.6% for Female students and 31.9% for male students. The proportion of Intellectual among male students is 38.3% which is four times that of the Female group at 9.5%. The proportion of Neurotic students is more than double for Female students (14.3%) when compared to male students (6.4%).

Research Question 1 *Are the personality traits and gender of students in the course independent?*

A Chi-square test of independence was performed to determine whether gender and personality traits were independent. At the 5% level of significance, the test was rejected with a p-value of 0.034, which means that personality traits and gender are not independent.

TABLE 1 - DISTRIBUTION OF PERSONALITY TRAITS ACCORDING TO GENDER (n=89)			
Personality Trait	Female	Male	Overall
Agreeable	47.6%	31.9%	39.3%
Intellect	9.5%	38.3%	24.7%
Conscientious	19.1%	14.9%	16.9%
Neurotic	14.3%	6.4%	10.1%
Extraverted	9.5%	8.5%	9.0%

Total	100% (42)	100% (47)	(100%) 89
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Attitudes and Motivation

The SAT-36, Attitude/Motivation Instrument (Slootmaeckers, 2012) was also adapted and administered, consisting of 5 statements designed to capture students' satisfaction, attitudes and motivation towards statistics, their preference for online versus in-class delivery, as well as exam format. Respondents were asked to indicate the level of their agreement on a scale of 1 to 5, where 1 corresponds to strongly disagree to 5 as strongly agree. The mean level of agreement and the corresponding standard deviation are found in Table 2. The results are tabulated according to each Personality trait and also overall.

Research Question 2 Do students with different personality traits exhibit a different level of agreement with statements related to attitude and motivation towards statistics and exams?

TABLE 2 - ATTITUDE / MOTIVATION TOWARD STATISTICS						
Statements	Mean Agreement Level (Standard Deviation)					
	Agreeable	Intellect	Conscientious	Neurotic	Extraverted	Overall
1) Statistics is a complicated subject	3.50 (0.93)	3.41 (0.91)	3.53 (0.92)	3.89 (0.78)	3.38 (0.92)	3.51 (0.88)
2) Good mathematical skills are necessary to succeed in a statistics course	3.69 (0.99)	3.50 (1.22)	4.13 (1.13)	3.89 (0.78)	4.25 (0.71)	3.75 (1.02)
3) Statistics is a pleasant subject for me	3.89 (0.90)	3.50 (0.91)	4.40 (0.51)	3.11 (0.93)	3.38 (0.92)	3.79 (0.92)
4) Knowing statistics would improve my job opportunities	4.26 (0.70)	3.91 (0.92)	4.57 (0.65)	4.33 (0.71)	3.38 (1.19)	4.11 (0.86)
5) It is easier for me to learn Statistics in-class instead of online	4.11 (0.80)	3.55 (1.18)	4.33 (0.82)	4.11 (0.78)	3.63 (1.19)	3.91 (1.00)

Table 2 indicates that students with different personality traits show different levels of agreement for the statements presented. The following observations can be made:

- ✓ The Neurotic group gave the strongest level of agreement for the first statement, where they feel that Statistics is a complicated subject.
- ✓ Students in the Extraverted group gave the strongest support to statement 2. They responded that they believe that good mathematical skills are necessary to succeed in Statistics.
- ✓ Students in the Conscientious group gave the strongest level of agreement to last three statements. They responded that Statistics is a pleasant subject and would improve job opportunities. They find it easier to learn statistics in class rather than online.

Anxiety

Students were also asked to indicate their level of anxiety before writing a statistics exam, when it is a closed book exam, an open book exam, and before statistics exams in general.

Research Question 3 Do gender and personality traits have an impact on the anxiety level for different exam formats?

Based on Table 3, we can conclude that gender and personality traits have an impact. Results indicate that Female students experience a higher level of anxiety in those three situations than the Male group. Male and Female students tend to be the most anxious before a closed book exam. This is also true for all personalities. We also note that Students in the Neurotic group feel the highest level of anxiety before writing a statistics

exam, especially when it is a Closed book exam. Students belonging to the Agreeable group expressed the highest level of anxiety before an Open book exam, followed by the Neurotic group.

TABLE 3 - PERSONALITY TRAITS, GENDER, ANXIETY / FEAR OF STATISTICS EXAMS				
PERSONALITY	Mean Anxiety Level (Standard Deviation)			
	Anxiety Level 1= No Anxiety to 10 = High Anxiety level			
	Before a Closed book exam	Before an open book exam	Before writing a statistics exam	Frequency
Agreeable	7.79 (1.53)	6.20 (1.89)	7.01 (1.67)	35
Intellect	6.39 (2.37)	5.50 (2.24)	6.45 (2.22)	22
Conscientious	6.23 (1.78)	5.07 (1.95)	5.67 (2.16)	15
Neurotic	8.11 (1.62)	6.00 (1.58)	7.83 (2.60)	9
Extraverted	7.75 (1.58)	5.50 (2.56)	7.69 (1.71)	8
Female	7.68 (1.43)	5.99 (2.02)	7.10 (1.73)	46
Male	6.82 (2.13)	5.44 (2.09)	6.44 (2.20)	55

Social Media Tools Usage

A list of social media was provided and respondents were asked to indicate whether they use the media or not to communicate in the course. The frequency of usage was tabulated overall and according to gender.

Research Question 4: Did students enlist social media tools to assist in the course? What were they?

Based on Table 4, we find that 99% of students use Social media tools, mainly Email messaging, Facebook, Text messaging, Phone calls, in addition to Face-to-Face. Results found in Table 4 indicate that Email messaging is widely used by students, 80% of them, while Face-to-Face is still highly used at 77%. Facebook is also a popular tool for communication used by 64%, followed by Text messaging at 59% and Phone calls at 39%. Table 4 also presents the results according to Gender. We find that 74% of female students use Email to communicate while the frequency is 85% of male students. More female students (83%) select Face-to-Face as a communication tool compared to 73% for male students. The same is true for Facebook usage for Female students at 76%, while it is at 55% for Male.

Table 4 - Social Interaction Tools Usage According to Gender			
Type of Social Media	Frequency Female (n=46)	Frequency Male (n=55)	Frequency Overall (n=101)
Email	74%	85%	80%
Face-to-Face	83%	73%	77%
Facebook	76%	55%	64%
Text messaging	50%	67%	59%
Phone calls	37%	40%	39%
Skype	2%	5%	4%
No communication	7%	2%	4%
Other	4%	2%	3%
Blogging	0%	2%	1%

Number of Social Media tools

Table 5 presents the number of social media and other interaction tools used overall and according to gender. We find that 83% of students use 2 to 5 social interaction tools, while only 5% use more than 5 tools and 12% use one or none.

Research Question 5: Is the choice and number of social media tools different according to gender?

The average number of tools used is almost the same for both male and Female but the distribution is different.

Table 5 - Number of Social Interaction Tools used to Communicate in the Course			
Number of Social Interaction Tools used	Frequency Female (n=46)	Frequency Male (n=55)	Frequency Overall (n=101)
0	2.2%	0.0%	1%
1	6.5%	14.5%	11%
2	19.6%	20.0%	20%
3	28.3%	16.4%	22%
4	21.7%	25.5%	24%
5	19.6%	16.4%	18%
6	0.0%	7.3%	4%
7	2.2%	0.0%	1%
Average	3.30	3.31	3.31

Several tests were performed to determine if the proportion of people using specific communication tools according to gender was significantly different. At 5% level of significance, only the proportion of Facebook users was significantly different according to gender (p -value = .024). The proportion using Texting is significantly different according to gender with a p -value of 0.078. No other significant differences were identified.

A Chi-square Test of independence was performed to determine whether the number of social media tools utilized and gender were independent. At the 5% level of significance the hypothesis of independence could not be rejected with a p -value of 0.243.

CONCLUSIONS

The study unearthed some interesting findings revolving around teaching statistics in a blended environment. Different levels of agreement, based on gender and personality traits, were found for the statements presented concerning attitudes and motivation, which was also true of social media usage. It was found that most students use social media tools, mainly Email messaging, but also Facebook, Text messaging, Phone calls, and they also rely on Face-to-Face, all of which varied according to gender. The average number of social media tools used is

almost the same for both males and females but the distribution is different. Additionally, the level of anxiety of female students before exams of different formats is always higher than that of male students.

It is evident that instructional design needs to take into account gender and personality trait differences as they relate to attitudes, motivation, exam anxiety and social media use in a statistics course and need further study. How these relate to performance would also need to be investigated to advance the discussion, given the importance of this topic to both academia and industry.

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PHYSICAL ACTIVITIES AND SPECIAL EDUCATION. A CASE-STUDY WITH AUTISM SPECTRUM DISORDERS STUDENTS

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ABSTRACT

Since Convention of 'Sport in the United Nations Convention on the Rights of Persons with Disabilities' (2007) elaborated a 'multi-faceted' framework for implementation, sports and physical activities - in the school context - has been used to promote social equality and self participation of students with disabilities (European Council, Erasmus+ 2014/2020). Among traditional school practices, sports and physical activities are often connected to leisure and expressivity activities, providing only the body-material component. However, the Italian latest curriculum reforms (2007 and 2012) have highlighted the social competences related to sports and physical activities, although about the support function of physical activity to learning processes, especially in case of disabilities, there is much more to discover.

The paper presents the design-research, methodology and early results of an exploratory case-study, accomplished at the University of Bari. According to neuro-didactics studies and using the heuristic tool of active and bodily *mediation*, aimed:

- a) to investigate the mediation function of physical activities included within the interventions programs for student with Autism Spectrum Disorders (ASD) supporting the related learning processes;
- b) more specifically, to test the efficiency of 'iconic visualizers' (Kozhevnikov et al., 2005) – as video-modeling and flashcards - supporting the didactical communication and the understanding of motor activities performance.

INTRODUCTION

Physical activity is a key determinant of health across the lifespan and it has been recognized as an important factor to the learnings of students (Kohl & Cook, 2013; Casolo, 2017). It is well-known the importance of sports and physical activities for the development of personality of children and adolescents (Stodden et al. 2008; Lubans, Foster, Biddle, 2008), the preservation and efficiency of integrity and psycho-physical balance in adulthood, the prevention of aging and maintenance of autonomy in the senility (ACSM, 1998).

Movement is the first instrument of knowledge and relationship that the person uses (Ripoll, 1991; Newell & Vaillancourt, 2001). Through the body perceptions and movements, the child begins a great process of identification with respect to the environment, goes progressively from dependence to autonomy, expresses its own needs, responses, emotions (Vayer & Toulouse, 1982; Chunlei & Buchanan, 2014). Physical activity assumes the role of mediation for the emotional and cognitive development of children and young persons: through the performance of motor actions, reciprocal relationships are established between the motor, cognitive, emotional and social functions, so that the various motor experiences - through bodily expressiveness, play, and sport - become mediating factors for the development of mental processes, emotions, and interpersonal relationships (Colella, in Sibilio & D'Elia 2017).

Within a new 'paradigm' that looks at the relationship between physical and material (Thompson, 2005) and according to Embodied Cognition and Enactivism Science (Varela, Thompson, Rosch, 1992; Clark, 1997; Barsalou, 2008; Thompson, 2007) and looking on the second-generation cognitive sciences open to phenomenological reflections and neuroscience studies (Jouen et al., 2015), body and motor activities are considered as mediators between the *self* and the external reality, allowing the structuring of balanced relations between the areas of the person, the foundation for the promotion of individual health and well-being (Chunlei & Buchanan, 2014). The functionalistic approach and traditional distinction between perception, cognition and action were overcome and an idea of non-symbolic but very rooted in the sense-motor system cognition have been supported (Sibilio, 2013; Paternoster, 2010).

Linking traditional instances and innovation elements, a 'scientific acknowledgment' recognition of the body and movement function into the educational and didactic processes has been given (Sibilio, 2012, p.331). Since each motor and movement experiences promote multiple learning outcomes – from the cognitive, emotional and social development point of view, promotes the learning of topological concepts, problem solving, self-efficacy and social and relational skills (Lubans, Foster, Biddle, 2008; Colella, in Sibilio & D'Elia, 2017) - the

educational interventions - in formal as much as informal contexts, in normal and special needs - can not fail to consider the motor and physical activities (Bailey et al., 2006) in order to realize specific and 'personal' development (Perla, in Sibilio, 2017).

THE STUDY

Since Convention of 'Sport in the United Nations Convention on the Rights of Persons with Disabilities' (2007) elaborated a 'multi-faceted' framework for implementation addressed to students with disabilities in the school context, sports and physical activities has been used at first to promote social equality and self participation. In Italy, in accordance with European Council programs (Erasmus+ 2014/2020) and the latest curriculum reforms (DM 31 luglio 2007; DM 254/2012), among current educational practices, *in* and *out* of school, sports and physical activities are often connected to leisure and expressivity activities, providing mainly the body-material component and the social competences (Smith, 2002; Vazou et al., 2017).

According to neuro-didactics studies (Hebb, 1980; Kandel, Schwartz, Jessell, 2000; Sousa, 2010; Rivoltella, 2012), using the theoretical concept of *simplicity* (Berthoz, 2012; Sibilio, 2013) and an 'heuristic tool' of active and bodily *mediation* (Sibilio, 2011; Damiano, 2013), the exploratory case-study (Stake, 1995) is being realized at the University of Bari: the data collection has been carried out as an observatory study during the Master's internship (2013/2014); the analysis of data is still ongoing. Through a 'mixed-method design' (Creswell, 2003 – fig. 1) the study aimed:

- to investigate the mediation function of physical activities included within the interventions programs for student with Autism Spectrum Disorders (ASD) supporting the related learning processes;
- more specifically, to test the efficiency of 'iconic visualizers' (Kozhevnikov et al., 2005) – i.e. video-modeling and flashcards – used as didactical communication 'tools' in support of students' understanding and performance of motor activities.

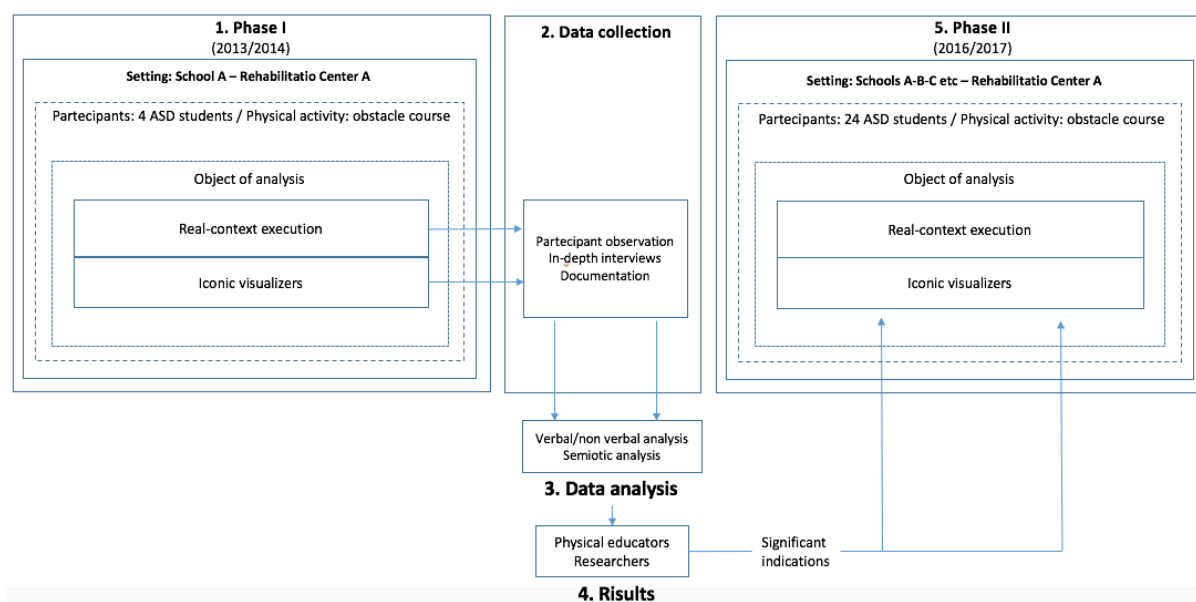


Fig. 1 – Design of research

Data collection and data analysis through a mixed method (participant observation of activities; in-depth interviews of physical educators; documentation) and a triangulation (Denzin, 2006) of verbal/non verbal and semiotic tokens (see fig. 1).

The background intervention program refers to TEACCH treatment (Mesibov, Shea, Schopler, 2004; Virsues-Ortega, Julio, Pastor-Barriuso, 2013) and, according to a 'personalized' approach (Perla, 2013; in Sibilio, 2017), it is implemented through the coordination of actions carried out at school and in the rehabilitation center, both attended by the ASD students involved in the study.

In the first exploratory phase of study, carried out in 2013/14, the study involved four ASD students, three male and one female, each of 9 years old, attended two different schools and the same physical activities program in the rehabilitation center. The prerequisites for participating in the study were previously being assessed at the same verbal languages and movement skills level (PVCL, Rustioni & Lancaster, 2007; Test of Gross Motor Development-2 - TGMD-2, Ulrich, 1985-2002; Burton, 1998) and history of acquiring skills with teaching procedures that included physical prompting.

The starting hypothesis is to demonstrate that through the use of 'iconic visualizers', within an appropriate

motor-educational intervention, it is possible for students with ASD to improve the performance of the exercise – i.e. the obstacle course –, observed by increasing the executive parameters and the summative assessment expressed by physical educators – not directly involved in the survey – at the end of a training program of 5 physical education lessons (at school) and 5 activities (in the rehabilitation center). The assessment tool was inspired by the Basic Movement Performance Profile – BMPP (Western Australia Department of Education, 2013), translated and adapted in the Italian version (see USR Reggio-Emilia, 2009). The experimental pair (EP) followed a structured protocol as:

1. Cognitive Activation Step (mnemonic and mime/movement revision of the program supported by ‘icon visualizers’)
2. Motor Activation Step (stretching exercises and moderate motor activity)
3. Training Step (three-times repetition of exercise, alternated with the companion and supported by ‘icon visualizers’)
4. Cool-down Step (stretching exercises, lashing and respiratory control)

Both experimental pair (EP) and the control pair (CP) performed the same number of lessons. The control pair (CP) attended only the following three steps: Motor Activation Step, Training Step without the support of ‘icon visualizers’ and Cool-down Step.

Although during the obstacles course activities, several mediators have been unavoidably used to enhance the didactical communication and the understanding of ASD students – adult/peer tutor modeling (Clinton, 2015), verbal prompt (Chabani & Hommel, 2014) – only the ‘iconic visualizers’ (Kozhevnikov, Hegarty, Mayer, 2002) has been analyzed. The typologies of these are various – gross motor movement cards (see fig. 3, a.), schoolbook images – taken by specific and professional tools or belonging to a personal physical educator ‘thesaurus’ (Agrati, 2017).

FINDINGS

The following results refer exclusively to a) the quantitative dimension, based on the executive parameters and the summative assessment expressed by physical educators; b) a specific aspect of qualitative dimension – the early semiotic analysis of ‘iconic visualizers’. The whole study will be accomplished later, with the analysis of in-depth interviews of physical educator. The assessment of the basic movement performance focused on 4 of BMP skills: balance on a foot (BF), line walk (LW), forward roll (FR), run (R), jump for distance (JD).

Results concerning the quantitative dimension are elaborated in three steps and refers to each skill: a. score differences (numerical delta) of ratings pre-post of EP (ΔEP) and CP (ΔCP); b. increase of EP (ΔEP) net of ‘exercise effect’ – the increase of CP ($\Delta EP - \Delta CP$) – in order to evaluate the real ‘experimental effect’; percent increase of EP net of the ‘exercise effect’. Considering both pairs ($n = 4$, EP + CP), at the end of the analysis of ratings net of the ‘exercise effect’, an average increase 0.9 scores emerged in EP, respectively for BF (0.75 – 30%), LW (1.5 – 60%), FR (0.5 – 20%), R (1.75 – 70%), JD (0 – 0%).

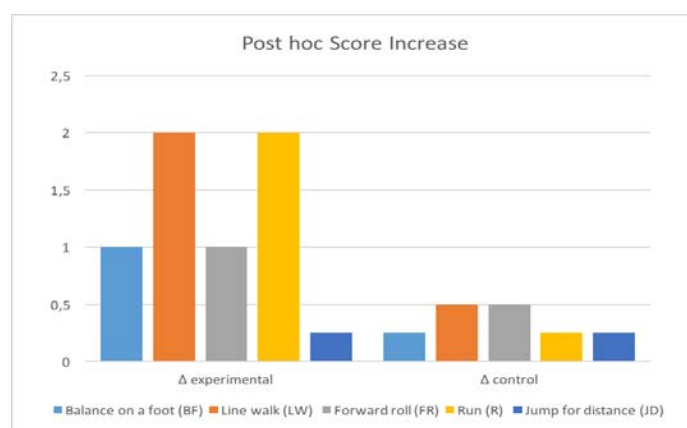


Fig. 2 – Post hoc score increase for each skill of training program

The Basic Movement Performance (2013), adapted in the Italian version, with respect to the sample tested, has proven to be a quite effective performance measurement method, quantifying both the overall result of the data and the skills that have been taken into consideration. Although the study, from the experimental point of view, has a limited number of students, as a critical element, however an indicative value of the ‘experimental effect’ (0.9 – 36%) has been obtained. Beyond the average increase, the diversification by skill – max. in ‘run’ (R), min. in ‘jump for distance’ (JP) – is to be note.

This quantitative data confirms with due ‘caution’ (Breslin & Rudisill, 2011) the efficiency of ‘iconic visualizers’ supporting of physical activities for ASD students. As studies with ASD early child (Bremer & Lloyd, 2016; Liu & Breslin, 2013), ‘results indicated statistically significant differences between protocols,

while post hoc tests indicated that the picture task card condition produced significantly higher gross motor quotient scores than the traditional protocol' (Liu & Breslin, 2013, p. 347). Therefore, it would be interesting to carry out a study to verify the real differences in the use of iconic 'mediators' - as picture task card - due to the age of students (early childhood and childhood).

This suggests further research - broader samples, skills-specific analytics - in order to give more precise answers. The indicative results and previous studies (Agrati, 2016; 2017) induces the investigation into its qualitative dimension through the specific analysis of 'iconic mediators', used in supporting the physical activity programs of ASD students. This second step is taking place on a larger sample (24 ASD student - age: 7-11 - and 24 ASD adults - age: 18-30; involved in the same training program). The following semiotic analysis (Nikolajeva & Scott, 2013) has been carried out on the 'iconic visualizers', used in the training program, and it refers only to the icon of 'jump for distance' (JD), whose ability has not increased.

Comparing three 'iconic visualizers' - see fig. 3, a. used in the experiment; b. adapted from Gross Motor Movement Cards (AfA, 2017), c. used in the study of Breslin & Rudisill (2011) - graphical and textual differences can be distinguished.

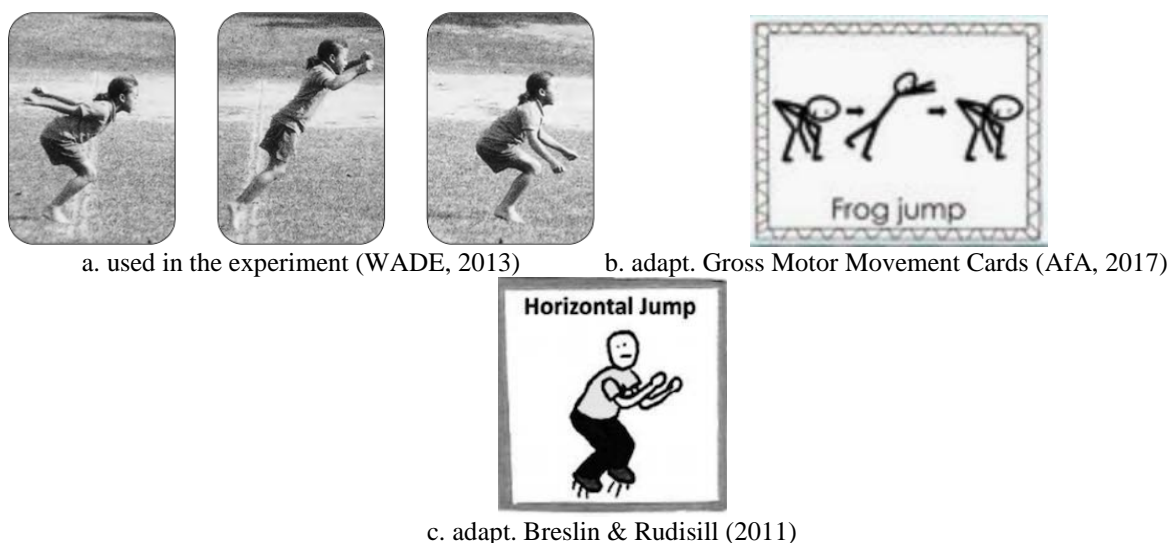


Fig. 3 - 'Icon visualizers' analyzed

The image a. is a 'picture' that reproduces a realistic situation - a jumping child - and it is articulated in three sub-pictures that express the effect of movement. The image c. is an 'icon' (Peirce, 1931-58; Eco, 1975) that represents an essential character performing a jump. It's articulated, as the image a., in three sequences and the effect of the movement is further highlighted by the directional arrows. The image c. is, also, an 'icon' that reproduces an essential character. It is not articulated in sequences. In the image a. there are no verbal elements, in b. 'Frog jump', in c. 'Horizontal Jump'.

The communicative effectiveness of these three images is not testable using only theoretical tools. For this reason, in order to verify if the different features of the 'iconic visualizers' have effects on the ASD students understanding and performance, in the second phase of this study a further experimental analysis will be carried out on them.

CONCLUSIONS

As known and widely accepted (Billingsley & Rome, 1983; Libby et al., 2008; McKay et al., 2014), according to the behavioral approach, there are four procedures for transferring stimulus control from response prompts to natural stimuli (see 'Prompt Hierarchy as Applied Behavior Analysis approach'). In general, in order to providing the performance of ASD student, this study is confirming that verbal prompts need to be integrated with images, in physical activity as well. Although this is known (Liu & Breslin, 2013), however, it would be useful to better analyze the iconic mediators in detail because - as emerging from the survey - their features may have an effect on the learning and performance of ASD students.

The idea of teaching as a 'complex adaptive system' (Sibilio, 2014) is once again confirmed: in order to meet individual differences and recognize the potential plasticity of the neurological system, teaching is 'adapted' to the personal forms of knowledge, skills, attitudes and behaviors (p. 78). From this perspective, on one hand, the teachers are called every day to explore the different and specific apprenticeships of students and to identify eventual methodological 'deviations' (Sibilio, 2017) that respond to different educational needs; on the other hand, the researchers should believe in an *in progress* knowledge and be always available to further deepen the

obvious.

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PLACE AND IMPORTANCE OF ORGANIZATIONAL COMMUNICATION IN EDUCATION INSTITUTIONS (EĞİTİM KURUMLARINDA ÖRGÜTSEL İLETİŞİMİN YERİ VE ÖNEMİ)

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Bu araştırmanın amacı eğitim kurumlarında örgütsel iletişimin yeri ve önemi hakkında bilgi vermek, konuya ilişkin araştırma sonuçlarından hareketle günümüz eğitim uygulamalarına ışık tutmaktır. Bu amaç çerçevesinde kütüphane ve internet ortamında “iletişim”, “örgütsel iletişim” anahtar kavramlarıyla taramalar yapılmıştır. Bu tarama sonucu amaca uygun bulunan makale, tez ve kitaplar incelenmiştir. Betimsel analizin kullanıldığı araştırma sonunda; örgütsel iletişimin örgütün amaçlarının gerçekleştirilmesinde, kurum içinde karar aşamasında gerekli olan bilgilerin toplanması ve alınan kararların etkili bir şekilde uygulanmasında önemli bir etkiye sahip olduğu görülmüştür.

POLICY ANALYSIS ON THE USE OF AN E-LEARNING PLATFORM AT A HIGHER EDUCATION INSTITUTION

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ABSTRACT

Learning Management System or LMS are very widely used in most higher education institutions. Change management is crucial in determining its successful implementation when adopting an entirely new LMS for the university. The objective of this study is to evaluate the adoption of an e-Learning platform Canvas in one of the universities in Brunei Darussalam. We used the Policy Analysis Process which comprised of the six main stages from verifying, defining and detailing the problem; establishing evaluation criteria; identify and then evaluate alternative policies; followed by displaying and distinguishing among alternative policies, and the final stage consisted of monitoring the implemented policy. We also explored the different types of LMS available, and identified the challenges after the implementation of using Canvas in the university.

Keywords: Learning Management System, Higher Education, Policy, Challenges

INTRODUCTION

Learning Management Systems or LMS are very widely used in higher education. Some of the perceived benefits are the capability to provide a centralized learning, ability to track and report features, evaluate capabilities, ease of upgrading and its simplified learning process. Centralized learning offers the combination of several activities including the development content of training and performance derived from a single source. Watson and Hardaker (2005) stated “web-based intelligent tutoring systems, aimed at compensating for the absence of a real world tutor have to date mostly concentrated on providing assistance in a particular subject domain and not focused on the problem of utilising content represented as learning objects across multi-subject domains” (p. 56). In the case of successful implementation, LMS further enhances the knowledge and skills of the users, it reduces time for the learning and professional development in terms of efficiency and effectiveness, and ultimately drive towards achieving the set targets and goals (Little, 2015).

The use of an LMS platform known as Canvas has since been made mandatory in one of the universities in Brunei, from the time of its implementation in recent years. Canvas is a cloud based LMS, an enterprise software by Instructure (Canvas Instructure, 2017a, 2017b). A study conducted locally in the teaching and learning of Sociology using Canvas reported satisfactory improvements in the writing skills and generated positive interests by high school students (Lamit et al., 2017). Canvas was first introduced as a pilot test in one of the faculties in the university. Canvas was adopted in the university due to its features in ease of learning which increases efficiency for every stakeholder in terms of administration management, and most importantly the study process and progress of the university’s students. Since its implementation, there’s no mandatory requirement for both the staffs and students to use the Canvas LMS in the university. However, only emails are sent upon instructions to all staffs and students. The stakeholders who are involved in the implementation of the university’s Canvas LMS include the senior management team of the university, the focal persons from each faculty/school/institution/centre of the university coined as the Learning Technology Advisors (LTA) and the Canvas helpdesk personnel at the ICT center.

Technology is only ever evolving and therefore change can be inevitable. Planning and implementing a change can be difficult as not all changes are going to meet everyone’s expectation. Hence, it is crucial that change is managed as much as possible. When it comes to the adoption of an entirely new learning management system for the university, change management is crucial in determining its successful implementation. As stated by Burnes (2003), organizations may miss out on opportunities for organizational improvement if management development is not integrated with organizational change. In other words, leadership ultimately determines whether change management is successful. Many studies have mentioned the importance of leadership in

managing change. The main obstacles towards effective organizational change has been explicitly identified by Hoag et al. (2002) as poor leadership, weak management and organizational culture. Brown et al. (2016) have also found a commonality among the studies that have been made on the methodologies of change management. One notable commonality is the relationship between leadership and management. Additionally, Edmonds (2011) noted that managers and leaders should be picked based upon their skills and level of commitment rather than the level of hierarchy.

Kotter's (1996) guide to successful change entails the organizational leaders creating 'a sense of urgency' among the organization to adopt the changes, to develop a vision and a strategy for the change and to communicate this change vision to the employees, all of which requires good leadership to achieve. Edmonds (2011) have also mentioned the importance of having a clear and concise communication with the management and stakeholders before planning the implementation of a change. Furthermore, Manning (2012) has summarised the key theories for a successful implementation of change to five points; communication, having a good and clear set of starting ideas, those who are involved need to be committed from start to finish, having plenty of resources to keep the planning and implementation of change going, and develop a detailed implementation plan.

The key findings of IBM's 2008 Making Change Work Study conducted with 1,532 participants determined that most CEOs believe that they themselves as well as the organization implements change poorly and only a handful others believe themselves and the organization to be successful in these implementations (Jørgensen et al., 2009). In the study, project leaders established that successful projects are infrequent where nearly 60 percent of them failed to completely realize their objectives whereas 15 percent have reported to completely miss all the objectives or have had management discontinue their project. The most successful segment of the participants are the 20 percent of participants who are able to successfully hit their targets within time and budget with a recorded 80 percent success rate; also known for being Change Masters, leaders who are able to execute effective change management.

Notably ineffective change management may lead to higher costs and expenses such as the waste of money in implementing Canvas if less than half of the stakeholders are using it. There is also the issue of lost opportunity for the stakeholders in utilizing the features of the application which has the potential to enhance the quality of learning. The Change Masters in the above study has identified several fundamental barriers towards change with 58 percent voting for difficulty in changing mindsets and attitudes and corporate culture at 49 percent. When it comes to the what makes change successful, 92 percent of participants believe that top management support for change is fundamental in executing successful change. Meanwhile, 72 percent of participants believe that employee involvement in decision making is another key factor, whereas honest and timely communication is agreed by 70 percent of the participants and finally an organizational culture that encourages change within the organization is another critical area that will determine the success of change management and execution.

METHODOLOGY

The following are the objectives of this present study:

- To evaluate the adoption of an e-Learning LMS platform Canvas in one of higher education institutions in Brunei known as Universiti Brunei Darussalam (hereafter referred to as UBD), with the use of the Policy Analysis Process which comprised of the six main stages from verifying, defining and detailing the problem; establishing evaluation criteria; identify and then evaluate alternative policies; followed by displaying and distinguishing among alternative policies, and the final stage that consisted of monitoring the implemented policy.
- To explore the different types of LMS available.
- To identify the challenges after the implementation of using Canvas in the university.
- To recommend any areas of improvement on the use of Canvas in the university.

This study made use of both qualitative and quantitative methods to obtain data and information in which an interview was conducted with the main administrative person in-charge overseeing the progress on the use of Canvas LMS at the university. The interview duration was about 90 minutes.

In analysing the policy for this study, we adopted the 6-steps policy analysis process by Patton and Sawicki (1986), which are:

1. Verify, define and detail the problem.
2. Establish evaluation criteria.
3. Identify alternative policies.
4. Evaluate alternative policies.
5. Display and distinguish among the alternative policies.

6. Monitor the implemented policy.

Verifying, Defining and Detailing the Problem

The current teaching and learning experience were hindered from evolving by some problems within the institution. These are the major problems that need to be addressed through the implementation of a certain change or policy.

Firstly, prior to this study, the LMS used throughout the campus is not standardized. There is no one LMS that is being used by all faculties, which implied that different faculties are using different LMS. This makes it seem like the faculties within UBD are working differently from each other and there is no sense of integration among them. Furthermore, this also means it would be more difficult for the management team to monitor the different LMS used.

Secondly, UBD has a vision to be 'a first class international university' and this is considered the major vision for the institution (Tan & Shahrill, 2015a, 2015b; Tan et al., 2016, 2017; Hanafi & Tong, 2017). One of the many challenges in achieving this vision is to incorporate more technological advancements that can further aid lecturers and students to have much better teaching and learning sessions. Additionally, as more and more institutions are becoming more conscious about the environment, it is also a good move to increase the use of paperless learning materials.

Thirdly, it was also mentioned in the interview that there is a lack of interaction between lecturers and students. While some students prefer to have discussions with their lecturers face-to-face, it can sometimes be difficult to do so as lecturers can be very busy with other administrative work. As a result, there is no ideal time and/or place to do the discussions. On the other hand, there are also students who actually prefer to talk or discuss with their lecturers through online platforms, for example via email. Hence, there needs to be a better platform where the different needs of both the lecturers and students can be met and where activities, such having a group discussion or an online quiz can be done more comfortably, at any time convenient to both parties.

And fourthly, lecturers are unable to monitor their students' activity or learning behavior outside the lecture or class. Lecturers are only able to monitor students' activity when they are in lectures but not beyond the lecture room. This problem also ties in with the previous problem. Being able to monitor the students' activity or learning behavior such as when the students are accessing lecture notes or learning materials, or when they are actively participating in a group discussion, would be beneficial for the lecturers to identify the different needs and learning behavior of their students.

Establishing the Evaluation Criteria

In order to choose a policy, alternative policies need to be examined. Before any form of evaluation is done, a set of criteria needs to be established in order for the alternative policies to be weighed and compared. These criteria include the following.

Cost – Budget in the implementation of a new system can be allocated and the amount of budget invested needs to be able to make a sustainable change in the future.

Benefit – The policy needs to benefit all relevant stakeholders. If a system is widely used by all staffs and students, this will mean that the system is beneficial; not only to those who are using it but also to those who have invested their time and effort in making sure the system is successfully implemented.

Administrative ease – The policy needs to be implemented and monitored easily for further improvements.

Effectiveness – The policy needs to be able to meet the stakeholders' requirements. The LMS needs to be able to be used to deliver lectures and teaching materials easily and effectively, ensuring a smooth learning process.

Political acceptability – This refers to the level of acceptance of the policy by all stakeholders.

Time to implement – In the case of implementing a new learning system, there needs to be ample time to do some in-depth research on the system first before it can be used by all. Additionally, all staffs and students would require some time to familiarize themselves with the new system. Hence, implementing the policy incrementally is the best way as learning management system can be quite evolving over time as well.

Technical ease – The policy needs to be compatible with the existing infrastructure within UBD and that there are technical skills available to cater the needs of the system.

Identifying Alternative Policies

Before settling on which policy we want to implement, we need to identify alternative policies in order to compare and evaluate so that a reasonable or rational decision can be made afterwards. There is not much alternative when it comes to teaching and learning experience through the use of LMS, other than choosing a different or a better LMS. In this case, we have two options; we can either stay using the current ones (the non-standardized LMS) or we can move to using a better system that can be used campus-wide (standardized LMS).

Evaluating Alternative Policies

The content, implementation, outcomes and impacts of each policy have to be evaluated to acquire a deeper understanding of its value and functions. Therefore, running a framework of evaluation activity is necessary. Each alternative policy mentioned previously must possess at least the basics of the following standards; utility, feasibility, propriety and accuracy. Figure 1 below shows the evaluation framework adapted from Centers for Disease Control and Prevention (2017).

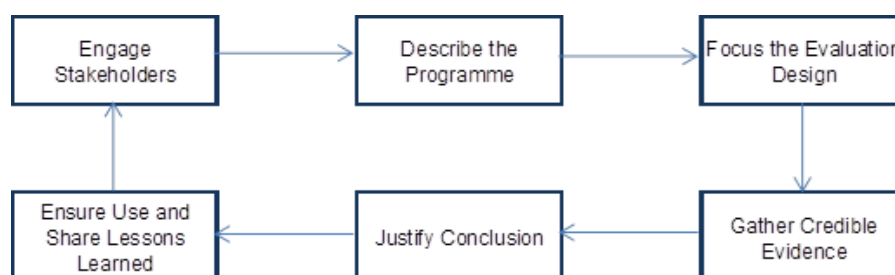


Figure 1: Evaluation framework (adapted from Centers for Disease Control and Prevention, 2017)

Stakeholders are made sure to contribute in evaluating the alternatives. Stakeholders in this case are divided into four main groups; the higher management, the research committee, teaching and non-teaching staff and students. The first two groups are the policy makers. They are the ones who gather information from the last two groups of people (acknowledged as the public) and utilize the acquired data to be considered in the evaluation of the policy. Furthermore, engaging the stakeholders is a prominent action.

Subsequently, Alternative #1 describes the several LMSs used and none can be standardized. It is unfair to completely neglect their contributions over the years because needs and expectations from an LMS are changing in time, especially with the rapid development of technology. Alternative #2 on the other hand, perpetuates to finding an LMS that suits the ever-changing requirements in terms of the LMS's standards. In order to further elaborate the essence of the policies, the evaluation criteria established in Step 2 of the policy analysis process are designed to complement the analogy of the policies. We then compared each alternative based on the evaluation criteria. Table 1 shows the acceptability indication of each alternative in terms of the criteria listed (the '☐' indicates high acceptability).

Table 1: Acceptability indication of each alternative

Evaluation Criteria	Alternative #1	Alternative #2
Cost	☐	
Benefit		☐
Administrative ease		☐
Effectiveness		☐
Political acceptability	☐	☐
Time to implement	☐	
Technical ease	☐	☐

Investment cost, in particular, is the major concern in relation to investment on an LMS. It has to be defined before one could proceed to analyzing other factors. Thus, it is essential to justify the benefits with the cost invested on the system. The cost-benefit analysis could be used in this aspect and that is to ensure the benefits from the system outweigh the cost. Benefits gained and the effectiveness of the system must extract some measurable credible evidences or ROI. Benefits and effectiveness here refer to the positive impacts from the implemented policy in terms of making teaching and learning easier.

In justifying the conclusion, the aim of each policy is to solve the problems identified. Therefore, Alternative #1 is quickly seen as stagnant but there is still a further distinguishing that needs to be undergone in order to avoid Alternative #1 from being discarded single-mindedly. Moreover, evaluation of the two alternatives is fruitful, as we still need to look into the different LMSs that fall under each alternative. We have chosen two LMSs (Edmodo and Moodle) that have been used within UBD as the examples of non-standardized LMS. These LMSs fall into Alternative #1. That is, if UBD was to take no action in altering its LMS. On the other hand, Canvas (an LMS) is chosen beforehand if UBD is to choose Alternative #2 that is to standardize its LMS. Table 2 shows the evaluation of each LMS. All the LMSs are compared based on the criteria of LMS Evaluation tool outlined (Longsight, 2013). According to the criteria listed, Canvas scores best between the other two LMSs. The scores obtained are from calibrating the quality of the LMSs features (FinancesOnline, 2016a, 2016b).

Table 2: Evaluation of each LMS

Criteria of LMS	Alternative #1		Alternative #2
	Edmodo	Moodle	Canvas
Pedagogical design & layout	Good	Excellent	Excellent
Content organization	Good	Excellent	Excellent
Speed of system	Good	Good	Good
Communication	Fair	Excellent	Excellent
Sections and groups	Good	Good	Excellent
E-portfolio	-	-	Excellent
Discussion tools	Good	Good	Excellent
Analytics & student tracking	Good	Good	Excellent
Cost	Quote-based	Free	Quote-based

Display and Distinguish among Alternative Policies

In Table 3 below, we listed the highlighted advantages or disadvantages of each alternative policy.

Table 3: Advantages or disadvantages of Alternative #1 and Alternative #2

Evaluation Criteria	Alternative #1	Alternative #2
Cost	Eradicate the need to invest in a new system	<ul style="list-style-type: none"> Particularly high investment on system High subscription rate
Benefit	The current teaching and learning system is time consuming and not up to standard/expectation	<ul style="list-style-type: none"> Making teaching and learning easier Helps take the classroom experience into the 21st century (Canvas Instructure, 2017a)
Administrative ease	Difficult to monitor	<ul style="list-style-type: none"> Fairly easy to implement Early stage in monitoring due to limited data
Effectiveness	Much time consumed, neglecting efforts in other work or matters	Significant increase in effectiveness with increasing usage
Political acceptability	Naturally accepted with the idea of not needing to change	<ul style="list-style-type: none"> Approved and accepted by higher management Negative first impressions from potential users
Time to implement	N/A	Incremental method in implementation and updating
Technical ease	Much work needed to implement and maintain different LMSs	<ul style="list-style-type: none"> Available bandwidth within campus Desktops and necessary hardware are provided

Figure 2 illustrates the much advantages of implementing Alternative #2 compared to Alternative #1. Should we consider taking no action, there is no need to invest on another system for its research and implementation of which would take several years. Being dormant is a natural human behavior as it is not an eccentric subject to discuss. The public may resist migrating to a new system at the expense of indulging the benefits of a standardized LMS.

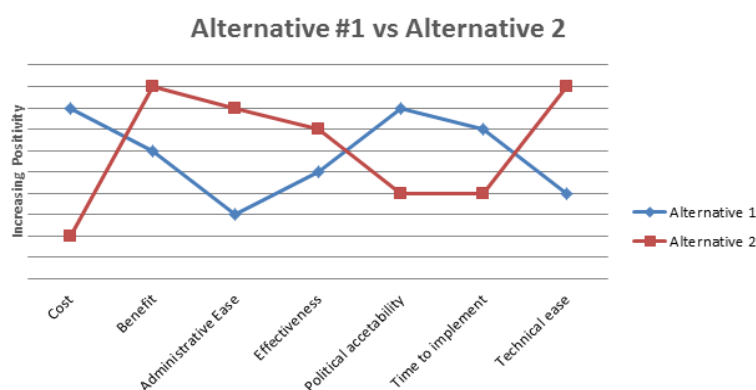


Figure 2: Comparing Alternative #1 and Alternative #2

To further justify the competency of implementing Alternative #2, we have displayed the capability of Canvas (shown in Table 4) following the LMS Evaluation Tool (Longsight, 2013).

Table 4: The capabilities of Canvas

Criteria of LMS	Canvas
Pedagogical design & layout	<ul style="list-style-type: none"> Access to contents Pedagogical tools are routinely added
Content organisation	<ul style="list-style-type: none"> Provides storage and use strategies Features are like announcement tab, feed, files etc.
Speed of system	Quite fast although depending on the bandwidth capacity
Communication	Provides the use of e-mail and threaded discussion
Sections and groups	<ul style="list-style-type: none"> Hierarchical ability to organize course content Instructor may manage sub-groups of students
E-portfolio	<ul style="list-style-type: none"> Work products are gathered to support portfolio strategy Reporting tools allow assessment
Discussion tools	Fast and functional with user profiles and pictures, increase interaction between students and instructors
Analytics & student tracking	<ul style="list-style-type: none"> Allows instructor to gather data of learning outcomes Tracks student activity and enrolment
Cost	Quote-based

The overall capability of Canvas is excellent in performance. Apart from being standardized, Canvas is one of the top-rated LMSs globally. Canvas LMS is “the enterprise software that helps take the classroom experience into the 21st century” with the goal, “to make teaching and learning easier” (Canvas Instructure, 2017b).

Decision Making

Through the process of evaluation and distinguishing, we learned that Alternative #1 does not particularly solve the problems addressed at the beginning. Moreover, it contradicts to UBD’s vision as a whole. Alternative #2 may have conformed to the standards and expectation of UBD. Canvas is highly beneficial, justifying its worth to be UBD’s standard LMS.

The below description outlines the activities in decision making by the policy makers along a timeline:

In July 2014, the two champions, with the approval of University Research Ethics Committee conducted a pilot study on Canvas. The LMS was subsequently implemented in five faculties in UBD. The stakeholders foresee the potentials of Canvas. The higher management was convinced with the capabilities of Canvas and therefore decided to implement Canvas as the standard LMS of UBD. In July 2015, upon instruction, an email was sent to notify the compulsory usage of Canvas to all relevant parties. Additionally, the use of Canvas was officially introduced at the National Teachers’ Day Exhibition. UBD refers Canvas as UBD Canvas.

Figure 3 shows the decision tree based on our findings in this report. We should note here that it is not the official chart used in the decision-making by the higher management of UBD.

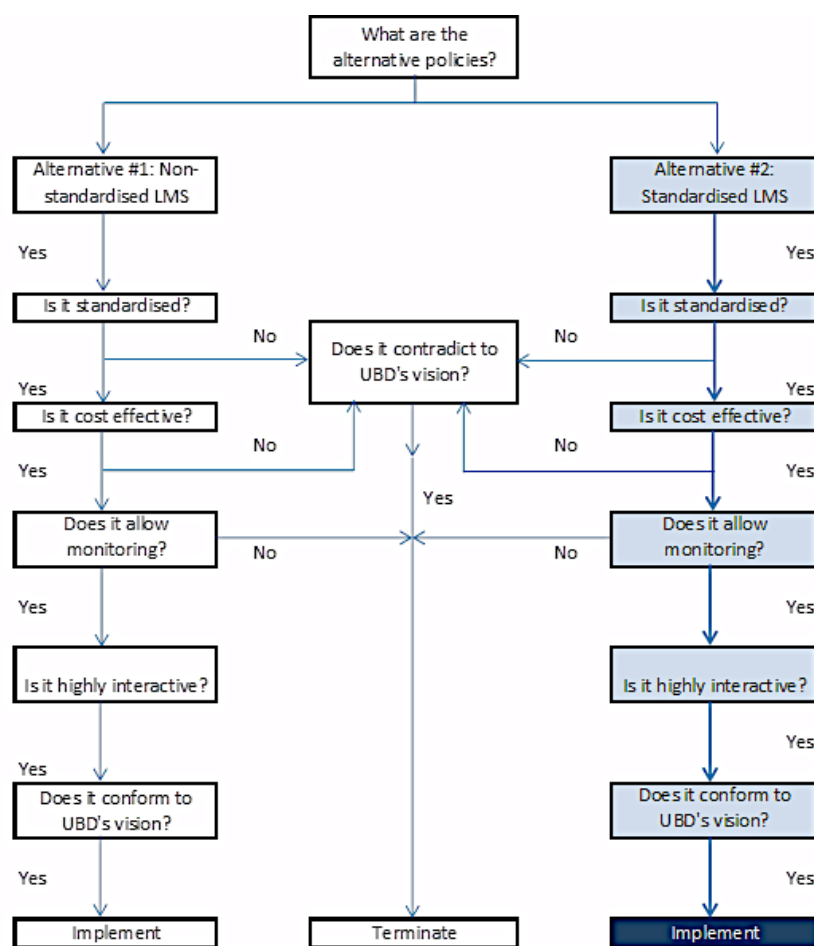


Figure 3: Decision Tree

Monitoring and Evaluation of Implemented Policy

After implementing a policy, follow-ups have to be conducted through constant monitoring in order to determine the effectiveness of the policy and its success rate. The monitoring process can be done through several steps as follows. First of all, there is a need to check if the implemented policy has achieved the expected goals or outcomes. This means that the implemented policy has helped to solve the problems identified earlier. As mentioned earlier, the four problems associated were (1) non-standardized LMS, (2) difficulty in achieving vision leading to a need in incorporating technology and learning, (3) lack of interaction between lecturers and students, and (4) unable to monitor students' activity or learning behavior. In this case, by adopting the use of Canvas campus-wide, this standardized LMS will eventually help in achieving UBD's vision by incorporating technology and education. Also, the interaction between lecturers and students can be enhanced as everyone is in the same system or platform. Lecturers can also monitor students' activity in Canvas, as well as their learning behavior.

Before any evaluation of the implementation can take place, data will be needed and hence the second step is to specify the method that can be used for data collection. Through UBD Canvas, there is a lot of information that can be extracted and utilized for academic purposes. There is also a feature in UBD Canvas, called Course Analytics, whereby lecturers have access to four main areas, namely activity or participation levels, submissions, grades and student analytics. By using the tools and features provided by UBD Canvas, a more detailed analysis can then be conducted in order to gain more information about students' online learning behavior. The data collected can then be displayed in a tabular format to allow for better visual and evaluation to take place. Several sets of data will be needed in order to make solid and valid comparisons and conclusions to determine the overall success rate.

We provide in Table 5 an example for the monitoring process, which was the data collected in order to aid the analysis for this paper. As the implementation of this policy started in July 2015 (at the time of study), only two sets of data were extracted, which was from Semester 1 (Academic Year 2015/2016) and Semester 2 (Academic

Year 2015/2016). The number of Canvas LMS users (lecturers and students only) for the two semesters indicated is given in Table 5.

Table 5: The number of Canvas LMS users

User Types	Semester 1, AY 2015/2016	Semester 2, AY 2015/2016	Difference
Lecturers	423	416	-1.65%
Students	5856	5924	+1.16%

From the data provided, minimal differences were evident in terms of the number of UBD Canvas users from the two semesters, ever since the compulsory usage was first implemented. This simply means that almost all lecturers and students are currently using UBD Canvas as their main e-learning platform. However, it should be noted that it is still difficult to judge as to what is the actual success rate as only data from the previous two semesters were provided. Only through constant monitoring and collecting of more data, then can the actual results be identified.

Challenges in the Adoption

Initially, the adoption rate of Canvas was quite low due to the resistance to change of many staff. Although many were registered automatically in Canvas, their activity levels were quite low. Zaltman and Duncan (1977) defined resistance as “any conduct that serves to maintain the status quo in the face of pressure to alter the status quo” (p. 63). As a result, a sudden change in the status quo and with no much time given to adapt to the whole concept of change are generally resisted. Furthermore, in times of change, the natural reaction is to resist because change introduces the ‘unknown’.

One critical factor that has led to the resistance of change was due to the lack of communication between the decision-makers (Management Committee) and the stakeholders (staff and students). No specific information was conveyed to the stakeholders with regards to Management’s plan for adopting a standardized e-learning management system throughout UBD. Hence, the purpose of change was not clearly understood by all stakeholders. After the implementation took place, there were also technical issues such as Wi-Fi connectivity problem and limited bandwidth throughout the UBD campus. Due to the nature of Canvas being a web-based e-learning platform, a stable Internet connectivity will be required in order to access the contents within the system. It can also be problematic if there are too many users logged-on and accessing the system at the same time.

Besides that, there is one major challenge that UBD may face in the future, which is in terms of the budget allocated for Canvas. Currently, the cost of investment spent on Canvas per year, which is to pay for a subscription fee to cater to a maximum of 6,000 users in the whole system. However, due to the fluctuating economic situation of Brunei Darussalam, there present some uncertainties as to whether the future budgets allocated may or may not be as much as it is today. Eventually, this increases the risks for implementing such an expensive e-learning management system in UBD, as opposed to other LMS that are less costly or even free to use.

Actions taken by the university

In order to reduce the after-effects from the implementation, UBD has taken a few steps to minimize the consequences. Firstly, trainings and workshops were conducted for all UBD staff at a frequent basis since August 2015 and the champions of the whole research project conducted these sessions. These trainings and workshops aimed to help and guide all UBD staff in the use of Canvas. In addition, all staff of UBD was also enrolled as ‘Student’ under one online module in Canvas itself, called ‘Canvas1’. Here, learning materials on how to fully utilize Canvas were provided and prepared by an academic staff who was well-versed in using Canvas for her modules. The learning materials provided include tutorial instruction notes and video links. On the other hand, students were also introduced to Canvas and briefed on the system during the university’s Fresher’s Week. There was also a UBD lecturer who took the initiative to deliver a Canvas workshop that was in Malay language to the staff, in order to cater to any individual whose first language may not be English or who might be more comfortable with the Malay language.

Other than that, a number of Learning Technology Advisors (LTAs) for each faculty, centre and institute within UBD were also appointed. The LTA acts as the focal person for the respective faculty, who also helped to ensure the smooth process of Canvas implementation throughout the university. The main criterion in choosing an appropriate LTA consisted of having a good background and content knowledge about Canvas. Hence, any problems encountered can be identified and then conveyed to the Management Committee for the monitoring process.

The ICT Center of the university also took part in the initiative to help any staff or student who experienced problems when assessing Canvas. One of it was the provision of a Canvas Helpdesk, which is currently handled by two technical staff. The center also dealt with the problem of overloaded access by increasing the bandwidth within the UBD campus. Moreover, the ICT staff provided an offer to all lecturers whereby should there be any lecturers who need to use Canvas during his/her class together with their students, the Center will be obliged to increase the bandwidth within the UBD campus temporarily within a specific period of time so as to cater to more Canvas users and help all lecturers in delivering smooth lectures and tutorials.

Recommendations

Firstly, one of the possible ways in overcoming any change resistance is by educating all relevant parties regarding the change effort beforehand. Hence, upfront communication should have been done in a more effective manner throughout UBD in this case. Timely and adequate information with regards to the whole process (from planning to implementation) should be provided to all stakeholders. Waddell and Sohal (1998) stated that one of the most critical factors that can successfully implement change in any organization is through proper and regular communication and consultation with the parties involved.

Furthermore, prior to any implementation, it is important to gather all stakeholders who will be affected by the change. By conducting interactive sessions, all parties can benefit from this by exploring the changes together and at the same time, learn more about the concept of change and change management. This will also create the sense of urgency among stakeholders that will make them more willing to adopt the use of Canvas. With that in mind, it is also advisable to include any interested participants during the decision-making process, who can contribute their knowledge, attitudes, opinions, suggestions and feelings at their own will. This eventually gives the stakeholders a sense of belonging and they will become supportive to the idea of change, which can ultimately reduce the level of resistance.

In addition, frequent follow-ups should be conducted to monitor the whole transition process. A Change Management Committee should be set up for the purpose of the monitoring process. Lecturers should be able to provide suggestions on how to improve the use of Canvas. Thus, the LTAs should enhance their interaction and communication with their colleagues to identify any potential problems. Likewise, sharing sessions between UBD staff should be held in order to share the best practices on the use of Canvas.

In terms of challenges in budget allocation for Canvas especially during the current economic situation, there are two ways in which UBD may be able to combat these problems if there comes a day when budget cut occurs. Firstly is to reduce certain subscription services to reduce the cost of subscription. The administrator can do this by monitoring the usage of Canvas and by recognizing the patterns, determine which functions are the least popular and unsubscribe to it. This idea is loosely based on the actions that have been taken by the Brunei Shell Petroleum (BSP) in the current economic downturn. For example, in the past everyone in a department is subscribed to certain software even though not everyone needed it. To save cost, BSP reduced their subscription so that only those who actually use the software are subscribed.

Another way to tackle this problem is by spreading the cost to all stakeholders. An example is by increasing the registration fee during the enrollment of a new student. This idea is inspired by the B\$60 fee per semester payable to the university's student body for all bachelor degree students. Sharing the cost among all stakeholders will ensure continuity of Canvas and make it sustainable.

CONCLUSIONS

The decision to adopt an official e-learning platform is a huge responsibility undertaken by the management team of UBD. Every decision made from the planning to the implementation and monitoring stage effects the users of Canvas. Therefore, it is crucial to ensure that the impact that the decision made is beneficial for all stakeholders. Last semester out of 1783 courses, 973 were registered on Canvas making 54 percent of the total courses. Since that was the first semester to implement this e-learning platform, a 54 percent registration is understandable as many are still unfamiliar on how to use the system. This percentage will be expected to rise to 100 percent in the future.

The criteria used to determine which e-learning platform to adopt is crucial during the planning process such as whether the cost is sustainable, how effective it should be in terms of achieving the goals of the policy and how easy would it be for the stakeholders to accept this new change. The final decision for the management team to choose Canvas as the official e-learning platform over the others is also because of its popularity in universities worldwide. (FinancesOnline, 2016a, 2016b). According to FinancesOnline (2016a, 2016b), Canvas is popular

among higher educational academic institutes such as the University of Hampshire and Kansas State University whereas Moodle is popular among businesses such as McDonald's and the Bank of America. On the other hand, the majority of Edmodo customers are primary and secondary education institutes such as Winterville Elementary School and Killian Middle School.

As Canvas is still in the early stages of implementation and monitoring, there are still some uncertainties as to how it will fare among the users. However, as discussed earlier, initiatives have been taken by a lecturer to conduct classes for other lecturers on how to use Canvas in the Malay Language. The willingness of the lecturer to teach other lecturers and the willingness of the other lecturers to attend the workshop and learn how to use it shows the determination of the lecturers in UBD to adopt Canvas as an e-learning platform.

The management team is very optimistic on the prospects of Canvas and they have all the reasons to be. Lecturers have reported to say that the use of Canvas has freed up a lot of their time in terms of organizing and distributing learning materials to students. Quizzes can also be conducted online, sparing the lecturer more time to teach during lectures. The roll call function allows them to easily track the students who attended the class and they are able to conduct audio or video lectures if classes had to be cancelled. Canvas is revolutionizing methods of learning and it is the right move towards building a knowledge society in UBD. Perhaps in the future it might ultimately be adopted as the official learning management system throughout various educational institutes in Brunei Darussalam.

Research Limitations

The primary collection of information and data for this case study was conducted qualitatively via one interview session. For this reason, these findings do not represent the view of the main stakeholders involved, which are the lecturers and students. Additionally, the current use of Moodle and other e-learning platforms within UBD, if any, were not extensively explored. The lack of other quantitative data also limits us in determining the level of acceptance of Canvas by both lecturers and students. Since Canvas was only implemented as a mandatory e-learning platform last semester (at the time of study), data comparison, which could shed light on adoption rate and level of usage between two semesters, cannot be made.

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POSITIVE DISCIPLINE AND BEHAVIOR APPROACH FOR ADDRESSING NEGATIVE BEHAVIORS IN EDUCATION: MODEL OF ARI SCHOOLS

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ABSTRACT

This study deals with the model of positive discipline concept and behavior approach, applied in Ari Schools for addressing negative behaviors in schools. The approach of positive discipline concept enables a positive school environment to be sustainable, as well as minimizing problematic behaviors. It increases efficiency in training and education. Positive discipline mentality is based on a gradual system in which the persons, who will help settlement of problematic behaviors, become part of the effort hierarchically. Ensuring that students realize their negative behaviors and the results thereof and that they take responsibility in this respect, the model supports them to gain a significant life skill.

INTRODUCTION

In order to create healthy and effective educational environments in schools, it is essential to create a peaceful and reliable organizational environment. In this respect, the manner, in which the negative behaviors are addressed, is as important as the fact that the rules and principles of the classroom and school are clear-cut and understandable. That the students know and internalize what they are expected and what behaviors are required in the learning environment prevents formation of negative behaviors to a large extent. The students, who are aware of their restrictions, will not have any difficulty about what they can do or not, and feel themselves more secure.

All of the behaviors, which should and shouldn't be exhibited pursuant to the value system, thought and behaviors of educational environment and the culture of the school are called as discipline. Discipline is a system that includes the behaviors expected from students. Establishing such a system is possible only through learning to pay regard to wills and requirements of their teachers, directors and friends so that they could gain acceptance from them while it ensures satisfaction regarding their own wills and requirements. It is essential that discipline sets sights on gaining skill of controlling themselves (i.e., self-control) and self-esteem, but not developing sense of obedience in students. Concept of discipline, applied in schools, must give chance both to healthy personal development of students and active learning environments. When it comes to discipline, all of the skills, which students must acquire to control themselves and take responsibility of their behaviors, spring to mind (Durant, 2010; Eaton, 1997; Jones, 1987; Mcvitte, 2007).

The objective of model of positive discipline and behavior approach, developed in Ari Schools, based on approaches of developmental psychology, is to ensure a regular and effective environment for the students so that the activities in the learning environment could be performed in accordance with the objectives and create the environment that will help students gain the communicative skills and social skills which take an important place regarding the personal development of learners.

The objective of "positive discipline" concept is to make an efficient and positive school environment and culture sustainable, take learning and personal development to top and minimize negative behaviors. Negative behaviors are those, which arise in the form of disruption of classroom environment, rebellious attitudes and behaviors and preclusion of classroom environment and friends. The reasons for the negative behaviors of students may be numerous such as anxiety, apprehension, appeal, showing one's strength to others, learning difficulty, disability to concentrate, lack of attention, hyperactivity and inability in social skills (Bej, 2016).

In “positive discipline” approach, students are made to find the behavioral options to prevent the formation of undesired behaviors rather than suppressing the negative behavior with punishment. Students are guided about how to replace a negative behavior with a positive behavior. When the students are taught, reinforced about the proper behavioral options to meet their own requirements, it is believed that students will exhibit positive behaviors.

Positive discipline concept is based on the following thought: “discipline requires love and sympathy.” Happiness and success in training and education is only possible through a positive sense of self and development of positive behaviors (Mcvitte, 2007; Stephens, 1992).

IMPLEMENTATION PROCESS

The system, applied in Ari Schools to address the problematic behaviors is called “Gradual System.” In gradual system, attitudes regarding the assessment of negative behaviors of the students are handled in three stages, and the people, who are likely to help the solution of the problem, are included in the negotiations respectively. Written forms to outline and document the negotiations are filled in each stage by the respective parties.

Positive discipline approach and ‘Gradual System’ have been implemented at Ari Schools since 2015 – 2016 school year. So far, the program conducted to 6th (172 students), 7th (160 students) and 8th (66 students) graders, 66 teachers and 3 principals.

Stage 1

First negotiation: This is performed by the teacher, who observes, experiences the negative behavior and the student, who is the owner of such behavior. These people are granted right and responsibility to carry out the first meeting. In the negotiation, it is essential that the teacher use communication skills effectively and run problem solving steps (i.e., determining the problem, understanding the emotions to accompany the problem, delivering the results, elaborating solution options, encouraging the students for the solutions). Performing the first meeting about the negative behavior in a comfortable environment, the teacher and the student find solution for the elimination of the disrupting behavior.

Second negotiation: In the event that negative behavior still endures following the first negotiation, the teacher and the students negotiate once again and mutually sign the agreed solution thereby making it an agreement (i.e., Teacher-Student Agreement Form).

Stage 2

In the event that negative behavior, which is displayed by the student and that impairs education and training environment continues, concerned teacher fills in Student Negative Behavior form and shares the issue respectively with students’ classroom teachers, psychological counselor and respective Assistant Manager and initiates the process for taking suggestions and delivers the form to psychological counselor.

Stage 2

If the negative behaviors of the student are maintained persistently, the family is informed about the negative behavior of the student and invited to be a partner for the solution of the problem. Because, cooperation and unity of attitude of parents with the school is important for the solution of the problematic behavior. Such cooperation and unity of attitude paves the way for solving the problems. If the psychological counselor and respective assistant manager is present in the meeting, Management - Pdr – Parent – Teacher Negotiation Form is filled in by the psychological counselor during the meeting and signed by those who take part in the negotiation.

Stage 3

In cases where student fails to comply with the executed agreement and all efforts are insufficient, school principal becomes part of the effort. Based on the characteristics of negative behaviors of the student other than developmental characteristics of the student, action is taken pursuant to Regulation on Reward and Punishment by Ministry of National Education. Board of Reward and Discipline or the school principal shouldn't become part of the efforts in this respect without completing the first 3 stages.

In the studies conducted with the student, it is essential to try to focus on problematic behavior rather than tending towards the personality of the student; as the student is not completely "wrong." What is defective is the behavior of the student. Psychological counsellor continues to give the essential support to the student and his/her family for changing the problematic negative behavior of the student while all these stages are applied.

Gradual system reduces class conflicts and helps development of communication of the teachers with the students. It ensures the flow of information between the teacher and the counselling center, increases sharing and supports their generating solution together. Psychological counsellors are informed about the problematic behaviors through the forms taken from the teachers, they monitor and give support for solution process. As for the students; with this method, they learn that communication is bilateral, both of the parties have a share if a problem is experienced and therefore the solution can only be generated together. Thus, their communication skills are developed. It further enables them to discuss the problem with the teachers, and gains the students the concepts of being fair and equal as well as raising awareness about being a partner of the problem.

Gradual system ensures determination of at which stage of the problems the management will become part of the activity and what their role will be. It ensures that management can maintain communication and problem solving process actively before carrying out the articles of regulation on reward and punishment.. If the problems are not solved in the process of Gradual system, the management leads the student to disciplinary board due to unfavourable behaviors. In this case, student assumes the responsibility of negative behaviors. As regards the parents being another shareholder, the system ensures that parents take place and assume responsibility in solving the problematic behavior of the child. Just as the parents are informed about the problem, they also learn their duties about the process.

FINDINGS

Assessment of Model Implementation

When it comes to the assessments of shareholders who find take part in the solution process with the model of positive discipline concept and the gradual system that underlies the model;

Students:

Student of 6th grade, "I was interested in other things during the lesson rather than listening to the teacher. My teacher warned me several times. However, I continued the same behavior. The teacher called me for a negotiation after the lesson, we talked about this problem together and signed an agreement form. The fact that my teacher helped me to solve my problem and talked to me rather than reprimanding me among my friends was influential in that I gained an attitude towards listening to the lessons better."

Student of 7th grade, "That I was present in the negotiation performed with my family and that they helped me to solve my problem of failing to do homework at home made it easy for me to overcome this problem."

Student of 8th grade, "After I talked about my problem of being late for the classes with the assistant manager, my teacher and psychological counsellor, I realized that I had a problem to control myself regarding time management."

Teachers.

Teacher 1: "I learnt that the parents of the student, who fail to do his homework, are in a process of getting divorced. The fact that I understood that he needs much more attention ensured me to provide more different support for him."

Teacher 2: "In the process which started when a male student knocked the door and went out, it made me approach that student more different when I learnt in the negotiation, which we made to solve this problem, that the problem of this student with the authority in fact stems from his failure to make contact with his father. And this increased the success and interest of this student towards the lesson."

Teacher 3: "Feeling that I am not alone in solving the negative behaviors and feeling the support of guidance and the counselling service and management motivated me in reaching the solution."

Parents:

Parent 1: "I was invited to a meeting. An assistant manager, a Pdr specialist and a teacher took part in that meeting. I was very surprised in the beginning. Then the delivery, assessment and providing solution for the problem of my child regarding technology addiction through different perspectives of teachers, and the fact that I was guided in this process helped me to understand and be a partner for the solution of the problem."

Parent 2: "It was also a significant experience for my children to be aware of his problem without running the discipline mechanism directly, be a partner of the procedure for solving the problem and learn that problems can be solved by discussing without being harmed in all this process and even feeling himself more precious."

Parent 3: "I was called from the school due to the fact that my child insults, offends his friends. While talking to the managers and teachers about my child, it made me surprised to learn the real problem was that my child felt jealous about our new baby. The fact that I realised this reality, which I couldn't realise at home, helped me to solve the problem."

Principals:

Principal 1: "I believe that it gains the students positive and significant life skills when all concerned parts come together and talk about, discuss the problems and act together for the solution, as well as solving the problems without executing the disciplinary regulation."

Principal 2: "I believe that the solutions generated without using the Reward and Punishment sanctions develop human relations at the school and become efficient in creating positive organizational environment."

Principal 3: "I think that the leaving the first step in talking about and solving the problems to the teachers and students, who have deeper relation and communication is a much more effective way of solving the problems."

CONCLUSION

Positive discipline approach and the model of gradual system has a significant function in that students can understand and take responsibility of negative behaviors and the unfavourable results created by such attitudes. We are well aware of the fact that reward and punishment can only control the problematic behavior temporarily, however they fail to solve such completely. Making the change of problematic behavior sustainable in the desired direction is based on the fact that the individual gains the skills to talk about, discuss and solve the problem.

Positive discipline approach also contributes to the development of positive relations and communication within the school. That the individuals understand each other, solve the problems by talking supports all partners communicate openly and it has a positive impact on organizational environment and culture thereby improving their problem solving skills.

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POSITIVE PSYCHOLOGY AND SCHOOL INTERVENTION – WHAT SCHOOL PSYCHOLOGIST COULD/ SHOULD DO

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ABSTRACT

The evidence shows that positive psychology programs and interventions are significantly related to student relationships, his/her well-being, positive attitudes to learning and education and academic performance. We offer several examples of positive psychology application within common roles of the school psychologist (individual and group counseling, assessment, prevention, intervention).

INTRODUCTION

Positive psychology as a branch of psychology refers to scientific understanding and effective intervention to aid, it studies what makes our lives most worth living. According to Gable, S., Haidt, J. (2005) it is the study of the conditions and processes that contribute to the flourishing or optimal functioning of people, groups and institutions. With its history dating back to works of James in 1902, Allport in 1958 and Maslow in 1968 positive psychology grew into a discipline that studies the ways how people feel joy, create healthy relationships, families, groups and institutions, show altruism.

We spend almost one fourth of our lives being educated in pre-schools, schools, and universities or via lifelong learning. The way we spend our school time may influence our way of thinking, our self-esteem, our decisions as well as the state of our *mental, psychological and emotional wellbeing*. That's why there is no doubt that the school climate is the essential determinant of successful schools and is recognized as an important target for school reform and improving behavioral, academic and mental health outcomes for students (Thapa et al., 2012).

School climate as a multidimensional product of the interpersonal relationships among teachers, students, parents, and other school administrators and staff consists in general from five basic aspects: 1 – teaching and learning process, 2 – institutional environment (e.g. academic or physical environment), 3 – interpersonal relationships, 4 – staff relationships, 5 – safety. Positive school climate exists when all students and teachers feel comfortable, accepted, valued and safe in an environment of school and are surrounded by people who care. Research has shown associations between school climate and lower levels of alcohol and drug use (LaRusso et al., 2008), harassment (Attar-Schwartz, 2009, Vernarcová, 2016), bullying (Meyer-Adams & Conner, 2008) or academic performance (Brunclíková, Z., 2010, Hamranová & Vernarcová, 2013). Favorable school climate has been linked with higher student academic motivation and engagement, fewer student absences (Thapa et al., 2012). Not surprisingly, schools with evident positive climate have teachers who report higher level of commitment and more collegiality (Brunclíková, Z., 2010).

Strategies to enhance school climate according to Doll (2010) include those that strengthen relationships and those that foster self-regulation and autonomy. Although there is no one quick and easy solution or program for improving school climate, according to O'Brennan (2014) we can describe common features of effective school programs. One of the possibilities that works is to move away from a reactive, punitive, exclusionary approach to proactive, positive and supportive strategies. Rewarding positive behavior rather than punishing poor behavior will give children seeking attention and incentive to behave well. Educational researchers often explore the correlation between school climate and student mental health outcomes (Ternényová & Vernarcová,

2016). All educators must be informed and be able to explain what a positive school climate is and why it is important. The key educator leaders at school should be identified and trained.

School psychologist in Slovak republic is uniquely qualified specialist working in school teams, performing professional activities within psychological diagnostics, individual or group psychological counseling, prevention and intervention. The most basic function of a school psychologist is problem solving in schools. They use special psychological methods to work with learning and behavior and to help students succeed in all fields. They need to cooperate with families, teachers, other school professionals to create healthy, safe and supportive school environment. School psychologists provide direct support and interventions to students, consult with teachers and parents, they try to improve academic achievement, promote positive behavior and mental health, create safe and positive school climate, strengthen family-school partnership.

As Gajdošová (2017) states trying to reach the aims of European and Slovak strategies for the support and developing of mental health of children and young people for next years it is necessary to innovate and modify the concept of school psychology and the services of school psychologists in schools. The *tasks of school psychologists* are as follows:

- to pay special attention to the mental health of students, teachers and other professionals working at school during the educational process
- to focus on health prevention and preventive activities at school to support and secure them, special attention should be pay to the reduction of violence against children within the family, youth violence and teenage dating violence
- to design and implement short-term, mid-term but also long-term preventive programs aimed especially on effective conflict resolution, assertiveness, empathy, crisis management, promoting safe school environments, positive behavioral support etc.
- to be able to cooperate with students, teachers, parents and other communities it is necessary for school psychologist to be a part of a multidisciplinary professional team of special education teachers, social workers, doctors etc.
- a healthy, safe and positive school places importance on the identification and diagnosis of students' positive traits, gifted and talented students and their positive personal development and growth
- to create and develop system of career guidance and counseling to help students make more informed and better educational and career choices
- to support development and implementation of programs focusing on relationships, future marriage, parenting
- to create, support and promote cultural diversity, tolerance, inclusion and inclusive education
- etc.

It seems to be useful to create multi-disciplinary teams (educators, school psychologists, counselors, special educators, other professionals) for regular analyzing of school climate and developing plans for its implementation. We have an excellent time for school psychologists to use all of their skills and knowledge in way that can benefit the whole school system.

The school psychologist is one of the most important components in creating of positive school climate.

To create *safe and positive school climate* means to promote respect, care, safety, inclusion, acceptance and engagement all school year round. These aims include tasks such as follows (see picture 1):

- respect - implement positive discipline, implement school-wide positive support
- care - assess school climate, support social-emotional learning
- safety - identify at risk students, prevent all forms of violence, minimize and manage conflicts, provide crisis intervention services
- inclusion – include students in school wide goal setting and decision making,
- acceptance – prevent bullying and victimization,
- engagement - involve parents to participate in school activities, build relationships with students and families and make time for students and other school staff to build relationships with one another, inform and engage students in informing their families about work in school using newsletters, sending photo documentation, open door days.



picture 1: promoting a positive school climate : respect, care, safety, inclusion, acceptance, engagement

THE STUDY

The Relationship Between School Climate and Mental and Emotional Wellbeing

School climate is usually described as “the quality and character of school life” and includes both physical and social aspects of school. As mentioned before it can significantly influence academic outcomes for students and teachers. Loukas (2007) acknowledges the importance of individual perceptions and therefore schools often assess how students feel about their school.

There are several assessment instruments available to examine the quality of school life with “school functioning”:

- SLSS – Student’s Life Satisfaction Scale,
- MSLSS – Multidimensional Student’s Life Satisfaction Scale,
- BMSLSS– Brief Multidimensional Student’s Life Satisfaction Scale,
- COSSS – Children’s Overall Satisfaction with Schooling Scale,
- MCI – My Class Inventory,
- VSP – A (Vecu et Santé Percue de l Adolescent),
- QSL – Quality of School Life etc.

Our study examines the *level of quality of school life* of pupils with special educational needs (SEN) compared with their intact peers. For our research we used the paper based, self-completion instrument the Quality of School Life Questionnaire (QoSL, Hlásna, 2007) with 56 items divided into 7 dimensions (2 general aspects: General Satisfaction, Negative Affect, and 5 specific aspects of schooling: Teacher – pupil relationships, School status, School success, Social support, School environment). The participants respond on a 5-point Likert scale from strongly agree to strongly disagree. The higher scores indicate better quality of school life. It has been constructed based on the theoretical definition of quality of school life describing the ‘quality of school life’ as students’ general well-being and satisfaction, from the point of view of their positive and negative experiences in school environment (Mareš, 2007). The study was conducted by surveying 136 pupils between 12-15 years (23 pupils were pupils with special educational needs). For next analyze we involved also data from 19 students educated in special primary school.

FINDINGS

Table 1 The final score for each dimension/scale - boys vs. girls

<i>Dimensions</i>	Sex	N	M	SD	SEM	df	t	p
General Satisfaction	boys	87	27,25(3,40)	6,47	,784	153	1,786	,031
	girls	68	25,54(3,19)	5,44	,583			
Negative Affect	boys	87	25,32(3,17)	5,85	,710	153	2,293	,040
	girls	68	27,35(3,41)	5,154	,552			
Teacher – pupil relationships	boys	87	25,64(3,20)	4,409	,472	153	2,815	,426
	girls	68	27,95(3,49)	5,816	,705			
Boys and Girls relationships	boys	87	27,51(3,43)	6,13	,743	153	2,228	,053
	girls	68	25,22(3,15)	5,308	,569			
School success	boys	87	25,83(3,23)	5,39	,578	153	1,860	,232
	girls	68	27,51(3,44)	5,78	,701			
Social support	boys	87	25,12(3,14)	5,166	,553	153	2,046	,611
	girls	68	26,97(3,37)	6,044	,733			
School environment	boys	87	26,22(3,27)	5,512	,591	153	1,410	,032
	girls	68	24,93(3,11)	5,817	,705			

M- mean, SD – standard deviation, df- degree of freedom, t-Student t-test, p- statistical significance

As published before (Vernarcová, Vancu, 2016), the aim of the survey was:

- to determine the level of quality of life of pupils with special educational needs (SEN) compared with their intact peers
- to identify factors affecting their quality of school life
- to compare how pupils differ in assessing the quality of life on the basis of gender, type of educational needs and type of school they attend (special or mainstream).

We have found statistically significant differences in 6 from 7 scales (except for General Satisfaction). Intact pupils are more satisfied with their school in general, they believe that school is useful, have more positive view of their status within their school, feel more safe and supported in school than pupils with special educational needs.

Comparing female and male students by analyzing the mean scores of these dimensions, it was found that the difference was in favor of female students (Table 1). This means that girls believe that they have a safe learning environment and the teachers exhibit supportive behaviors more than boys do.

CONCLUSION

As Lester & Cross (2015) have found, school climate factors of feeling safe at school, feeling supported, connected with school and school success are all protective of mental, emotional and social wellbeing. As Doll (2010) acknowledges, school psychologists can be important resource in creating a positive school climate. At first they can provide appropriate „research“ using reliable survey instruments to assess school climate, analyze data and suggest appropriate approaches to addressing problems. The next step is to support teachers' problem solving and team collaboration. Doll's suggestion is to continue with helping teachers and parents to implement strategies to support students' self regulatory skills and then consult on positive discipline and behavior. In different countries with different school systems there are several effective short-term or long-term wellbeing

programs designed to be implemented within the framework of school legislative and school curriculum. All educators as well as other professionals (e.g. school psychologists) have possibility to pass training courses to support health and wellbeing in their schools. Schemes of work, lesson plans, policies, resources and more on wellbeing topics are available to help and encourage schools in implementing positive school ideas.

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POWERING E-LEARNING THROUGH TECHNOLOGY: AN OVERVIEW OF RECENT TRENDS IN EDUCATIONAL TECHNOLOGIES

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Abstract: In the present scenario where the technology is continually changing, there is an increased intensive competition in the e-Learning industry to make the knowledge transfer more accessible and comprehensible. Education has become much simpler with e-Learning system making it possible with a mobile device and an internet connection. Educational technology enables the learning process with the usage of the technological processes which could be categorized as computer-based technologies and mobile-based technologies. The purpose of this paper is to summarize the demands of e-Learning and also presents the various educational technologies that works in facilitating the design and application of the e-Learning systems.

Keywords: e-Learning, Educational technology, m-Learning

INTRODUCTION

As stated in the book, “e-Learning and the science of instruction” written by Ruth C. Clark and Richard E. Mayer, e-Learning can simply be stated as instruction delivered on a digital device that is intended to support learning. Educational technologies aim at simplifying the process of e-Learning by using the available resources and enhancing the experience of remote learning. As defined by the Association for Educational Communications and Technology, Educational technology may be defined as “the study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources”

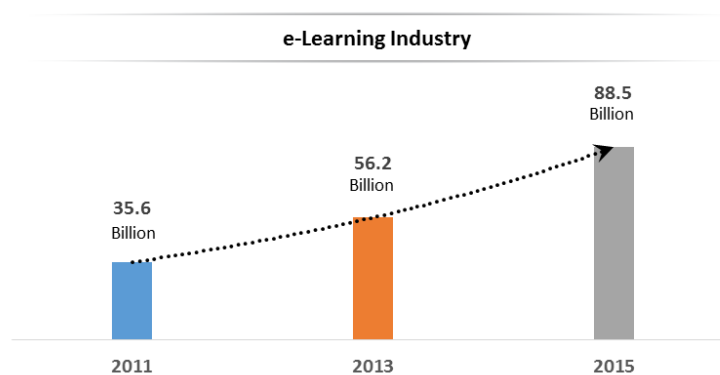


Figure 1: Growth of the e-Learning industry from 2011 to 2015

In the recent decade, e-Learning industry has seen a lot of developments in the market and the growth rate of those industries is shown in figure 1. In 2017, the number is expected to be

doubled and lot of educational institutions have also adopted the e-Learning concept to improvise on the education quality. The technologies are also constantly aimed at bringing about a less expensive and effective e-Learning system.

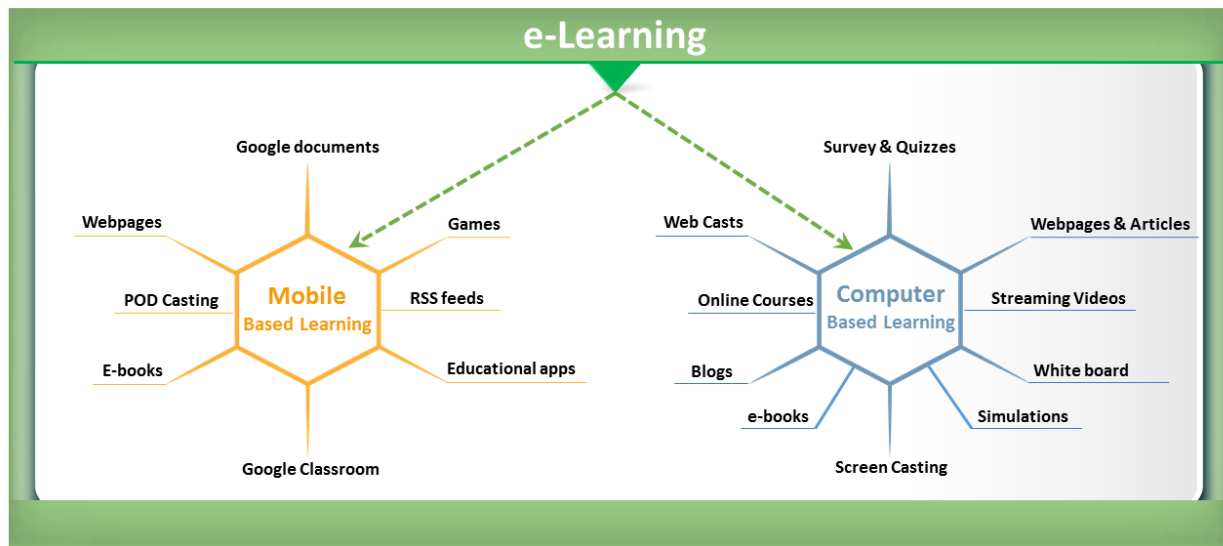


Figure 2: Applications of Mobile-based learning and Computer based learning

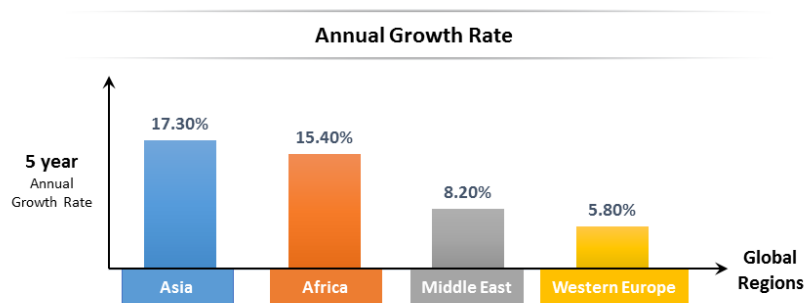


Figure 3: Five year Annual growth rate of the e-Learning industry

This paper gives an insight towards the existing educational technologies for e-Learning and the importance of multimedia based learning. e-learning is much needed in the case of distance/remote education and also requires consideration towards the time and cost savings which will enable the knowledge transfer more accessible to any part of the world.

Advantages and disadvantages of e-Learning

After an extensive research conducted on e-Learning, the advantages and limitations are listed out in the Table 1.

Table 1: Summary of advantages and limitations of e-Learning

Advantages	Limitations
Low running cost	No social interaction
Flexibility in time	Sole responsibility lies on learner
Up to date content	High development cost
Learning pace is adjustable	No individual attention
Quick grasp using multimedia content	No face-face interaction
Customization of learning content	Technology-dependent
More control over the content	Too much exposure to screen could affect health
Delivery of content can be modified	Lack of control at the instructors end
Immediate feedback	
Flexibility in location	
Access to unlimited learning materials	
Better access to the instructors	

The advantages and disadvantages of e-Learning has been summarized by referring to various technological advancements in the field of education (Virginio et al (2004), Ruth and Richard (2016)). The limitations could be considered while designing an e-Learning system and the disadvantages currently present could be overcome.

EDUCATIONAL TECHNOLOGY

Educational technology refers to the field of technology that contributes towards the development and application of the methods that aid or promote education. It can also be looked at as the study and practice of simplifying the learning process by using, creating or managing the technological resources available. Claire et al (2017) has presented a 10- year study which has exposed the variations and changes in the teaching and learning process with the aid of technology. The recent technologies in the education is categorized as mobile-based and computer-based for simplification purpose. With computers being slowly replaced by mobile devices, m-learning is gaining its popularity in the field of education.

There are a variety of applications that are employed in both computers and mobile devices. The figure 4 shows these applications that are categorized under computer based and mobile based technologies.

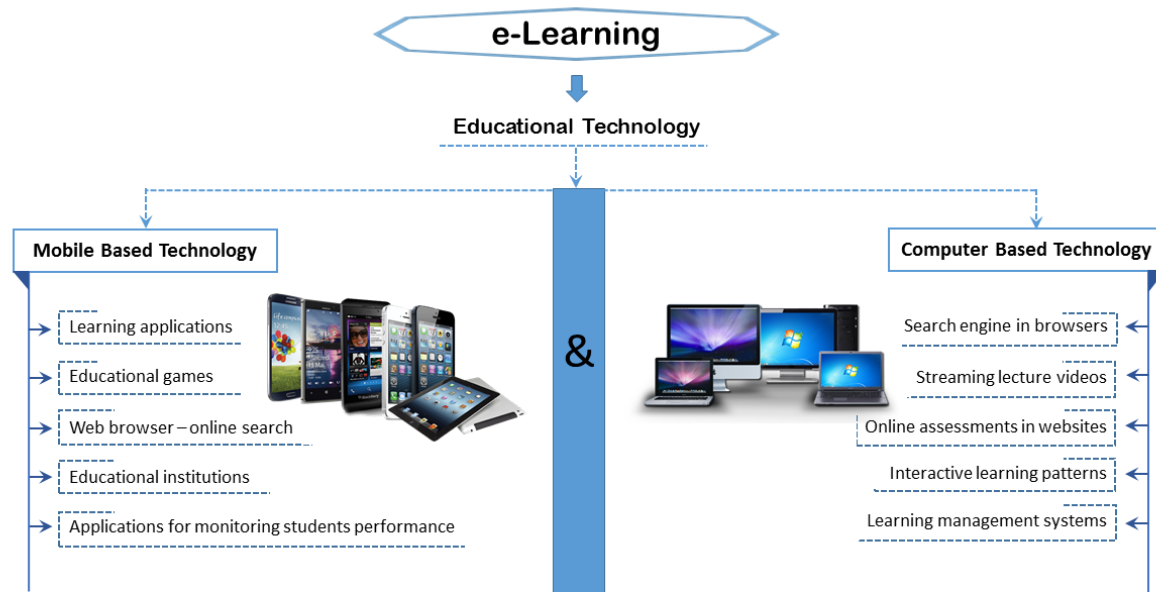


Figure 4: Categorization of Educational Technologies

COMPUTER-BASED TECHNOLOGY

Computer based technology has been existent from the very start of the e-Learning industry. Teaching and learning methods that employed computer based technologies has benefits compared to the traditional approaches starting from the very use of search engines to employing computer based educational games. Bruce et al (2017) performed a study and found that the students performed better with the use of mathematical educational game. This proves that the use of computer based technology definitely provides greater learning opportunities to the students.

Search Engine

The very basic type of learning using the computer would be using the search engine for browsing and the application used for this are the web browsers. The number of lecture videos and the tutorials have increased in number over the decade. Lot of research work is carried on to achieve an energy efficient streaming for the educational videos online.

LMS

LMS (Learning management systems) is being actively used in the educational institutions for the management of the study materials. They help in administrating the tools that are used by the instructors and also aids in the distribution of the course materials, assignments and so on. In all the research being carried out in e-Learning, communication and collaboration among learners is considered important. Thus LMS provides a good solution by letting the students communicate

with peers and tutors and also learn together online. Recent research conducted by Zanjani et al (2017) provides the LMS design factors that affects the user engagement by engaging the e-learning tools and as a result found that the factors affecting the user engagement were user-friendly structure, reducing the number of tools and links, privacy support, anonymous posting and customized student-centered tools. Considering the factors that affects the design, a better learning management systems could be created.

Computer based assessment

Computer based technology offers many innovative methods of assessments and an effective feedback system. A wide range of adoptions are available to make this computer assessment more interactive and effective. Scalise and Gifford (2006) in their paper have researched on the assessment techniques available in the computer based technology and have come up with 28 innovative types. This has provided a framework paving way for the discussion of assessment techniques which are innovative and effective in the computer based settings.

MOBILE-BASED TECHNOLOGY

With almost everyone owning a mobile device, the mobile learning could be considered as the next generation learning. Using the mobile technology for any type of learning model can be termed as m-learning. Mobile-based learning mainly includes the educational games, web-browsing, streaming audio-video, MMS and so on using the most recent of technologies. M-learning makes use of the multimedia components and communication and it also offers flexibility in time and location.

The educational use of the mobile phone was researched by Zahra and Amir (2012) and their research findings elaborate of the mobile based learning by the University students. The examination of the university students who used the mobile technology for education was conducted and found that the percentage of the students who used the mobile phones particularly for education was less. This has changed over time in a span of five years. The recent research conducted by J. Joo-Nagata et al (2017) have shown a high acceptance among students and resulted in a positive response. Mobile based educational technology was reviewed in Japan by Patricia & Chris (2005) where English lessons were sent through the mobile phones and a high effectiveness in the education was shown.

Mobile Games

Using mobile games as a mean of education creates an active and fun environment to the learning process. Educational games are being designed for the teaching specific tasks and mastering a particular field. There are few examples of such kind, one of which Ketamo (2002) has designed a game for kids at the age of 6 to teach geometry and also Goth et.al (2004) have developed a game for university students to learn the campus of the University and Zimmerman, Barnes and Leventhal have explored the options of employing 3D graphics in the process of learning the art of Origami. J. Huizenga et al (2009) have discussed the effects of a mobile city game called Frequency 1550 and have performed an experimental study on the students of secondary education. The results of the study shows that the students who played the game had higher scores in the knowledge test compared to those students who did not play the game prior to the knowledge test.

Learning Applications

As mobile applications are increasing in number, there are a wide range of educational applications that have come in the recent past. Learning through mobile application makes the process of learning more personal and easier. In a research conducted by Fernando (2011) a framework was formed to evaluate different language learning applications and also the current research on potential learning applications was conducted.

CONCLUSION

Educational technology is about using the technological processes to enhance the learning experience making it easily accessible and comprehensible. This has been dealt according to the present day scenario by classifying it into computer-based technologies and Mobile-based technologies. This paper has thus dealt with the latest technologies available in the field of education that facilitates the design and application of the e-Learning systems.

FUTURE DIRECTIONS

In today's world the computers are slowly being replaced by the mobile phones, PDAs and tablets so it is sensible to design the learning materials which will suit both the devices thus inter-operability is expected

Collaborative learning is already existing but a few additions would add the benefits of traditional class room training to e-Learning

Using the present technologies, energy efficient streaming methods could be designed which will provide a cost effective streaming of lecture videos

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PRESCHOOL TEACHER CANDIDATES' METAPHORIC PERCEPTIONS ABOUT THE CONCEPT OF MUSIC

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ABSTRACT

The general purpose of this study is to examine teacher candidates' perceptions about the concept of music through metaphors. In line with this general purpose, answers to these questions were sought: What are preschool teacher candidates' metaphors for the concept of music? Under what categories the metaphors developed by the preschool teacher candidates be grouped according to their common characteristics? This research is a qualitative study. Content analysis model was used in the study. The study group consisted of 59 senior students studying at the Department of Preschool Education of Konya Necmettin Erbakan University's Faculty of Education during the Spring semester of 2016-2017 academic year. In order to collect the data in the study, forms with the statement "music is similar to ... because ..." were distributed to the students, and they were asked to complete the statement on the form. Later, the forms with students' own statements were collected, and content analysis were done on the collected data. After examining students' completed statements, seven forms were excluded from the process since they did not give explanation. The analysis of the data was realized in four phases: naming, categorization, ensuring validity and ensuring reliability. At the end of data analysis, 52 metaphors developed by the teacher candidates were grouped under three categorical titles.

Key Words: Music, Metaphor, Preschool Teacher Candidate

INTRODUCTION

Metaphors are important to have an intuitive look at complex concepts and to learn individuals' opinions on their personal experiences. Metaphor is derived from the Greek word 'metapherein', combining the terms meta (between) and pherein (carry) words. The word metaphor therefore means the transference of a content from one thing to another (Gibbs, 1994, p.210; Nikitina & Furuoka, 2008 cited in Konaklı & Göğüş, 2013, p. 68). Metaphors are considered as one of the most important cognitive tools constructing, directing and controlling ideas about how events take place and continue. Metaphors are constructs used to describe other concepts to explain a concept, to strengthen the narrative, to enrich the language and transform the thought into linguistic action in the most effective way (Saban, 2004). Metaphors provide a broad perspective for their users. While the meaning transference in the metaphors developed make it possible to think about the relationship between the concepts, it also helps different characteristics that were not that clear to come to light (Rundgren, Hirsch & Tibell, 2009). Furthermore, while metaphors contribute to put forth how concepts that need to be analyzed are being perceived by facilitating the understanding and interpretation of concepts (Cerit, 2008 cited in Kasapoğlu 2016, p. 61), metaphor analysis research is interested in determining the metaphors and what they mean to clarify a subject by focusing in-depth on the key words and concepts individuals use while talking or interacting (Ekiz, 2009 cited in Kasapoğlu 2016, p. 61). Metaphors have different functions. According to these functions the meaning the metaphor imply can change the context to a certain degree. The meaning vales of the metaphors are more intense than their true meanings. Metaphors carry relative meaning values. They can be used as tools to understand the character and the culture. They can also be used as data collection tools in various sciences (Booth, 2003, p. 14; Girmen, 2007, p. 11-12 cited in Aydiner-Uygun, 2015, p. 2). Metaphors have also been used

as a data collection tool in studies on music. According to Aydın-Uygun (2015), the studies where metaphors are used as data collection tools in music literature can be grouped under three categories. Some studies use metaphors as a tool in analyzing the expression in lyrical and instrumental music pieces. In another study, the effect of metaphors as an educational tool on the shaping and development of musical expression was tested. In another study, metaphors are used as a data collection tool to determine perceptions regarding concepts in the field of music and art education. Among these studies, Koca's study (2012) aimed to put forth preschool teacher candidates' perceptions about learning music through metaphors. In their study, Mustan-Dönmez and Karaburun (2013) examined the metaphoric expression tradition in folk song lyrics. While Özkul (2013) focused on metaphors in musical expression within the music-language relationship, Umuzdaş and M-Umuzdaş (2013) focused on classroom teacher candidates' perceptions about the music class. Furthermore, while Babacan (2014) examined the perceptions of students studying at fine arts high school about the art education class, Dinç-Altun (2014) metaphorically analyzed music teacher candidates' perceptions about the piano class. In her study, Mentiş-Köksoy (2015) determined classroom teacher candidates' perceptions about the concept of music through metaphors. Also, in her study, Aydın-Uygun (2015) put forth teacher candidates' perceptions about traditional music genres through metaphors. Tez and Aydın-Uygun (2016) made a metaphorical analysis of middle school students' perceptions about the music class and their music teacher. Using metaphors is a way of thought and seeing the world in general. In this sense, metaphors are a powerful cognitive tool that individuals can use to understand and explain a highly abstract, complex or theoretical concept (Saban, 2008, p. 460). In other words, metaphors are powerful tools allowing individuals to explain their perceptions about abstract concepts with concrete concepts. In this study, metaphors are used as the fundamental data collection tool to determine individuals' perceptions about concepts. In this respect, in this study, it was believed that preschool teacher candidates' perceptions about the concept of music can be explained by transforming them into concrete concepts by using metaphors. This study was conducted in order to put forth preschool teacher candidates' metaphors about the concept of music. In line with this general purpose, answers to the following questions were sought:

- 1- What are preschool teacher candidates' metaphors for the concept of music?
- 2- Under what categories the metaphors developed by the preschool teacher candidates be grouped according to their common characteristics?

METHOD

Study Group

This research is a qualitative study. Content analysis model was used in the study. The study group was made up of 59 senior students studying at the Department of Preschool Education of Konya Necmettin Erbakan University's Faculty of Education during the Spring semester of 2016-2017 academic year.

Data Collection and Analysis

In order to collect the data in the study, forms with the statement "music is similar to ... because ..." were distributed to the students, and they were asked to complete the statement on the form. Later, the forms with students' own statements were collected, and content analysis were done on the collected data. The analysis of the data was realized in four phases: naming, categorization, ensuring validity and ensuring reliability (Saban, 2008). In the analysis of data, first, the papers filled by the students were numbered as S1, S2, etc. (Student1, Student2). The metaphors developed by the students were coded according to numbers. In the second phase, students' completed statements were examined, and the forms

that the students did not provide any explanations for the metaphors were excluded from the process. A valid 52 metaphors with explanations were obtained. In the third phase, the statements completed by the students were rechecked. The metaphors developed by the students were examined according to their common characteristics. The valid 52 metaphors were grouped under three categories according to their common characteristics and justifications. In the fourth phase, data analysis process was explained in order to ensure the validity of study results, and the metaphors were listed. In addition, in the findings section, examples that were believed to best represent each of the three categories about the 52 metaphors were provided. For ensuring the study's validity, consistency between the coding the researcher did at two different times was examined in order to determine whether the metaphors were grouped under the related categories or not. For this, the researcher coded the metaphors twice in 15 days and tested her own consistency. As a result of this, the reliability coefficient was calculated to be .90. Here, reliability equals to agreements divided by agreements plus disagreements (Miles & Huberman, 1994).

FINDINGS AND INTERPRETATIONS

Table 1 - Preschool teacher candidates' metaphors about the concept of music and their percentages

Metaphor	n	%	Metaphor	n	%
friend	2		relaxation	1	
anti-depressant	1		soul	2	
love	1		food for the soul	1	
tea	1		feeds the soul	1	
chocolate	1		wind	1	
flower garden	1		windmill	1	
nature	1		psychologist	1	
our feelings	2		tranquilizer	1	
resting	1		love	1	
food	3		stress ball	1	
life	3		water	1	
life itself	1		desert	1	
medicine	1		treatment	2	
port	1		therapy	3	
massage	1		earth smell	1	
massage tool	1		sleep	1	
fairy tale	2		living	1	
happiness hormone	1		living itself	1	
breathing	1		eating	1	
jumping from a cliff	1				
Total	52				

When Table 1 is examined, it is seen that preschool teacher candidates developed a total of 52 metaphors.

Table 2 - Categories about Metaphors

Category	n	%
language of feelings	7	
source of life	15	
peace giver	18	
Total	40	

40 metaphors developed by the teacher candidates were grouped under three categories according to justifications given by the students.

Table 3 - Language of Feelings

Metaphor	n	%
love	1	
happiness hormone	1	
nature	1	
our feeling	2	
jumping from a cliff	1	
wind	1	
windmill	1	
Total	8	

Metaphors given in Table 3 were grouped under the “Language of Feelings” category according to justifications provided by the teacher candidates. Some of the views of teacher candidates are given below as example:

“Music is like the happiness hormone because when we are sad and upset, it takes us away from that and adds happiness on top of our happiness when we are happy. And this positively affects us” (S38).

“Music is like nature because in nature there is a harmonious rhythm, too, between trees, birds, etc. Music creates a harmonious rhythm, too and makes us feel good” (S30).

“Music is like jumping from a cliff because it excites us and appeals to our positive and negative feelings” (S31).

“Music is like wind because it takes us from feeling to feeling. Just like the wind, wind leads our feelings” (S46).

Table 4 - Source of Life

Metaphor	n	%
food	2	
life	3	
life itself	1	
water	1	
living	1	
living itself	1	
food	3	
eating	1	
sleep	1	
treatment	2	
desert	1	
breathing	1	
soul	2	
food for the soul	1	
feeds the soul	1	
Total	22	

Metaphors given in Table 4 were grouped under the “Source of Life” category according to explanations provided by the teacher candidates. Some of the views of teacher candidates are given below as example:

“Music is like water because people cannot live without water. If water is need for people to survive, music is needed for feeding the soul. It connects people to life and gives life” (S26).

“Music is like food because it feeds the soul. When the soul is full, it connects to life more and becomes more harmonious” (S8).

Music is like food because when I listen to music, my soul becomes full. I look positively to life and connect more because my soul is full and satisfied” (S15).

“Music is like sleep because just like we cannot live and survive without sleep, we cannot live without music. Music is very necessary in our lives” (S38).

“Music is like life because it takes us both to past and to the future. In a very short time, it tells a whole life to us” (S39).

“Music is like treatment because when we are sad, it makes us feel better and connects us to life” (S4).

Table 5 - Peace Giver

Metaphor	n	%
friend	2	
anti-depressant	1	
love	1	
tea	1	
chocolate	1	
flower garden	1	

resting	1
medicine	1
port	1
massage	1
massage tool	1
fairy tale	2
stress ball	1
earth smell	1
theraphy	3
relaxation	1
psychologist	1
tranquilizer	1
Total	22

Metaphors given in Table 5 were grouped under the “Peace Giver” category according to explanations provided by the teacher candidates. Some of the views of teacher candidates are given below as example:

“Music is like massage because it relaxes people and gives peace” (S57).

“Music is like a port because it is a place where people hide from the things they face and find tranquility” (S42).

“Music is like anti-depressant because anti-depressants relax the body and makes people feel better. Just like that, music relaxes the mind and gives peace” (S7).

“Music is like a friend because our friend is with us during our happy times and sad times. They relax us. Just like a friend, music always gives us peace and happiness” (S5).

“Music is like therapy because just like how people relax while they take therapy, they also find peace while listening to music” (S1).

“Music is like chocolate because just like how people become happy when they eat chocolate and find peace, they also find peace while they listen to music” (S23).

RESULT AND RECOMMENDATIONS

Preschool teacher candidates produced 52 metaphors about the concept of music. These metaphors were grouped under three categorical titles named language of feelings, source of life and peace giver. Based on these findings, it can be said that teacher candidates regard music as significant in their lives and ascribe positive meanings to the concept of music. It is very fortunate for these teacher candidates to assign positive meanings to the concept of music especially because as preschool education majors they have taken Music Education 1 and Music Education 2 courses while they were juniors and especially because music is very helpful in children’s development during preschool.

Particularly having music activities in educational planning during preschool plays a very important role in the child’s social, affective, cognitive and physical development. Therefore, music education given during this period is very crucial (Kılıç, 2011). Because of this, it is very important for preschool teacher candidates who will teach music during preschool to have positive thoughts about music. However, when the literature is reviewed, it is seen that

there are limited number of studies on preschool teachers, preschool teacher candidates and music course in our country. Further studies on this subject is recommended. In addition, the metaphors obtained within the framework of the study results can be turned into scale items, and scales determining the perceptions about the concept of music can be developed. New studies examining the relationships between the metaphors developed and various variables can be conducted. Finally, metaphors can be used as data collection tool in order to determine individuals' perceptions about different musical concepts.

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PRESUMPTIONS FOR “INTERNATIONAL TRADE” STUDIES – COMPARISON THE CZECH AND SLOVAK EDUCATION SYSTEM EFFECTIVENESS

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ABSTRACT

The article compares the success rate of Czech and Slovak students who studied “International Trade” at the Faculty of International Relations during the years of 2009 – 2016. This comparison is used as a starting point for comparing the education systems of both countries in terms of preparedness for this type of studies. The basic source of data included the university’s internal information system that contains data concerning both entrance exam results and failed or completed studies. For the actual research, we present the research question saying that Slovak students are more motivated to complete the studies than Czech students. This is how we want to find out the effectiveness of the education systems in the Czech Republic and the Slovak Republic with respect to International Trade studies. For the primary analysis of 13,230 records, we used standard statistical functions. To calculate the parameters of the Logit model, we used the functionality of the SPSS product. We calculated the probability of successful completion of the studies only based on the records showing completed or failed studies.

Key words: International trade education, Education systems, Students

INTRODUCTION

The measuring of effectiveness and usefulness of the education systems in individual European countries is one of the important characteristics of investing public funds into the education of young people in particular. This education focuses on a variety of specializations – from technical and managerial all the way to humanities (Danel, 2016). As the European collaboration keeps growing, there is more need for professionals with interdisciplinary and multicultural knowledge and skills, which especially includes the ability to communicate in different languages for different cultural environments (Rodriguez-Muniz, Diaz, Mier & Alonso, 2016), to understand different customs and to have knowledge of statistics, management, accounting, human resources management, project management and risk management (Svátková, and Maryska, 2016, Nedomova Svatkova, 2016). Students applying to this field of study (International Trade) must pass two entrance exams. The first one is an English exam that tests the applicants’ knowledge of grammar and vocabulary as well as their ability to accurately express themselves (Zaif, Karapinar & Eksi, 2017)). The second one is a math exam that tests the applicants’ ability to think logically and to work with abstract concepts. Based on the results of these entrance exams, the best applicants are accepted to the university. The “International Trade” study field has a large percentage of foreign students who, however, study in the Czech language. This is why foreign students must also pass the Czech entrance exam (Maryska, Doucek, Mikovcová and Nedomova, 2013). Due to the similarity of the Czech and Slovak languages, Slovak students, who completed high school and passed the baccalaureate exam in compliance with the Slovak laws in the Slovak language, are not required to take this exam.

By comparing the entrance exam results, we are able to compare the education systems of both countries in terms of preparedness for the “International Trade” study field.

PROBLEM FORMULATION

The goal of this article is to:

- Analyze the entrance exam results of Czech and Slovak applicants interested in the “International Trade” study field;
- Analyze the results;
- Evaluate and compare the success rate of Czech and Slovak students in studying “International Trade,” based on their entrance exam results;
- Compare the effectiveness of the education systems of both countries in terms of preparedness for the “International Trade” study field.

Furthermore, we have formulated one research question - RQ: **Slovak students are more motivated to study and are more successful because they left their country to study at a prestigious foreign university.**

MATERIAL AND METHODS (DATA COLLECTION)

All analyzed data came from the pedagogic part of UEP's internal information system, which includes both data about entrance exams, including data about applications, and data about exams taken during the studies. In compliance with the topic of this article, we selected the data concerning Czech and Slovak applicants and then students of the undergraduate "International Trade" study program in Czech. Citizenship was the criterion for including students in our research.

We analyzed the select data, using standard statistical functions. To calculate the probability of successful completion of the studies based on the number of points obtained in the entrance exam (the Logit model - Hebák, Hustopecký and Malá, 2005), we analyzed the correlation between the entrance exam results and successful completion of the studies. The analysis included data records about failed and completed studies. We excluded the records of all students who have not yet completed their studies for whatever reason – suspension of the studies, etc. We converted the completion of studies to binary variables: successful completion – 1, failed completion – 0. To calculate the correlation values, we used the logistic regression, where the binary variable completion of study was the dependent variable and the number of points obtained in an entrance exam (PE) was only one independent quantitative continuous variable (Kuncova & Wasserbauer, 2007; Rezankova, 2010). The probability of studies completion is marked as p . Then:

$$\ln(p/1-p) = \beta_0 + \beta_1 PE \quad (1)$$

where PE is vector with number of obtained points from entrance exams,

β_0 - constant,

β_1 – increment - points from entrance exam,

p - probability of successful studies completion.

To calculate the actual correlation, we used the SPSS package function, and to accept or reject the null hypothesis of regression parameters being zero we used the Wald test (Rezankova, 2010) where we rejected this hypothesis if the Wald test was higher than zero.

The correlation (1) shows that

$$p = e^{(\beta_0 + \beta_1 * PE)} / 1 + e^{(\beta_0 + \beta_1 * PE)} \quad (2)$$

where

β_0 – constant,

β_1 – increment - points from entrance exam,

PE - is number of points obtained in an entrance exam,

p - the estimated probability of successful studies completion if a certain number of points is obtained in an entrance exam.

The values β_0 and β_1 shall be obtained from the data processed using the functionality of the SPSS product.

In compliance with the provisions of Act No. 101/2006 of Coll., on the protection of personal data, we set the data anonymous during our research in order to make it impossible to track down specific persons based on the analyzed data. The analysis was conducted for individual years as well as for the entire set of data.

GENERAL DATA CHARACTERISTICS

For our research, we identified 13,229 records about the entrance exam for the "International Trade" study field during the years of 2009 – 2016.

Table 1. The number of applicants from the Czech Republic and the Slovak Republic

Year	Czech Applicants	Slovak Applicants	Total
2009	1720	154	1874
2010	1557	172	1729
2011	1700	192	1892
2012	1589	163	1752
2013	1492	146	1638
2014	1383	132	1515
2015	1181	113	1294
2016	1381	154	1535

Of this total number, every year there are approximately 8 – 10 % of applicants from the Slovak Republic, i.e. the majority of applicants are from the Czech Republic. This fact shall affect the follow-up results of our

analysis, e.g. the average of points obtained in the entrance exam for the entire data sample, etc. The following section provides other research results.

RESULTS AND DISCUSSION

The research results focus mainly on two areas, i.e. entrance exam results and the probability of successful completion of the studies. These two areas are analyzed separately for Czech students and for Slovak students.

THE NUMBER OF APPLICANTS

Table 2 shows the number of applicants from both countries during the analyzed time period from 2009 to 2016.

Table 2. Participation and entrance exam results in %

Year	CZE			SK		
	The applicant did not take the entrance exam	The applicant was not accepted	The applicant was accepted	The applicant did not take the entrance exam	The applicant was not accepted	The applicant was accepted
2009	18.10	43.88	38.02	13.90	29.83	56.27
2010	23.74	32.85	43.41	22.71	24.41	52.88
2011	25.00	35.33	39.67	27.89	23.81	48.30
2012	18.82	42.77	38.41	17.44	35.66	46.90
2013	21.17	42.82	36.01	17.14	31.02	51.84
2014	22.89	41.51	35.60	16.67	35.24	48.10
2015	24.52	39.16	36.33	22.03	31.64	46.33
2016	26.04	30.95	43.02	22.73	29.22	48.05
Total	22.28	38.92	38.81	20.02	29.72	50.26

On average 22.3% of applicants (20% of applicants from the Slovak Republic) did not take the entrance exam during the analyzed time period, and this percentage is getting higher over time. This is because students can apply to several universities and, if accepted to one of them, they do not take the entrance exam at the other universities. This percentage, as well as the percentage of accepted students who did not register, essentially indicates the attractiveness of this study field for students. Approximately 39% of applicants (50% of applicants from the Slovak Republic) who took the entrance exam are accepted – the trend is slightly going up, with tendencies to oscillate.

ENTRANCE EXAM RESULTS

Entrance exam results represent one of the most important characteristics of the applicants. For the purposes of our research, we evaluated mathematics and English entrance exams and used average values to compare them over time. Since the obtained values from the data sample met the normality condition, we did not use median as a comparative value. Average values of points obtained in entrance exams show descending results in mathematics and oscillating results in English.

Table 3. The number of points obtained in entrance exams

Year	CZE		SK		Total	
	MAT	ENG	MAT	ENG	MAT	ENG
2009	64.47	71.09	72.91	76.55	65.43	71.72
2010	68.04	73.43	74.93	79.21	68.82	74.09
2011	61.30	72.26	69.55	75.62	62.16	72.61
2012	58.19	71.55	62.60	73.92	58.65	71.79
2013	54.29	71.54	63.13	74.88	55.27	71.90
2014	52.22	70.06	60.49	74.33	53.12	70.51
2015	51.69	70.26	58.98	72.53	52.42	70.48
2016	52.11	72.45	56.43	73.93	52.52	72.58
Total	58.84	71.62	66.25	75.45	59.64	72.03

The average values in both entrance exams taken by applicants who failed the entrance exam were considerably lower, but the number of points obtained by applicants from Slovakia in both exams was higher by about 5%. Table 4 and Table 5 provide very interesting information about the entrance exam results of students who start or do not start studying “International Trade.” Table 4 presents the number of points obtained in both entrance exams by Czech and Slovak students by year.

Table 4. The number of points obtained in entrance exams – accepted applicants

Year	CZE		SK		Total	
	MAT	ENG	MAT	ENG	MAT	ENG
2009	84.28	81.42	83.34	82.17	84.14	81.54
2010	82.18	80.45	84.29	83.55	82.46	80.87
2011	76.75	78.55	78.91	79.92	77.03	78.73
2012	77.64	80.18	77.44	79.86	77.62	80.14
2013	75.82	80.20	78.53	82.40	76.22	80.51
2014	74.16	77.66	76.37	80.13	74.46	77.97
2015	72.24	77.50	75.33	78.09	72.61	77.56
Total	77.53	79.36	79.59	80.93	77.81	79.56

Note to Table 4: the data for 2016 are not shown since we used at least one passed exam as an attribute for whether or not the applicant started the studies, and this information was not available at the time this article was written.

The results clearly show that Slovak students had very slightly better results in both exams; however, the number of points obtained in both exams keeps going down in the long-term.

Table 5 includes a warning.

Table 5. The number of points obtained in entrance exams – accepted applicants who did not start the studies

Year	CZE		SK		Total	
	MAT	ENG	MAT	ENG	MAT	ENG
2009	84,31	81,52	83,69	82,34	84,21	81,66
2010	82,20	80,26	84,39	82,98	82,50	80,63
2011	76,64	77,84	78,67	79,87	76,88	78,08
2012	77,76	80,00	77,04	78,52	77,67	79,83
2013	76,63	79,94	79,59	81,78	77,08	80,20
2014	74,56	77,41	75,63	78,95	74,71	77,60
2015	72,48	76,89	76,77	77,53	72,99	76,96
Total	78,44	79,19	80,17	80,71	78,68	79,40

Note to Table 5: the data for 2016 are not shown since we used at least one passed exam as an attribute for whether or not the applicant started the studies, and this information was not available at the time this article was written.

This Table shows that the average number of points obtained in entrance exams by applicants who in the end did not start the studies was higher than the average number of points obtained by students who started the studies. Therefore, we can conclude that the best applicants do not always start the studies and that some of the applicants whose entrance exam results were above-average do not start the studies and find another type of university or field of study more attractive.

SUCCESS RATE MODELING

As already mentioned in the part “Material and Methods,” the following section presents the findings based on the Logit model principles. In this case, we analyzed the probability of successful completion of the studies if a certain number of points is obtained in the entrance exams. In the first part of our analysis, we analyzed only the impact of the number of points obtained in the English entrance exam. The results are provided in Figure 1.

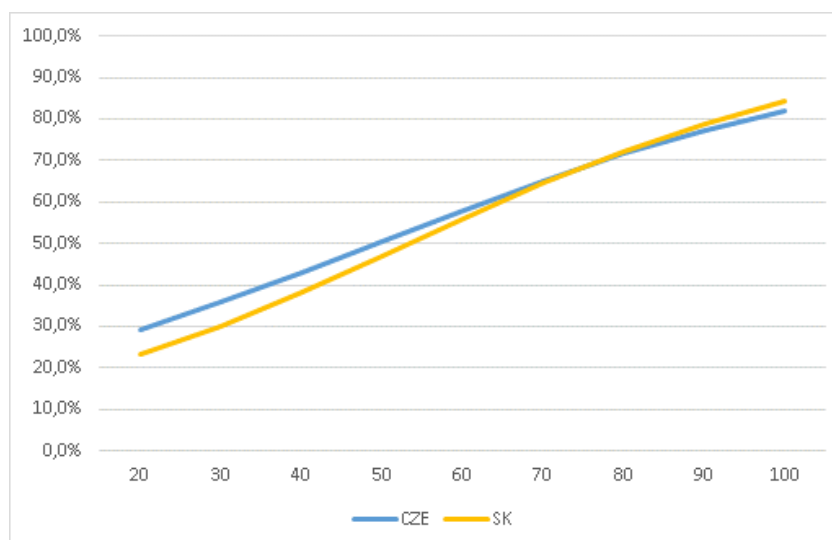


Figure 1. Logit model – English entrance exam results

The results show an interesting fact: with a lower number of points obtained in the English entrance exam, Czech students have a higher study success rate. These success rates even out at around 75 points, and with a higher number of points obtained in the English entrance exam, Slovak students have a higher study success rate. It is interesting that the model results practically show a linear correlation between the entrance exam results and the probability of successful completion of the studies, in particular in Czech students.

The relationship between mathematics entrance exam results and the probability of successful completion of the studies shown in Figure 2 is very similar.

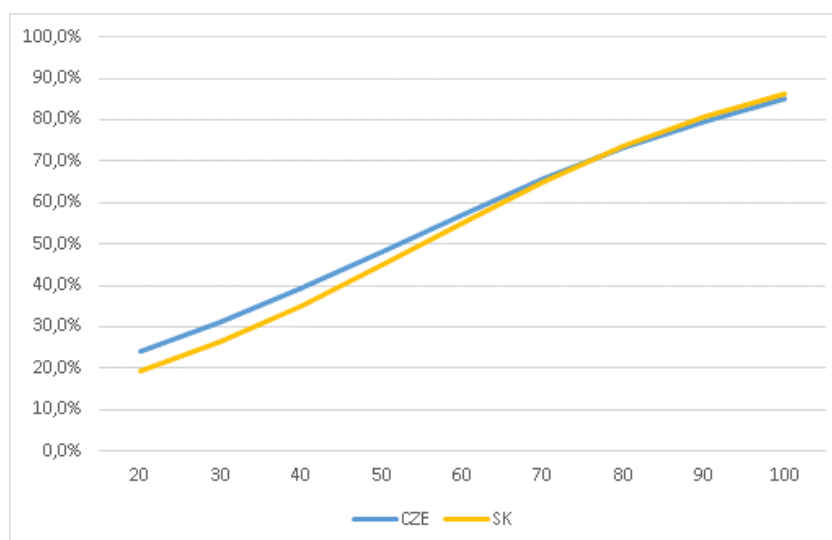


Figure 2. Logit model – mathematics entrance exam results

The discovered impact of mathematics entrance exam results on the study success rate is very similar to that of English entrance exam results. Both curves show even a smaller difference than in the case of Figure 1. The success rates of Slovak applicants and Czech applicants even out at 80 obtained points, and both curves are practically the same at a higher number of points.

In order to fully analyze the impact of entrance exam results on the probability of successful completion of the studies, we also modeled the probability of successful completion of the studies for the total points obtained in both entrance exams. The main reason was to verify whether students who did well in one entrance exam did not obtain a considerably lower number of points in the other exam, which would reflect in their study success rate. This relationship is displayed in Figure 3.

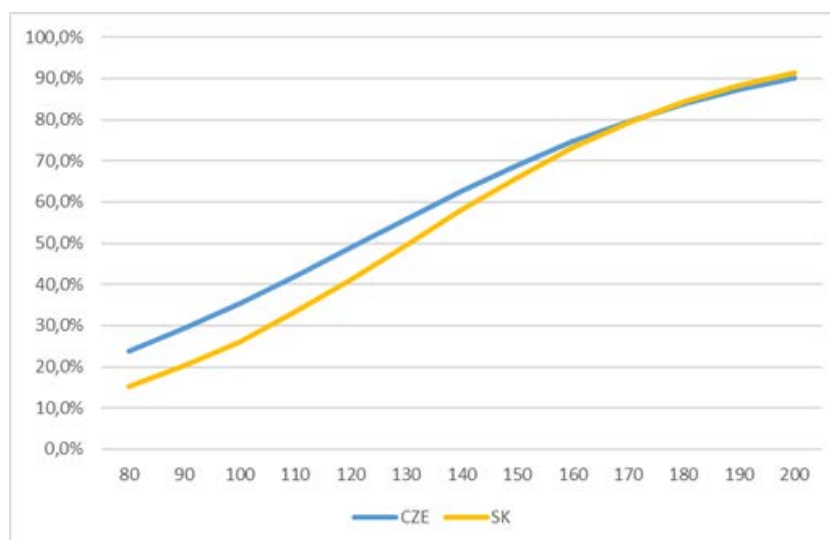


Figure 3. Logit model – points obtained in both entrance exams

The results show that the probability of successful completion of the studies evens out at 180 obtained points, where it exceeds 80%. The model results did not confirm any major difference between the results in individual entrance exams. Therefore, we can conclude that students who are good in English are also good in mathematics and vice versa. Based on experience, it is reasonable to accept students with a 50% and more probability of successful completion of the studies, which in our case means starting with 120 points for Czechs and 130 points for Slovak students. However, this is only a theoretical thought since the faculties set one limit for all students and do not take into consideration students' citizenship.

CONCLUSIONS

Based on our findings, we can say that we were not able to prove any major difference in the effectiveness of the education systems for the "International Trade" study field between the Czech Republic and the Slovak Republic. We were not able to provide a clearly positive answer to our Research Question either.

It is startling that students who obtain less than 120 or 130 points in the entrance exam have less than a 50% probability of successfully completing the studies (if we disregard any external or internal factors).

There are several options of how to increase this probability, i.e. how to help students to overcome the pitfalls of university studies (ShuangYing, 2015). The **first option** is to implement mock exams that shall help to improve entrance exam results. This may seem unnecessary because a higher number of points obtained in the entrance exam shall not automatically increase the study success rate. Nevertheless, mock exams may remove stress and psychological barriers of students who would be interested and would start the studies (the percentage of accepted but non-registered students shall decrease). **Another option** is to make the studies more attractive for applicants so that this field of study would become their highest priority, which would reduce the number of students who do not take the entrance exam or are accepted but do not start the studies. We are planning to perform a similar analysis by gender and, based on this analysis, to make recommendations for making this field of study more attractive. Foreign universities usually have student crisis centers (Danel, 2016) that, however, are not activated unless there is some major study or personal crisis. UEP also has a similar center, but it does not get activated at all in the case of slowly accumulated study problems. The **last option** includes the evaluation of study system data (working with exercise materials, how often students connect to the computer network, etc.), monitoring of students' activities and communication with students who stop these activities.

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PRIMARY SCHOOL STUDENTS' METAPHORS ABOUT THE CONCEPT OF MATHEMATICS

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ABSTRACT

Metaphors, though known as language term, are used to reveal the perceptions of individuals currently. They reflect ideas and perceptions like a mirror. Use of metaphors may help to determine perceptions of individuals especially on difficult concepts. This study aimed to reveal the primary students' perceptions related with mathematics through metaphors. Study was conducted during 2016-2017 school year with 335 primary school students (182 third-graders and 153 fourth-graders) from two public schools located in Istanbul. Each student was asked to complete the blanks in given sentence of "Mathematics is like . . . , because . . .". The results collected from the students were categorized and the similar metaphors were grouped. Accordingly, thirty-five and twenty-nine different metaphors collected from third and grade students, respectively, were further analyzed. The common metaphors created by third and fourth grade students are "Game", "Life" and "Puzzle". It seems that both third and fourth grade students have positive perceptions towards mathematics and most of them find mathematics enjoyable.

Key words: metaphor, mathematics, primary school students

INTRODUCTION

Mathematics is sometimes wonderful or sometimes weird and contradictory feelings, love and hate, may appear when we work with it. Mathematics is like a stern parent, who loves you but could not express their emotion, so you have to get their permission (Ernest, 2010). Students' beliefs about the mathematics are linked with the role of mathematics in their daily life and school life. Metaphors help to understand their feelings or beliefs about mathematics (Schinck & al., 2008). Metaphor is usually known as a language term but Lakoff and Johnson (1980) stated that it is in thought and action. According to them, "*Metaphor is principally a way of conceiving of one thing in terms of another, and its primary function is understanding*". Modell (2009) described the metaphor as the currency of the mind.

Students' beliefs or perceptions about mathematics were investigated via metaphors. Using metaphors helps to understand students' internalized views about mathematics. Ninth and tenth grade students defined mathematics as useful tool for themselves and their society (Schinck & al., 2008). There are several studies trying to examine middle school and high school students (Gür, Hangül & Kara, 2014; Oflaz, 2011, Güner, 2013a) pre-service teachers and teachers' metaphorical perceptions on mathematics (Kılıç & Yelken Yanpar, 2013; Güner, 2013b; Şahin, 2013; Şengül & Katrancı, 2012; Güler & al., 2012; Güveli & al, 2011; Schinck & al., 2008), however only a handful studies (Ummanel, 2017; Tuncer & Sahinkaya, 2016) on primary school students' metaphorical perceptions about mathematics have been conducted in the literature.

In this study, it was aimed to reveal primary students' perceptions related with mathematics through metaphors. In this context, the answers of following questions were examined.

- What are the metaphors and the categories of the third grade students related with mathematics concept?
- What are the metaphors and the categories of the fourth grade students related with mathematics concept?

THE STUDY

Method

In this qualitative study, a totally of 335 (182 third grades and 153 fourth grades) students attended. The students were selected from two primary schools with middle socio-economic level located in Istanbul.

Data collection

Data were collected by researchers with one lesson hour for each class in spring semester of 2016-2017 academic-year. All students voluntarily agreed to participate in the study. Each student was asked to complete the blanks in given sentence of “Mathematics is like . . . , because . . .”.

Data analysis

The metaphors created by students were listed. Some data were eliminated because the responses were not appropriate for metaphor definition and some of the students did not complete the task. A total of 16 and 20 responses were eliminated from third and fourth grades, respectively. The responses were independently analyzed and categorized by the researchers. In order to test the reliability, the evaluations of the researchers, whether the response can be accepted as metaphor or not, were analyzed using the formula $\text{reliability} = \frac{\text{number of agreement}}{\text{total number of agreement} + \text{disagreement}} \times 100$ (Miles & Huberman, 1994). The agreement between the two researchers was calculated as 90%, which shows high reliability between coders. The metaphors and categories obtained from research data were presented in the form of frequency-distribution tables.

FINDINGS

Third grade students’ metaphors about the concept of mathematics were listed as frequency-percentages distribution and given in Table 1.

Table 1. Third grade students’ metaphors about the mathematics.

METAPHORS	f	%	METAPHORS	f	%
Game	32	19.3	Flower	1	0.6
Life	28	16.9	Language	1	0.6
Intelligence	21	12.7	Mind	1	0.6
Puzzle	18	10.8	Idea	1	0.6
Information	14	8.4	Food	1	0.6
Science	11	6.6	Watermelon	1	0.6
Friendship	6	3.6	Hair	1	0.6
Road	4	2.4	Needle	1	0.6
Problem	2	1.2	Competition	1	0.6
Brain	2	1.2	Question	1	0.6
Dream	2	1.2	Making a car	1	0.6
Exam	2	1.2	Die	1	0.6
Job	2	1.2	Mental gymnastics	1	0.6
Water	1	0.6	Tale	1	0.6
Car	1	0.6	Heaven	1	0.6
Tree	1	0.6	Physical development	1	0.6
Notebook	1	0.6	Baklava (traditional Turkish dessert)	1	0.6
Light	1	0.6			
TOTAL				166	100

Table 1 shows that third grade students produced 35 different metaphors totally. Twenty-two metaphors have frequency of 1.0, which means only one student has used these metaphors for the definition of mathematics. The number of metaphors written only once was. The most repeated metaphors were “Game”, “Life”, “Intelligence” and “Puzzle”, which means 20% of third grade students see mathematics as a “Game”.

Third grade students' metaphors were also categorized. Some metaphors belong to more than one category depending on students' responses. Table 2 shows the categories and the metaphors belonging each category together with the frequencies (given in parentheses).

Table 2. The categories and metaphors of third grade students possess

CATEGORIES	METAPHORS
Informative	Intelligence (11) Science (9), Life (10), Information (14), Road (4), Idea(1), Car (1),
Enjoyable	Game (15), Life (5), Puzzle (18), Competition (1), Mental gymnastics (1), Physical development (1)
Easy	Game (30)
Existence	Life (20), Water (1) ,Exam (2), Information (1)
Happiness	Baklava (1), Food (1), Watermelon (1), Dream (2), Tale (1), Heaven (1) Friendship (6),
Complexity	Hair (1), Brain (2) Life (5), Tree (1), Mind (1), Question (1), Flower (1), Making a car(1)
Guiding	Intelligence (10), Science (2) Light (1)
Necessity	Information (5), Job (2),Notebook (1), Language (1)
Difficulty	Problem (2)
Painful	Needle (1), Die (1)

A total of ten categories were defined to better analyze the metaphors created by the students (Table 2). The metaphors of "Life", "Game", "Information" and "Science" were listed under more than once category. Metaphors created by students were generally listed under the categories of "Informative", "Enjoyable", "Easy" and "Existence". Only few metaphors were listed under the categories of "Difficulty" and "Painful". Hence, most of the students have positive feelings about mathematics.

Some examples of students' responses and the category, under which it is defined, are: "*Mathematics is like **intelligence** because it provides information (**informative**). Mathematics is like a **science**, because both of them give information (**informative**). Mathematics like a **puzzle**, because game and mathematics are so enjoyable (**enjoyable**). Mathematics is like a **game**, because both of them are easy for me (**easy**). Mathematics is like **life**, because it is basis of everything (**existence**). Mathematics is like a **baklava**, because I like mathematics (**happiness**). Mathematics is like a **hair**, because mathematics may be complex as hair (**complexity**). Mathematics is like **intelligence**, because it always guiding (**guiding**). Mathematics is like **information**, because it is necessity to do best (**necessity**). Mathematics is like **problem**, because I think that it is difficult (**difficulty**). Mathematics is like a **needle**, because I feel that needle and mathematics hurts me (**painful**)."*

Fourth grade students' metaphors about the concept of mathematics were listed together with frequency-percentages distribution in Table 3.

Table 3. Fourth grade students' metaphors about the mathematics

METAPHORS	f	%	METAPHORS	f	%
Life	26	20	Intelligence	1	0.7
Puzzle	22	17	Dancing	1	0.7
Game	21	15.8	Tree	1	0.7
Stairs	14	10.5	Plane	1	0.7
Problem	12	9.0	Running	1	0.7
Mind	5	3.7	Cartoon	1	0.7
Bicycle	4	3	Labyrinth	1	0.7
Brain teaser	4	3	Step	1	0.7
Science	4	3	Earth	1	0.7
My life	2	1.5	Information Source	1	0.7
Car	1	0.7	Cooking	1	0.7
Experiment	1	0.7	Art	1	0.7
Brain	1	0.7	Poison	1	0.7
Water	1	0.7	Friend	1	0.7
Elevator	1	0.7			
TOTAL			133	100	

According to Table 3, it can be said that fourth grade students produced 29 different metaphors totally. Nineteen metaphors have the frequency of one, which means they are only used by one student. The most commonly repeated metaphors were “Life”, “Puzzle”, “Game” and “Stairs”. It can be said that “Life” was produced by 20% of fourth grade students.

Fourth grade students’ metaphors were categorized similar to the third grade students’ responses. Some metaphors belong to more than one category depending on students’ responses. Categories and metaphors and their frequencies (given in parentheses) were given in Table 4.

Table 4. The categories and metaphors of fourth grade students possess

CATEGORIES	METAPHORS
Enjoyable	Game (15), Fun (12), Problem (7), Puzzle (10), Dancing (1), Running (1)
Guiding	Stairs (7), Life (6), Problem (5), Mind (5), Science (4), Intelligence (1), Labyrinth (1), Brain teaser (4), Brain (1), Tree (1)
Formative	Stairs (10), Life (4), Game (8), Bicycle (4), Car (1), Elevator (1), Plane (1), Cartoon (1), Step (1), Friend (1)
Existence	Life (16), My life (2), Water (1), Cooking (1), Earth (1),
Informative	Experiment (1), Information Source (1)
Complexity	Art (1),
Difficulty	Poison (1)

Seven categories were selected to analyze the metaphors created by the students. “Life”, “Game”, “Information” and “Science” metaphors are listed more than once category. Most of the metaphors created by students were primarily collected under the categories of “Enjoyable”, “Guiding” and “Formative”. Only few metaphors were listed under the categories of “Complexity” and “Difficulty”. So, similar to the third grade students results, fourth grade students have positive feelings.

Some examples of students’ responses: “*Mathematics is like **game**, because I enjoy with mathematics*”(enjoyable). “*Mathematics is like **stairs**, because it guides to us*” (guiding). “*Mathematics is like **stairs**, because you improve step by step*”(formative). “*Mathematics is like **life**, because mathematics is in life and everywhere in life*” (existence). “*Mathematics is like **experiment**, because it gives information*”(informative). “*Mathematics is like **art**, because art has some complex picture*”(complexity). “*Mathematics is like **poison**, because if you are not able to doing mathematics, your brain will be poisoned*”(difficulty).

CONCLUSIONS

Third and fourth students created thirty-five and twenty-nine metaphors, respectively. Both third and fourth grade students commonly used the metaphors of “Game”, “Life” and “Puzzle” to express their feelings about mathematics. For the third and fourth grade students, “Intelligence” and “Stairs” are the fourth mostly used metaphors, respectively. Metaphors produced by third grade students’ were collected within ten categories. The categories of “Informative”, “Enjoyable”, “Easy” and “Existence” have more metaphors than the other categories. Twenty-nine metaphors were listed within seven categories for fourth grade. “Enjoyable”, “Guiding”, “Formative” and “Existence” is the first fourth categories for fourth grade students. I can be said that “enjoyable” and “existence” are the common categories. The categories of “Difficulty”, “complexity” and “painful” refer to negative perceptions with a few metaphors for both grades. These findings are consistent with Tuncer & Sahinkaya (2016), Ummanel (2017) and (Schinck & al, 2008). Tuncer & Sahinkaya (2016) found that fourth grade students’ metaphors were categorized at the category of “joyous” primarily. According to Ummanel (2017), students have positive attitudes towards mathematics. Schinck & al (2008) stated that students thought that mathematics was a useful tool. According to metaphor analysis results, Oflaz (2011) found that students have negative perceptions on mathematics.

As a result of the study, it can be said that both third and fourth grade students have positive perceptions towards mathematics and mathematics is enjoyable for them. The reason may depend on various factors, such as students' interest on mathematics, their teachers' attitude, their parents' attitude, etc. These factors and their effect on students' perceptions on mathematics may need to be examined further. Especially, determining the reasons of the negative feelings, some students have, understanding their feelings and trying to alter their feelings are important.

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PROJECT TEACHING AT UNIVERSITY - A TOOL FOR PRESENTING PROPOSALS FOR PREVENTION AND SOLVING THE PROBLEM OF THE GENERAL PUBLIC

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ABSTRACT

Work on the "Water for All" project started in October 2016, when all 11 ateliers of the Faculty of Multimedia Communications, the Department of Marketing Communications and the Department of Theoretical Studies worked on research, analyses, graphic and conceptual solutions for the prevention of a society-wide problem - water management. The main objective of the project is to analyse, implement and present possible solutions (specific design of products or prototypes) or communication tools and their content (graphic designs, results of research on water management) but also the overlap of project teaching into the higher education process and brandbuilding of the university. A partial aim of the project and the main part of this paper is a presentation of research results and proposals for prevention and solution of the problem of water management in the Czech Republic with a warning about the loss of water in nature.

INTRODUCTION

Higher education is different from the concept of secondary education. Paul Ramsden (1992), based on the research of university teachers and students, formulated six principles of university education:

Principle 1: Quality of presentation and influencing of study interests of students. The university teacher should have the ability to select and present the curriculum so that it is interesting and stimulating for students. From a learner's point of view, it is essential that the teacher can choose key and crucial themes, structure them in overviews, refer to literature, research, application, practicality, and use experience. During a lecture the teacher should focus on key issues and structures, perceive student incomprehension, and adapt the lecture to it.

Principle 2: Interest in students, respecting students and their teaching. University teachers should be aware of whom is the lecture intended for and to what extent students are ready for difficult themes they intend to present. They should therefore know their learning backgrounds and educational needs, leave room for questions, perceive misunderstandings and mistakes, help to correct them and adjust their teaching.

Principle 3: Appropriate assessment and feedback. Teachers set their requirements for student performance, usually as a range of knowledge and skills within a given discipline or course/ subject. The assessment has a partial (e.g. during a credit test) or a summarizing character (e.g. at a state examination). Assessment requires a considerable focus of the teacher, ability to compare and differentiate, and to be objective. In order to prevent mistakes in the evaluation, it is recommended that teachers set out clear rules, requirements and evaluation criteria and familiarize students with them in a timely manner. Feedback to students brings into focus whether the results of their study effort and content comprehension correspond to set learning requirements. The most effective feedback is included in the course. It can take the form of a discussion, pre-test, post-test, computer program, specifically targeted individual or group study tasks, a consultation interview and the like.

Principle 4: Clear objectives and intellectual stimuli. Teacher's teaching activities and student's learning activities should form a complementary pair in terms of educational goals. Therefore, the objectives must be formulated not only in binding higher education documents, but also in the design of teaching in individual disciplines or courses/ subjects. They should also be clear in individual teaching units and themes. The more they are specified and better expressed, the more they facilitate the study of students, motivate for learning and give direction to the study effort.

Principle 5: Independence and active involvement of students in lecture. Independence is one of the characteristics of university studies. Students assume responsibility for their learning outcomes. Independence, however, cannot be confused with the loneliness and the helplessness of students. Students need guidance, help and support of their teachers. The student should study, think, ponder, discover. In the classroom the teacher should create the conditions for these intellectual activities, i.e. to assign individual or group activities, to give space for their presentation, opposing and peer evaluation. Each college teacher should have a set of teaching methods based on the activity of the students in the discipline they are teaching. A prerequisite for success is the deep knowledge of their field, thorough preparation of study tasks, communicative and managerial skills, ability to improvise.

Principle 6: Learning from students. To learn from students means to recognize them as developing personalities, to explore their study possibilities and styles, educational interests, to estimate their responses, to identify their educational needs and interests, to take into account their opinions and criticisms, and then include them in the teaching strategies that need to be improved all the time and that way continually professionalize. If the teacher creates the right conditions, then the students bring their ideas and solutions to the lesson.

Vašutová (1999) reports frequent dissatisfaction with the traditional Czech university education, in which the monologue of the university teacher is dominated and the passivity of the students is tolerated. In higher education, there is a need to create such learning conditions for students that their educational needs and individual profile and abilities will be respected. At the same time, students should not be just consumers of presented knowledge, but they themselves should be involved in their discovery, acquisition and usage. To such approaches, the conditions are given by group project teaching.

Project teaching is based on a project method (Kratochvílová, 2006). The project is understood as a complex task in which students solve a particular problem (problem task, problem situation, etc.). Using this teaching method, students are encouraged to independently process certain complex tasks or solve problems associated with life reality. A characteristic feature of project teaching is a goal, which is represented by a specific output, i.e. a product or a practical solution to the problem. Projects often take the form of integrated topics, they use inter-subject relations.

The aim of the project teaching is to present information in context and to present phenomena in an interdisciplinary way. It is a unique system of teaching, which is focused, among other things, on preparation of students for practice.

Characteristics that the project should include, inter alia Coufalová states:

- The project is based on needs (the need to gain new experience, responsibility for own activities, ...) and interests of students, as well as society.
- The project is based on a specific and up-to-date situation that is not limited to the school environment.
- The project is interdisciplinary.
- The students' work in the project brings a specific product, i.e. the output that the project participants present.
- The project allows the school to be integrated into the life of the community or the wider public.

Project teaching is a heuristic method. The core of heuristic methods (from the Greek word *heuréka* - I found, I discovered) is the problematic situation the student solves independently, with the gradual help of the teacher. Maňák and Švec (2003) define this situation as a penetration of a difficult, unclear and new situation. J. Skalková (1999) states that awareness of the problem situation is the beginning of all thinking. The knowledge and skills that a student discovers and gains during problem solving are more permanent than seemingly easier and faster memorized, pre-prepared, right solutions.

The main principles of successful heuristic methods include:

- activity - students must themselves actively seek, discover and solve;
- motivation - Students gain their own inner interest in solving tasks, problems;
- phase progress - students learn to organize their thinking according to the heuristic model, learn regulation and self-regulation during solving problems and creative work.

An efficiently managed project within the project teaching should go through the same phases as for instance a business project, i.e. planning, implementation and controlling phase. At the beginning, it is important to specify the aim of the project, to formulate objectives and results of the project (i.e. measurable outputs and their meaning/ purpose). It is also necessary to plan partial questions, themes and activities related to them. After that, the project itself is carried out and, finally, the assessment of whether the objectives have been achieved. The evaluation should ideally take place in the mutual dialogue of the teacher with the students, but also between the students, so that they can critically develop some activities and inspire each other to solve them.

Positive Implications of Project Teaching on a Student:	Positive Implications of Project Teaching on an Educator:
<ul style="list-style-type: none"> - gaining stronger motivation to learn; seeing the wider impact of their work and their contribution to the practice - assuming greater responsibility for the outcome of the work; - students' autonomy is developed as well as team competencies; they learn to collaborate with operatives from other fields, - learning to work with different sources of information; - learning to solve problems; construct their knowledge, - gaining organizational, management, planning, evaluation skills; - getting a global overview of the problem; - developing their communication skills across the team, disciplines and with the educators; - learning mutual respect; - developing creativity, activity and fantasy. 	<ul style="list-style-type: none"> - learning a new role, a counsellor role; - learning to perceive the student as a whole. There is a change in their thinking about students; - expanding their repertoire of teaching strategies; - using new assessment and self-assessment options; - expanding their organizational skills.
Negative Aspects on a Student Side:	Negative Aspects on Educator's Side:
<ul style="list-style-type: none"> - time demands of the project solution; - students are often not equipped with necessary competencies. 	<ul style="list-style-type: none"> - time demands of the project preparation; - evaluation difficulty.

Table 1: Positive and Negative Aspect Implications of Project

Universities should be actively involved in creating conditions and removing obstacles to human development in all countries of the world. They should teach their graduates responsible citizenship in a globalized world in all its complexity, interconnection and interdependence of individual components (Ecrigas, 2008). However, current attempts to address the major global challenges (poverty, hunger, war, disease, natural degradation and global climate change) are ineffective, and the consequences of these problems prevent any development in most of the human population. For decades, there have been talks about systemic changes leading to sustainable development. Work on the project, leading to the prevention and partial solution of a societal problem, is the essence of this contribution, which is linked to the "Water for All" project, realized at the Faculty of Multimedia Communications of Tomas Bata University in Zlín from September 2016 to June 2017. Since then, each person in the Czech Republic consumed about 25,000 liters of water. Through design, film and marketing effectuated in 11 art ateliers and at the department of Marketing Communications, the project tried to communicate to the public that this number is too high. The unifying element was water, the fragility and importance of which the students tried to express in their work.

The Water for All project took place under the patronage of the Ministry of the Environment and had two main objectives. The first was to increase the awareness of the need for water management and to raise a debate on the subject with the general public. The second objective, which is also reflected in the name of the project, was cooperation, not only between the students themselves, but also between the Faculty and the city of Zlín, the production and non-profit sectors and the general public. The entire project was launched on September 21 at a conference entitled Expert Block: Water for All. Water management professionals presented their work to give visitors the opportunity to take a look at the topic from different perspectives. For example, Josef Nistler, Director of the Department of Water Protection of the Ministry of the Environment, Mark Rieder of the T.G. Masaryk Water Research Institute, or publicist Vladimír Kořen, took part in lectures. At the end of the conference, the speakers met in a panel discussion where they discussed, among other things, topics suggested by participants and students. The project involved 450 faculty students and created 360 unique outputs: a

collection of clothes with print inspired by satellite images of drying Aral Lake, mobile applications that show users the source of drinking water in nature; a series of posters that highlight the necessity of water management, as well as architectural modifications of the river Dřevnice and Kudlov dam. Students of the department of Marketing Communications worked on a pilot survey, the partial results of which are the essence of this paper. The selected outputs of the project can be viewed at www.vodaprovsechny.cz.

METHODS

As was said before, The "Water for All" project has been structured into several phases:

1. Presentation of the problem to students in the form of an all-day conference with experts from various fields (geologist, designer, urban architect, water management expert, non-profit organization promoting the idea of efficient water management, etc.)
2. Creating a source information disk (library) where secondary analyses and materials on the topic, website, and corporate identity of the project are shared.
3. Regular consultations of the problem at the ateliers and the Department of Marketing Communications in the subjects. Assignment of seminar papers in relation to the project.
4. Processing whole-faculty and external presentations of product concepts on the topic "water management" in ateliers, exhibitions and results of a pilot survey at conferences.
5. Establishing further collaboration with companies and organizations to develop campaigns and prototypes of water management products.
6. Project evaluation.

By solving own research monoprospects, students can be brought to basic research attitudes. Students acquire following skills: • to separate and formulate a question; • prepare the data collection tool to an adequate question or problem; • find a suitable way of processing this data; • interpret findings in a way that does not exceed the validity of the data, and at the same time goes beyond a mere description of the collected data. The research conducted by students of the department of Marketing Communications was elaborated by the method of action research. Action research is understood as a systematic reflection of professional situations that is being conducted to innovate these situations. The term action research refers to action and its exploration, with the actor being a student in the role of a researcher. Action research demonstrates that the democratic participation of students becomes a practical reality in a 21st century higher education institution. It proves that research methods become the property of everyone. Systematic data collection and critical analysis can be effectively implemented not only by researchers but also by students. Students participating in action research observe, ask questions, analyze, share opinions, and evaluate results. Action research is described as a practical research that is being implemented by students as opposed to academic research conducted by academic researchers. Stephen Kemmis (1983) defines action research as a form of self-reflection. It has a character of cyclical interventions rather than one-off interventions. Each intervention is evaluated in order to plan further steps. It improves the quality of pedagogical work and the results achieved (Schmuck 1997). The goal of action research is also to improve the students' professionalism, develop their thinking and skills, improve their decision-making processes, influence students' value orientation and strengthen their hope and belief in improving their experience. Action research within the "Water for All" project aimed to prepare and pre-test a questionnaire, which they then distributed to a pilot sample of university students, evaluated it and interpreted the results. The pilot questionnaire survey was conducted on a sample of 370 university students (258 women and 112 men) with the aim to identify the main motivations and attitudes of young people to water management.

FINDINGS AND DISCUSSION

As part of the hypothesis formulation, students assumed that respondents would be more sensitive to local water management, i.e. they would be more interested in how to address the prevention of water loss in the Czech Republic compared to the world's sustainability issues in the landscape. So, among other things, they formulated a battery of research questions where they asked, among other things: "Do you think people in the Czech Republic/ the world behave indifferently to water consumption?" and "Do you think the state (Czech Republic)/ world organizations engage in analyses and water management strategies?" It was measured on Likert's scale of consent.

Due to a narrowly age-profiled sample of respondents, the results were sorted according to gender to make it clear whether men respond to social problems more sensitively than women or not.

Two hypotheses have been defined:

1. H_0 : "The perception of the issue of water management in the Czech Republic is not gender-dependent."
2. H_0 : "The perception of the participation of organizations (both world and Czech) in solving water scarcity is not gender-dependent."

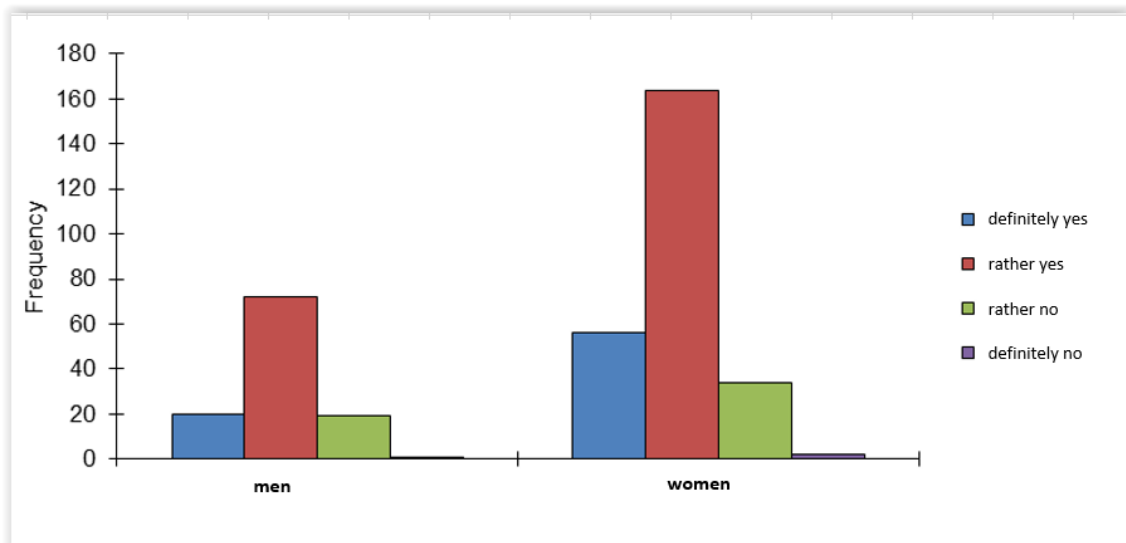


Figure 1: Indifference in Czech Republic

(Pearson) Chi-square Test	
H_0 : Variables are independent (no interaction between variables)	
H_1 : Variables are dependent (interaction between variables)	
Chi-square	1,35536
DF	3
p-value	= 0,716031

Table 2: Independence of indifference in Czech Republic and sex

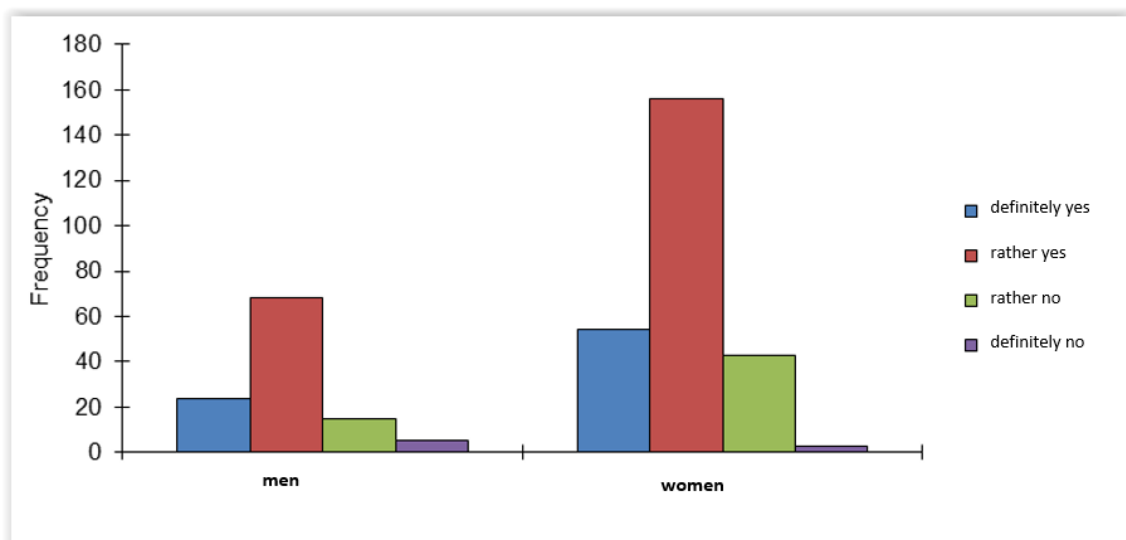


Figure 2: Indifference in world

(Pearson) Chi-square TestH₀: Variables are independent (no interaction between variables)H₁: Variables are dependent (interaction between variables)

Chi-square 4,462617

DF 3

p-value = 0,215649

Table 3: Independence of indifference in world and sex**(Pearson) Chi-square Test**H₀: Variables are independent (no interaction between variables)H₁: Variables are dependent (interaction between variables)

Chi-square 4,614515

DF 3

p-value = 0,2023

Table 4: Independence of Strategy in Czech Republic and sex**(Pearson) Chi-square Test**H₀: Variables are independent (no interaction between variables)H₁: Variables are dependent (interaction between variables)

Chi-square 4,588924

DF 3

p-value = 0,204494

Table 5: Independence of Strategy in world and sex

Within the analyses, contingency tables were created and frequency charts of individual variables and hypotheses were tested by the Chi-square test, with all p-values being higher than 0.05. From the above tests, the distribution is defensively gender-independent (at least according to our sample, which can testify to the judgment of young students of art-oriented schools in general). Therefore, there is a premise that young people perceive the issue of water management very actively and independently of gender. Their perception is slightly more sensitive to the prevention of water spill from nature in the Czech Republic. 5 % of respondents mentioned companies and corporations as organizations responsible for water management, 5% mentioned the world's organizations, 7 % government of the Czech Republic and the appropriate ministries. Most of them, however, determined themselves being responsible, or more precisely each individual, in 81 % of cases. A key factor in our adaptation to changing environments will therefore be the ability to change people's thinking. History is known for civilizations that have had to cope with the change of their environment during two generations. Thilo Lehmann from the Vienna City Hall talked about change of mindset at the Conference about Water. According to him, the change of mindset, took place mainly at the municipality itself. In 2011 and 2014, Vienna suffered heavy rain that caused great damage. "Certainly, more capacity for sewerage could be built. But it is very expensive and people are annoyed when the city is dug up," says Lehmann. And so the municipality decided to simply not let the rainwater into the sewer, except for the historic center, where the spatial possibilities simply do not allow for another solution. (Martin Mach Ondřej, © 2017) A survey of people on a representative sample could bring inspirational ideas not only for organizations and cities that deal with management but the results will be used to educate and motivate these people to take interest in this society-wide problem and for proposals for its prevention or solution.

Czech university students perceive the society-wide problem of water management very sensitively. Their perception is not gender-dependent. They are slightly more aware of the problem of water scarcity in the world, which is very alarming due to the fact that the Czech Republic has only 2 % of surface water. Schools, the state,

and non-profit organizations should therefore communicate more intensively about the prevention of this problem and the responsibility of each individual for its solution.

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PROMOTING ACADEMIC INTEGRITY IN SECONDARY EDUCATION

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ABSTRACT

One of the decisive issues of school integrity index is connected to assessment parameter and concept of integrity emerging social and cultural impact. This is a fascinating issue to challenge with a vast concept of integrity that will be explored as consistency across context, coherence between values and action, stability over time, permanence across roles, and union of ethical perspective. To overcome that issue, the purposes of this study are to analyze academic integrity in the secondary education and to make recommendation for policy makers in order to enhancing academic integrity. The author utilized Soft Systems Methodology (SSM) as research method, and supporting program of Integrity Index of National Exam (IIUN) for secondary education in Indonesia as singular case study. Study result shows that employing Integrity Index of National Exam by measuring the structure of answer on national exam is quite effective to enhance academic integrity for particular scope. However, it requires improvement for the instrument that conceptually feasible, legitimate and politically sustainable.

Keywords: academic integrity, Soft Systems Methodology, Integrity Index of National Exam.

INTRODUCTION

Amidst critical remarks on integrity concept, it seems that Palanski and Yammarino (2007) noted on integrity is proved. They stated that “integrity suffers from significant problems, ... to many definitions and too little theory.” That statement supported by Dunn (2009) who concluded that “integrity will next be explored as consistency across context, coherence between values and action, stability over time, permanence across roles, and union of ethical perspective.” To explore those statements above, this study provides practical issue challenging with conceptual issue of school integrity.

In practice, it is connected with National Assessment Program, in which Ministry of Education and Culture (MEC) assisted by the Center for Educational Assessment (CEA) carrying out Paper Based National Exam (UN) for secondary education. The aim of that annual program is not only for enhancing academic achievement, but also for enhancing honesty and credibility of Indonesia education. To succeed it, MEC has employed Computer Based National Exam (UNBK) as optional program and Integrity Index of National Exam (IIUN) as supporting program.

As an optional program of the UN, Computer Based National Exam receives positive trending response from secondary schools in term of participation, risk, feed back, quality of preparation, process, and result. In short, UNBK program that really depends on educational technology and e-assessment is able to overcome the issue of academic achievement and integrity.

As a supporting program, Integrity Index of National Exam has been successfully proved to be an instrument to enhance school integrity through conducting Indonesia national exam honestly. The instrument actually aimed to reducing cheating index based on the answer pattern analysis. This policy is quite effective to diminish the systematic dishonesty for 41,7 per cent in senior high school on science program, and for 37,8 per cent in senior high school on social program. It can be noted that there was improvement of integrity index on 24 from 34 provinces observed (<http://www.cnnindonesia.com/nasional/20160510011843-20-129580/indeks-integritas-sma-meningkat-nilai-ujian-nasional-turun/>)

However, IIUN as an innovative program, faces analytical remarks of debatable criteria and its instrument. It emerges the main reason for some principals that they do not have confidence in the assessment result. Some principals are anxious about the impact of negative reputation from society towards their schools with low integrity index. MEC stated that the transparency of criteria to determine school integrity index, aiming to avoid interventions from certain stakeholders that disrupt the assessment (http://www.kompasiana.com/ramdan69/menyoal-objektivitas-indeks-integritas-sekolah_5584ec8183afb4912df8a1f).

The concept of assessing IIUN that has been implemented is slightly different from academic literatures. Carter (1996) who developed working definition of integrity, summarizing into three abilities such as “ability to discern what is morally right from morally wrong, ability to consistently act on those convictions, and ability to openly articulate that one is acting according to his convictions and these convictions are the result of moral reflection and evaluation.” The other study recommended the need to employ qualitative study to determine specific differences of perception about academic dishonesty (Boehm, Justice, and Weeks, 2009).

Regarding the previous studies above, the position of this study is to enrich context of academic integrity through confronting conceptual model of academic integrity, with perceived reality by using systems approach. The purposes of this study are to analyze academic integrity in the secondary education and to make recommendation to policy makers for enhancing academic integrity.

RESEARCH METHOD

This study employed Soft Systems Methodology or SSM (Checkland and Scholes, 1990) by implementing the seventh cycle stages: (1) problem situation considered problematic; (2) problem situation expressed; (3) root definition of relevant purposeful activity; (4) conceptual models of the named in the root definitions; (5) comparison of models and real world; (6) changes systematically desirable, culturally feasible; and (7) action to improve the situation (shown in **Figure 1**). SSM as described by Checkland and Poulter (2006) is an action oriented process of inquiry into problematical situations in the everyday world; users learn their way from finding out about the situation to defining and taking action to improve it.

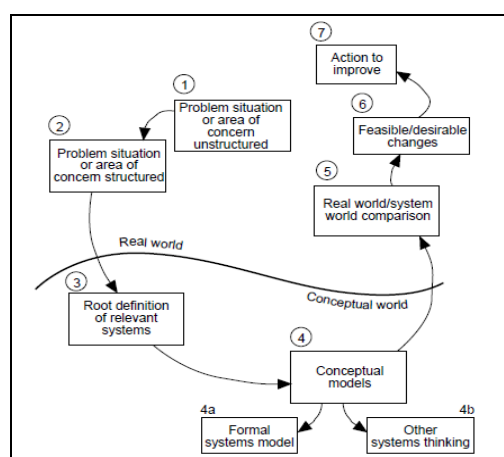


Figure 1. Seven stages of SSM

Study of literature has been conducted towards documents related to regulation and policy of IIUN (Integrity Index of National Exam), and papers related to academic integrity. To enrich data, a series interview were undertaken from various informants who have expertise in educational evaluation and integrity concept, from various academic backgrounds and professions. They are researchers, teachers, lecturers, practitioner, and school heads that have received integrity school award.

CASE STUDY

National Exam (UN) consisting of paper based test and computer based test that implementing national policy of the Constitution number 20 year of 2003 about National Education System. The purpose of UN is to measure national achievement of graduate competency on certain subjects referring to graduate competence standard (Constitution on National Education System article 7 and 58, and Government Regulation (PP) 19/2005 jo PP 32/2013). Previously, UN program was only employing paper based test, but since 2015, MEC has employed computer based test (UNBK) for secondary schools (senior, junior, vocational, and Islamic high school).

According to Director of the CEA, there are some benefits employing UNBK nationally such as “minimizing human and technical errors in term of preparation and implementation, facilitating process on collecting and assessment, accelerating announcement of national exam result, and promoting effective, efficient, and transparent program.” On the other hand, the result of UN is utilized as one of considerations for mapping of program quality and or education unit, selecting further level of education, and developing and awarding assistance to education unit in order to enhance education quality (Government Regulation No. 13/2015).

The reason behind of the MEC policy concerning UN instrument, is to stop cheating in the implementation. The analysis of cheating is measured through the structure of the UN's answer whether "pattern or disorder and systematic or unsystematic." Based on its structure of UN's answer, it can be identified the student work or collaboration.

FINDING AND DISCUSSION

The Stream of Cultural Enquiry and the Stream of Logic-Based Enquiry

The Stream of Cultural Enquiry consists of stage 1 and 2 of SSM (Checkland and Scholes, 1990). In these stages, there are social and political analysis to capture, informally, the main entities, structure and viewpoints in the situation, the processes going on, the current recognized issues and any potential ones (Checkland and Poulter, 2006). The result of these stages is expressed in rich picture where all relevant stakeholders are identified and related concerns are investigated (shown in **Figure 2**).

The Stream of Logic-Based Enquiry: Root Definition and Conceptual Model consists of stage 3 and 4 of SSM (Checkland and Scholes, 1990). At these stages, the relevant systems are selected, named, modeled and compared with perceptions of the real-world situation (Checkland and Scholes, 1990). As part of the process of modelling of the system, and in order to articulate what is the scope and component of it, CATWOE analysis is made firstly. The following table represents a description of CATWOE for the case in question (shown in **Table 1**).

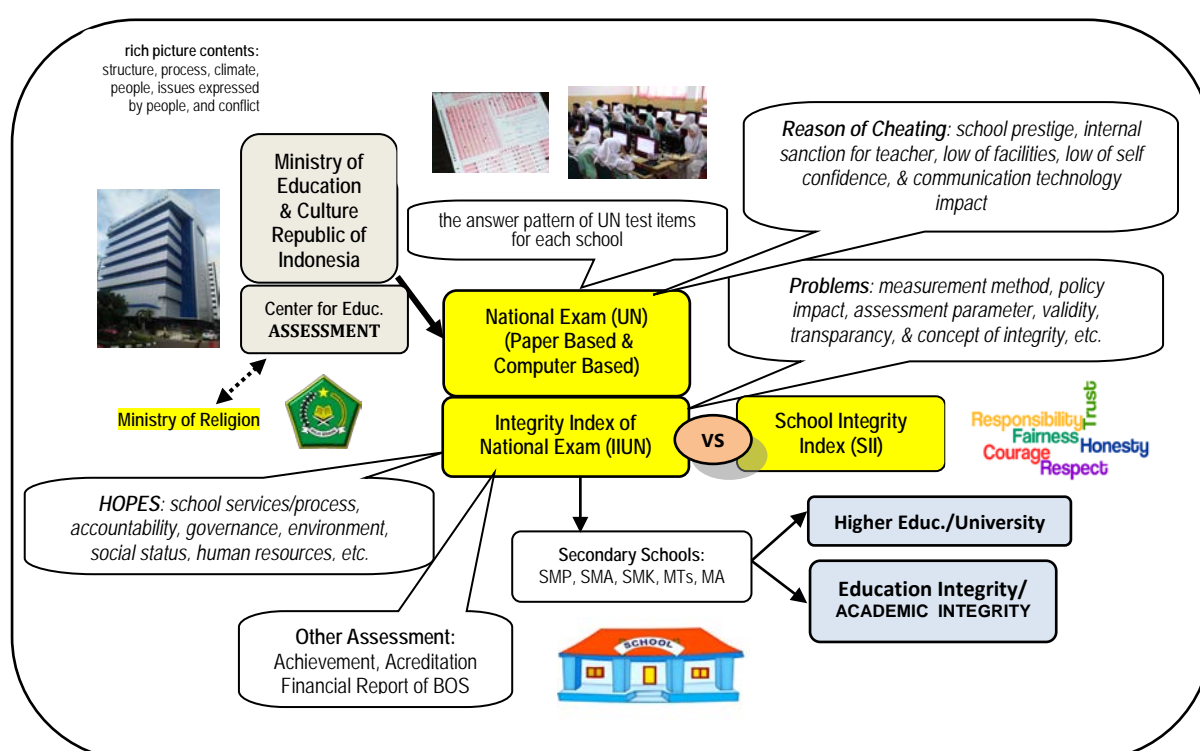


Figure 2. Rich Picture of Integrity Index of National Exam (IIUN)

Table 1. CATWOE Analysis

CATWOE	In the context of analyzing academic integrity
Customer	Ministry of Education & Culture, students, parents, teachers, principals, university
Actor	Director of the Center for Educational Assessment (CEA) and researcher
Transformation	Incompatible instrument transforms to representatively compatible instrument to measure academic integrity for generating equality and opportunity
Weltanschauung (world view)	Understanding and implementing the comprehensive concept of integrity are necessary for enhancing academic integrity
Owner	Center for Educational Assessment as technical institution
Environmental constraint	Political will and organization mind-set

Utilizing the above elements, a Root Definition (RD) has been constructed by utilizing Checkland and Poulter's PQR formula. The root definition expresses the main purpose of the activity system. The main element of RD is its transformation process in which a defined input is transformed into a defined output. Root definition for this case is a program which is managed by the Center for Educational Assessment (P), through developing concept and instrument of academic integrity (Q), in order to enhance academic integrity in secondary education (R).

Stage four is constructing conceptual model (shown in **Figure 3**) comprising a representation of the minimum activities necessary to carry out the needed transformation within the stated worldview and identified at the CATWOE. To complete the analysis of the problem situation, it takes verification whether conceptual model is successful or unsuccessful, it utilized three different account namely efficacy, efficiency, and effectiveness (Checkland and Scholes, 1990).

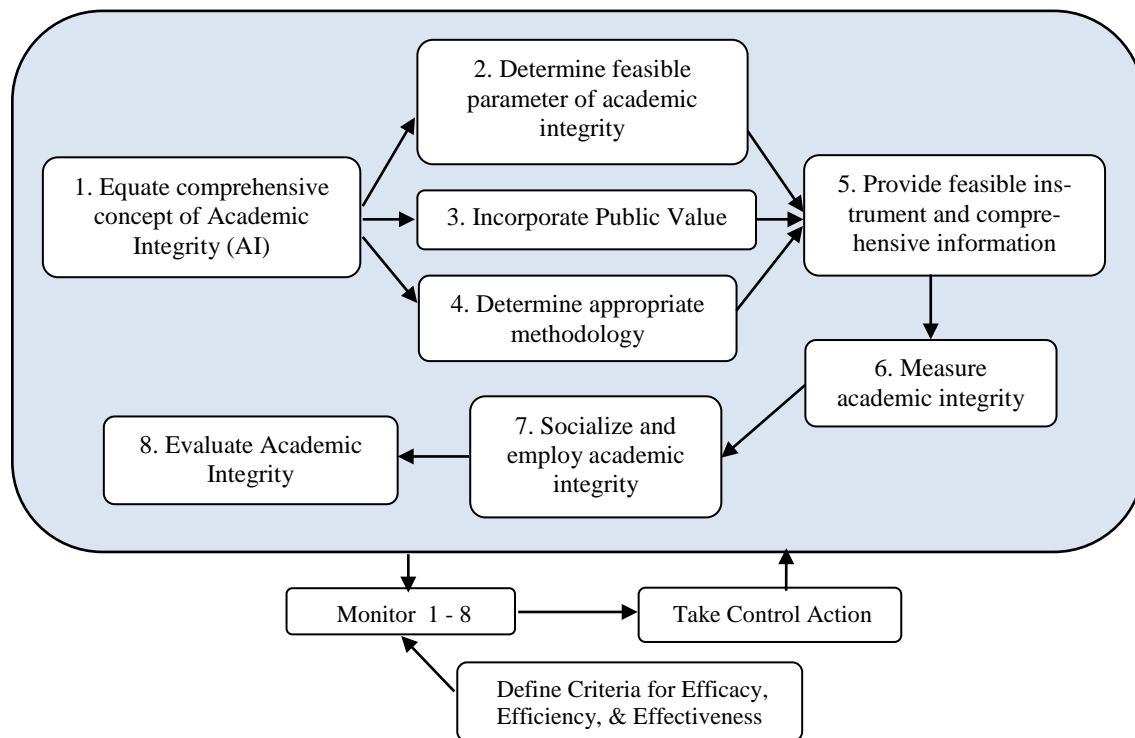


Figure 3. Conceptual Model of the system to construct academic integrity in secondary education

Comparing Model with Perceived Reality

At stage 5 is doing comparison between the real world, where the area of concern exists, and the systems world, where the root definitions and conceptual models have been built (shown in **Table 3**).

Table 3. Comparing the activities in systems world model with the conceptual activities in the real world

No	Activity	Does it Exist?	Description
1	Equate comprehensive concept of academic integrity (AI)	Partially	Using partial concept and purpose
2	Determine feasible parameter of academic integrity	Partially	Using limited parameters
3	Incorporate public value	Partially	Focus on certain areas
4	Determine appropriate methodology	Partially	Focus to use quantitative approach
5	Provide feasible instrument and comprehensive information	Partially	Merely use national exam data

Table 3. Comparing the activities in systems world model with the conceptual activities in the real world

No	Activity	Does it Exist?	Comments
6	Measure academic integrity	Partially	Answer pattern of national exam, and using statistical algorithms model
7	Socialize and employ academic integrity	Partially	Together with UN announcement, & granting integrity award for selected schools
8	Evaluate academic integrity	Partially	Partially evaluated

Pertaining activity to equate comprehensive concept of academic integrity, empirically stated that integrity index which based on one variable (answer pattern) of national exam is not yet fully reflected the integrity concept. As stated by Hadiana (February 2017) that “to measure integrity requires instrument that enable to measure integrity for student, teacher, organization culture, and school management. In short, it requires comprehensive concept of integrity incorporated in its instrument.” In understanding integrity concept, it can not be addressed only to some elements or stakeholders. That is supported by International Center for Academic Integrity, that integrity encompasses a number of values and ideals that should be upheld by all educational stakeholders (http://www.academicintegrity.org/fundamental_values_project/index.php).

In determining feasible parameter of academic integrity, a teacher of sociology at senior high school (SMA) in Pasuruan East Java (Bakhri, February 2017) stated that “the ideal integrity parameter is based on the objective condition of each school. Government should rethink to generalize integrity parameter in which the objective condition of each school is different. Measuring honesty could not depend on cognitive value or knowledge only. Honesty factually related to the aspect of student attitude in accomplishing the test items.” That statement can be understood that school with particular condition and culture will also have particular achievement. This is what Jennifer L. Kisamore et al (2007) stated on influence of integrity culture to intentions to cheat.

Their statements on concept and parameter of integrity have been justified by Barnard, Schurink, and Beer (2008) that “integrity is conceptualized as a multifaceted and dynamic construct based on a moral foundation and inner drive that managed by cognitive and affective processes manifesting various integrity-related behaviors.” Furthermore, they have formulated a conceptual framework that integrity incorporates a number of competencies i.e. self-motivation and drive, moral courage and assertiveness, honesty, consistency, commitment, diligence, self-discipline, responsibility, trustworthiness, and fairness.

Incorporating public value to enhance academic integrity that will generate significant output is a necessity. This activity responds to the macro and meso levels. In macro level, it's responding to public involvement in empirical data and research based policy management, and developing coordination and collaboration across sectors at national level (MEC Strategic Framework 2015 – 2019). In meso level, there is a requirement “to develop honesty indicator portraying the whole school ecosystem consisting of student, teacher, and education unit” (Hadiana, February 2017). The others, “for those allowing to determine honesty of students are their schools and teachers accompanying them during three years of the learning process, not in accomplishing national exam with multiple choice items” (Yustina, February 2017).

Conceptually, as Kelly et al. (2002) described that “public value is a contribution that created by the public sector in social, economic, environmental welfare sphere for community.” Generally, it can be defined as what the public demand related to spending of money and freedom that will be attained. As an initiator of public value theory, Moore (1995) stated that public value provides “a framework that helps us connect what we believe is valuable ... requires public resources, with improved ways of understanding what our public value and how we connect to them.”

Amidst the stance of pros and cons in responding integrity index of national exam relating to assessment of the integrity parameter and the impact that might be emerged, it requires a robust understanding of public value concept. This is pivotal concept for the CEA as a public sector in delivering school integrity index for heterogeneous schools in term of facility, capacity, management, goal, achievement, constraint, and socio culture. In short, in contributing to the public demand, CEA and MEC require strong mandate supported by the consistent and enthusiast support. This is supported by Moore and Khagram (2004) that “any successful organization must ensure that there is an alignment across its (public) value proposition, organizational capabilities, and sources of support and legitimacy is one that is likely to hold for profit making businesses as much as governmental agencies and non-profit organizations.”

Determining appropriate methodology to incorporate various data and information is strongly encouraged. The previous data used in IIUN was dominated by quantitative data sourcing from the UN results. As stated by Yustina (February 2017) “computer based national exam (UNBK) can be an awesome instrument to develop school integrity. However, measuring integrity index through analyzing the answer pattern of national exam could not generate benefits at all. It requires school, teacher, and student integrity.” To respond it, it requires to analyze various data that integrate quantitative and qualitative data through a transformative process (Driscoll, L. D., Salib, P., Rupert, D. J., 2007). Then to measure it, it can utilize “mixed method research which provides greater depth and breadth of information which is not possible utilizing singular approach” (Almalki, S. 2016).

The step of measuring academic integrity is definitely complicated. The current measurement is merely based on the answer pattern of national exam. That is the easiest way to collect, score, generate data, announce the result, and award the school selected. However, how to meet the normative criteria as stated by Hills and Sullivan (2006) that the method of measurement should be related to some items whether appropriate, holistic, democratic, trustworthy, and generating public value? The fundamental differences between the MEC process that has been conducted and the conceptual model at this stage relate to the constraints of time, budget, scope, resource, and accountability.

To provide reliable instrument and comprehensive information, UNBK can be acknowledged as reliable instrument in promoting student honesty in the form of test accomplishment. To sharpen its function, “it is very necessary to provide computer based test for various tests and subjects” (Yustina, February 2017). However, this instrument has disadvantage side of “how to assess the attitude i.e. good intention and good process” (Safari, educational assessment researcher, February 2017). Both statements are similarly confirmed with a survey by Watson and Watson (2011) in Michael, T. B., and Williams. M. A. (2013) reporting that students admitted to higher rates of cheating in face-to-face course in online classes.

To socialize academic integrity, MEC announces the UN result which is equipped by IIUN report. Besides that, MEC has selected secondary schools in all Indonesia's provinces which have consistency in school integrity performance during the last five years. The total of 503 schools have been selected to grant Integrity School Award from president. The question is how to meet the criteria of qualities, services, outcomes, and trust related to public value implementation by organization (Kelly, G., Muers, S., and Mulgan, G. 2002).

The method of determining school integrity that focuses only on the cognitive aspects in the examination, it will always gain continuous opposition from stakeholders who demand public values in term of equality, accountability, and legitimacy. In the long term this has an impact on the difficulty of obtaining outcomes and trust. To meet outcomes and trust, it requires to employ academic integrity through employing many aspects, approaches, and stakeholders at all levels. This was what an expert in educational socio-assessment (Witjaksono, March 2017) stated that “at school which has integrity, all activities such as curriculum, pedagogy, and assessment, are undertaken at inside and outside of school environment, includes UNBK which is represented through IIUN, will be undertaken based on school culture which is enacted referring to school of ethics.”

In the context of stakeholder engagement, there has been a fact that “many principals want to show their quasi-achievements to the upper officer of education which called *Dinas Pendidikan*, then *Dinas Pendidikan* also wants to show its achievements to the head district or province which called *Bupati* or Governor” (Yustina, Feb. 2017). The other stated that it “requires the change of mind-set for students, teachers, and parents” (Suryadi, National Education Standards Board, February. 2017).

In implementing evaluation on academic integrity there are interconnected concepts and intercepted practices between public value and the program itself that ideally uneasy to employ. However, conceptually, it should consider to what Grimsley and Meehan (2007) stated “it requires to focus on the concept of public value taken to include dimensions of outcomes, services, satisfaction, and trust”. Practically, Franz, et. al. (2014) concluded that the “process should not be black and white but reflect the current and potential value of a program as well as program changes and improvement needed.”

To meet those demands, MEC as the holder of public authority in the education sector, often only prioritizes pragmatic approach with limited and short-term outputs. As the institution of education policy authority, MEC urges to move on from a pragmatic approach to a comprehensive and integrative approach which has more ability to fulfill the public values.

Recommendation for Actions

Stage 6 and 7 of the SSM are giving for change and actions to improve the problem situation. Concerning to conceptual model (Figure 3), the author has recommendations of way to improve implementation conceptual model of the system to construct academic integrity in secondary education (shown in **Table 4**).

Table 4: Recommendation for Actions

No	Activities	Description
1	Equate comprehensive concept of academic integrity (AI)	Encourage to equate comprehensive concept of AI through the organized discussion across discipline/profession
2	Determine feasible parameter of academic integrity	Encourage to determine feasible parameter of AI through the organized discussion across discipline/profession
3	Incorporate public value	Encourage collaboration work across functional area
4	Determine appropriate methodology	Encourage to use mix method
5	Provide feasible instrument and comprehensive information	Encourage to collect various data and information
6	Measure academic integrity	Encourage collaboration work across functional areas
7	Socialize and employ academic integrity	Encourage to use various media and strategies
8	Evaluate academic integrity	Encourage to optimize program evaluation annually

CONCLUSIONS

This paper argues that the application of Soft Systems Methodology (SSM) can explore academic integrity practices through comparing conceptual model with actual situation in order to generated debate with the stakeholders. Study result shows that employing Integrity Index of National Exam (IIN) in secondary education by measuring the structure of answer on national exam is quite effective to enhance academic integrity for particular scope. However, to enhance academic integrity in secondary education that conceptually feasible, legitimate, and politically sustainable, it is necessary to accomodate expectations of the stakeholders through employing holistic assessment relates to concept and procedure, and objective assessment relates to school characteristics.

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PROMOTING STUDENTS METALANGUAGE AWARENESS THROUGH GENRE PEDAGOGY

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ABSTRACT

This paper draws on a study focusing on the use of genre pedagogy to prepare students for writing research proposals. This study aims to examine whether genre pedagogy can promote students' metalanguage awareness which will finally lead them to be able to write research proposal. The study was conducted in one university in Banten, involving fifteen students taking Research on ELT course unit in their third year. The data were collected through classroom observation and documents analysis. The classroom observation result shows that genre pedagogy can promote students' metalanguage awareness through the use of linguistic features and the teaching of various texts. Further, the result of the analysis of students' research proposal shows that the students have a good control of the schematic structure and linguistic feature. Based on those two findings, it can be concluded that the process of teaching by the exposure of various related text examples can promote students metalanguage which can lead them to write good research proposals.

INTRODUCTION

As one of academic texts, a research proposal, as Swales (1990) posits is the 'occluded' genre; that is, genre which is difficult for students to write, but plays an important part in the students' lives. Thus, the study on how to compose a good research proposal is an urgency. However, the study on the teaching of writing a research proposal in Indonesian context is very limited. Most of studies are conducted to find out the students' problems in writing research proposal (Widiastuti, 2010, Yusuf, 2013). The others examine the factors affecting the students' problem in writing research proposal (Dwiandini, et.al.). Therefore, the present study aims at investigating how genre pedagogy can help the students write research proposal as well as promote students metalanguage.

One of the basic principles of genre pedagogy is that learning to write involves learning to use language (Hyland, 2007). As genre teaching will focus on how texts are grammatically patterned combined by the choice of vocabularies that can create meaning, learning to write will be also intended to learn to use language. In the learning process, teacher and students explicitly discuss on how to use language. Therefore, genre pedagogy in some points might help students improve their metalanguage awareness.

There are three main theories used in the study: SFL genre pedagogy, metalanguage, and academic writing. For the last decade, the teaching of second or foreign language writing focuses on genre and context of writing. The central belief in this approach is that the students do not only write, but they write to achieve some purposes as an attempt to communicate with readers (Hyland, 2003). Rooted from the work of Systemic Functional Linguistics (SFL) which is developed by Halliday (1994), this genre pedagogy is motivated by language and literacy education (Feez, 2001).

Metalanguage in Cambridge Advanced Learner's Dictionary & Thesaurus is defined as "a specialized form of language or set of symbols used when discussing or describing the structure of a language". Metalanguage used in the present study is the technical term used to describe and analyze language (Crystal, 1985, 1997). Despite the criticism that as the use of metalanguage in the language teaching will make the students able to talk about language rather than to communicate (Halliwel, 1993), the advantages of metalanguage in language teaching outweighs its disadvantages. Hu (2010) posits several advantages of using metalanguage. First, the use of metalanguage can help students develop their metalinguistic awareness. Second, danger might arise when teacher and learners try to avoid technical terms. Finally, metalanguage can be used by teachers to help their learners use their grammatical rule that they have learned with new structures. The advantages of using metalanguage in this study is believed to finally lead the students be able to write research proposal. Therefore, it is an urgency to investigate how genre pedagogy can promote students metalanguage awareness. Finally, the theory of academic writing used in the study is that of Swales, 1990; Swales and Feak, 2004; Paltridge and Starfield, 2007; Emilia, 2008

THE STUDY

The study was conducted in one university in Banten, Indonesia, involving fifteen students taking Research on ELT course unit in their third year. The study used a case study design as it tried to understand the case in depth and natural setting (Punch, 2009). Further, a case study design is suitable with this study since as one of qualitative studies, the aim of this design as suggested by Punch (2009) is "... to understand the case in depth, and in its natural setting, recognizing its complexity and its context..."(p.119). The researcher acted as the teacher in implementing genre pedagogy to the teaching of writing a research proposal as one of academic texts.

The data were collected through classroom observation and relevant documents analysis. Students' research proposal documents were analyzed in terms of elements and linguistic features by using theories of English academic writing (Swales, 1990; Swales and Feak, 2004; Paltridge and Starfield, 2007; Emilia, 2008).

FINDINGS

1. Students' Metalanguage Found in the Implementation of Genre Pedagogy to the Teaching of Writing Research Proposal

The results of observation shows that in every teaching cycle, the students produce metalanguage. Following is the students' metalanguage found in every teaching parts. There are three teaching parts:

1.1 The teaching of 'Introduction' part

Below are the students' excerptst containing metalanguage found in the teaching of 'Introduction' part:

- (1) *I am not really sure about the use of past tense in the background part.* (Student C)
- (2) *Bu, can we use pronoun I in background part?* (Student G)

Example (1) showed that student C doubted about the using of past tense in background part. Student G in example (2) also showed her uncertainty about the using of pronoun I. These are examples of how they unconsciously discussed about grammar which means that they talk about metalanguage which leads to their language awareness.

1.2. The teaching of 'Literature Review' part

Below are the excerpts of students metalanguage found in the teaching of 'Literature Review' part.

- (3) *Bu, how to paraphrase? Do we change all?* (Student B)
- (4) *I think D uses so many words "state" in his literature review. She can use other words like claim, posit, etc.* (Student E)

Just as the teaching of previous part, students metalanguage were also found along the discussion of this teaching part. Example (4) showed how student B questioned the way to paraphrase. Thus, she wanted to know the way to construct a new sentence to paraphrase which meant on the grammar. Example (5) showed his criticism about the use of certain words or diction.

1.3 The teaching of "Research Methodology" Part

Following are the excerpts of students metalanguage in the teaching of 'Research Methodology' part:

- (5) *I think D made mistake. She write research design in past tense. She should use future tense because it is proposal.* (Student H)
- (6) *'Observation conducted toget the data'. I think C should use passive sentence.* (student A)

Example (6) and (7) shows the students awareness on the use of correct grammar. As students wrote research proposal, they should use future tense and student H criticizes her friend for using past tense. Student A in example (7) also shows how should a sence was constructed correctly by using passive voive instead of active sentence.

2. The Analysis of Students' Research proposal Schematic Sructure and Linguistic Feature

This part presents the analysis of schematic structure and linguistic feature of students' research proposal.

2.1 The Analysis of Schematic Structure of Students Research Proposals

Document analysis shows that most of the students' research proposal were written based on the guidelines given during the process of teaching research proposal usng genre pedagogy. The following tables show the schematic structure of research proposals produced by the students at the end of the teaching of research proposal using genre pedagogy.

Table 1 Analysis of Schematic Structure of Introduction

Elements		Proposal 1	Proposal 2	Proposal 3	Proposal 4	Proposal 6	Proposal 7	Proposal 8
Background	Establishing research territory	√	√	√	√	√	√	√
	Establishing niche/ gap	√	-	√	√	-	√	√
	Establishing purpose	√	√	√	√	√	√	√
Research Question		√	√	√	√	√	√	√
Research Objective		√	√	√	√	√	√	√
Research Significances		-	√	√	√	√	√	√

Table 2 Analysis of Schematic Structure of Literature Review

Elements	Proposal 1	Proposal 2	Proposal 4	Proposal 5	Proposal 6	Proposal 7	Proposal 8
Definition	√	√	√	√	√	√	√
Concepts	√	-	√	√	-	√	√
Notions	-	√	-	-	√	√	√
Models	√	√	√	√	√	√	√
Relation between variables	√	√	√	-	√	√	√
Stages	√	√	-	√	√	√	√
Related studies	√	√	√	√	√	√	√

Table 3 Analysis of Schematic Structure of Research Methodology

Elements	Proposal 1	Proposal 2	Proposal 3	Proposal 4	Proposal 5	Proposal 6	Proposal 7	Proposal 8
Research design	√	√	√	√	√	√	√	√
Research site and participants	√	√	√	√	√	√	√	√
Data collecting technique	√	√	√	√	√	√	√	√
Data analysis technique	-	√	√	√	√	√	√	√

Table 1, 2, and 3 are the analysis of every part of the students' research proposals. The tables show that most of the students' research proposal have fulfilled all elements of research proposal (Swales, 1990; Swales and Feak, 2004; Paltridge and Starfield, 2007; Emilia, 2008). Thus, the students have a good control on the schematic structure of this text. Only few students miss few elements, such as move 2 in research background.

2.2 Analysis of Linguistic Feature of Students' Research Proposals

2.2.1 Examples of Linguistic Feature Analysis in Introduction Part

- (1) Numerous studies have investigated the extensive reading in tertiary level and get positive result. However, less study has been conducted in the secondary level, so the researcher will try this method at school environment. (proposal 1)
- (2) Among four skills, writing is one of important skill that should master by the students. In language learning (proposal 7)

The underlined word in example (1) shows the linguistic feature of move 2 in research proposal background: establishing niche/gap using the word 'however'. This word is used to show the gap or contrast the previous research (Swales and Feak, 2004). Example (2) shows the using of word 'is' as the sign of present tense for move 1 in research background to establish territory (Swales and Feak, 2004).

2.2.2 Examples of Linguistic Feature Analysis in Literature Review Part

- (3) *Brown (2001) states that speaking is an interactive process of constructing meaning that involves producing and receiving and processing information* . (proposal 2)
- (4) *According to Thornbury (2002:13) "Without grammar very little can be conveyed, without vocabulary nothing can be conveyed"*. (proposal 3)

Example (3) shows that the student is able to use quotation. She uses present-reference to state generally accepted knowledge of the field (Feak and Swales, 2009). Whereas example (4) shows how the student uses direct quotation.

2.2.3 Examples of Linguistic Feature Analysis in Research methodology Part

- (5) *Corresponding to the research question and purpose, this study use an experimental study for reason: the researcher try to predict as "Experimental Research - An attempt by the researcher to maintain control over all factors that may affect the result of an experiment. In doing this, the researcher attempts to determine or predict what may occur" (Key, 1997).* (proposal 1)
- (6) *It is related with the aim of the reseacrher to conduct pre-test and post-test in this research, because the researcher wants to know the students' reading comprehension before and after the treatment* (proposal8)

Example (5) and (7) show that the students have good control of linguistic feature in writing research methodology part. They do not only describe, but also justify by giving arguments. It is in line with the linguistic feature of research methodology part as suggested by Swales and Feak (2004) and Emilia (2008) that this part provides an explanation why the research method is chosen.

CONCLUSIONS

The findings of the present study are students metalanguage is promoted during the process of teaching research proposal using genre pedagogy and the studens have good control on the schematic structure and linguistic feature of research proposal. First, students metalanguage are found in every stage of teaching research proposal, i.e. the teaching of introduction part, literature review part, and reserach methodology part. Second, based on the document analysis, it is found that the students have good control of schematic structure and linguistic feature of research proposal. Most of them are able to produce proposals fulfilling the major elements of this academic writing. Further, most of the proposals perform good linguistic feature of research proposal. Based on those two findings, it can be concluded that the process of teaching by the exposure of various related text examples can promote students metalanguage which can lead them to write good research proposals.

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PROPOSED HYBRID SYNCHRONOUS MODEL OF TEACHING AND LEARNING IN THE PRACTICUM PROGRAMS FOR HEALTH AND EDUCATION PROFESSIONS USING MOODLE LEARNING MANAGEMENT SYSTEM PLATFORM

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ABSTRACT

This paper presents a proposed model of delivering the practicum programs applicable in health and education using the Moodle Learning Management System Platform bundled with onsite practical sessions. The proposed model is based on the autoethnographic data of the proponents anchored on the experiences of being a clinical preceptor for early childhood school-based physical therapy and practicum supervisor for the internship education in special education. It presents how supervised and autonomous practice can be distributed in the practicum program and how the Moodle Learning Management System Platform can supplement in the delivery of the program itself. Rubrics integrated in the hybrid sessions of the supervised and autonomous practice are also explained.

PROSPECTIVE MATHEMATICS TEACHER'S VIEWS ON MATERIAL DEVELOPMENT

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This study was conducted with the aim of exploring the quality of teaching materials developed by prospective mathematics teachers and their viewpoints on developing teaching materials. The study was carried out with 170 prospective teachers from 4 classes in the Fall Semester of 2014-2015 Academic Year. During the first 8 weeks of the 14-week-long study, the theoretical parts and teaching technologies of the course were introduced. In the next 6 weeks, the prospective teachers were expected to present the materials they developed in a classroom environment. The data in this study were collected through the materials prepared by the prospective teachers, classroom observations, and survey questions. The data gained went under content and descriptive analysis. Findings indicate that prospective teachers can use the teaching technologies on a satisfactory level and prepare materials in accordance with the attainments. It also became evident that they believed they gained the necessary knowledge, skills, and attitudes in this course to develop and use teaching materials, and they would like to take advantage of these knowledge and skills in their teaching profession. In accordance with the findings, it is concluded that prospective teachers have positive views and attitudes to general teaching technologies and material development.

PROSPECTIVE TEACHERS' METAPHORS ON SCIENTIFIC LITERACY AND THE NATURE OF SCIENCE

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ABSTRACT

The aim of this study is to identify the metaphorical perceptions of the prospective teacher regarding the nature of science, scientific knowledge, scientists, scientific literacy and science. In the research, the case study was used as a one of the qualitative research methods. The participants of the research are 219 prospective teachers who are studying in science education and elementary mathematics teacher education department of Afyon Kocatepe University. A questionnaire prepared by the researcher and consisting of five open ended questions of the form "Science like because" was used as data collection tool. The analysis of the data was done by content analysis. Analysis of the data while the concept of science is mostly likened to nature, scientific knowledge is likened to the universe. Prospective teachers likened scientists most to the "sun". "Teacher" metaphor was most established in metaphor related to scientific literacy. While producing the most "book" metaphor for scientific literacy, the nature of science is most likened to the "universe". The metaphors created and the answers about why they are created show that the concepts of scientific literacy and science are not perceived and understood enough by prospective teachers.

INTRODUCTION

It is very important to give science education to children who will be adults in the future when technology and science are going very fast. Most of the countries' educational systems have important priorities such as educating especially creative and critical thinking skills, problem-solving and science-literate individuals. According to Köseoğlu et. (2008), it is emphasized that "all citizens should be literate in science" in the curriculum prepared in Turkey and especially in 2004 and afterwards. Lederman (2004) states that perceptions of nature of science are the most important dimensions of science literacy. For this reason, in order for students to be able to make conscious personal and social decisions by using scientific knowledge, it is first necessary to understand how scientific information is structured and, accordingly, to deeply understand the source and boundaries of this information. According to Wong (2002), the fact that the nature of science is taught to students in a good way will also help them understand the vital importance of knowledge, which leads to the change of societies and the understanding of science and technology will enable the production of new information and more advanced technologies. It is very important to define and perceive science within scientific concepts and literary literacy and its important dimension. Science is the act of searching for truth. Science is the combination of experiment-based methods that select the universe or a part of events as subjects, and regular information that try to draw conclusions from reality (TDK Glossary of Terms, 2017). Nevertheless, when considered as a structure and content, science is defined as "a set of proven systematic information that is valid". Karasar (2015), who does not try to reach agreement on an unchangeable definition of science, stated that it could be enough to define it as systematic information which is accepted as scientific knowledge. In the absence of a full definition of scientific literacy, in many literatures, scientific literacy means that one can ask questions about the situation that one is worried about as a result of his daily experiences, which means that he can answer or make decisions about these situations (National Research Council (NRC), 1996; Bell, 2008). One of the most important dimensions of scientific literacy is that of describing the nature of science, Lederman and Zeidler (1987) suggested that the nature of science and the values and beliefs involved in the developmental process of scientific knowledge and scientific knowledge are implied. In the educational literature, science refers to epistemology and sociology of natural science, or beliefs and values inherent in scientific knowledge and its development (Lederman 1992, Ryan and Aikenhead 1992). Scientific literacy and understanding of the nature of science is also important for the understanding of scientific knowledge and scientists. One of the elements of science that is the process of thinking about the nature of knowledge, preventing the accumulation of existing knowledge and producing new knowledge is scientific knowledge (Tan ve Temiz, 2003). Scientific knowledge arises from the collection, organization and interpretation of facts. According to Başdağ (2006), scientific information is validated information and includes facts, concepts, principles, natural laws and theories. According to Ortaş (2004), a scientist is a person who thinks universally, is objective, has a high moral responsibility, is enlightened, has a high level of anticipation, is responsible for all human beings and nature, is open to criticism and has the courage to tell the truth.

Although Lederman's (2007) perception of the nature of science has long been regarded as one of the most important components of scientific literacy, research shows that students do not have a sufficient understanding of this issue. The most important reason of the inadequacy in this issue is thought to be the teachers responsible for education and training. This situation has caused attention to concentrate on the teachers, and their opinions

about the nature of science have been tried to be determined. Reviewing the literature in the world and in Turkey, many studies emphasize that both students and teachers are insufficient in understanding the nature of science (Bell etc. 2000, Lederman, 1992; Sarıbaş ve Köseoğlu, 2006).

In this study, it was aimed to reveal the perceptions of "Science", "Scientific Knowledge", "Scientific Literacy", "Scientific Literacy" and "Nature of Science" by the metaphors of the prospective teachers who are studying in the departments of science and elementary mathematics teacher education.

THE STUDY

In this study descriptive survey model and qualitative method are used. The research is based on a case study aiming to draw conclusions about a particular situation. The participants of the study constitute 219 prospective teachers who attended Afyon Kocatepe University Mathematics and Science Education Teaching and Elementary Mathematics Education Branches in 2016-2017 academic year. The simple random sampling was used. Data was collected through the participants' completion of the prompt "Science is like . . .because". Research is conducted on 219 prospective teachers' metaphors about "Science", "nature of science", "scientific knowledge", "scientists", "scientific literacy" and "science".

To analyze the data, content analysis, basically inductive approach is used. According to Elo and Kyngas (2008), in content analysis, the aim is to build a model to describe the phenomenon in a conceptual form. Both inductive and deductive analysis processes are represented as three main phases: preparation, organizing and reporting. The preparation phase is similar in both approaches. The concepts are derived from the data in inductive content analysis. Besides, according to Saban (2008) data analysis take place through the five stages:

1. Coding/Elimination Stage: All the metaphorical images supplied by the participants are simply named/labeled.
2. Sample Metaphor Compilation Stage: A sample expression for each identified metaphor is selected by going through all the metaphorical images that are identified in the previous stage.
3. Sorting and Categorization Stage: For all the metaphors which are identified in students' answers, the conceptual categories are constructed. This part can be called as inductive content analysis.
4. Establishing the Inter-Rater Reliability Rate: Accordingly, the metaphors are classified by the independent coder and the level of agreement between his individual rating and this researcher was 0.94. (i.e., Reliability = Agreement / Agreement + Disagreement = 96 / 96 + 4 = 0.96). According to Miles & Huberman (1994), if the reliability rate is above the seventy percent, the research can be counted as reliable.

FINDINGS

The categories of the results of the content analysis of the responses given by prospective teachers to science, scientific literacy, the nature of science, scientific inquiries and questions about scientists and the metaphors they produced are given in the following tables.

Prospective teachers produced 145 different metaphors in six categories, namely "elements of nature", "human concepts", "philosophical approaches", "space", "knowledge" and "original answers". While 36 metaphors were included in the most "philosophical approaches" category, 65 metaphors were produced in the "nature elements" category as the number of metaphors. Metaphors and categories that prospective teacher produce about science are given in Table 1.

Tablo 1. Metaphors and categories that prospective teachers make about science concept

Categories	Metaphors
Nature elements	nature (18), tree (7), water (3), living being (2), sky (2), a plant (2), an unexplored island (2), a forest (2), a flowing river (1), a herb (1), natural disasters (1), iron (1), sea (1), an endless nature (1), an eternal forest (1), migratory birds (1), rainbow (1), a plane-tree (1), a rooted-tree (1), marble (1), fruits (1), seed of fruit tree (1), fruit kernel (1), ocean (1), natural environment (1), constantly evolving tree (1), nature (1), seed (1), mound (1), endless sky (1), endless ocean (1), endless rain forest (1), a long way (1), forest (1).
Human concepts	a baby (4), a child (4), a car (2), human (2), buildings (2), human body (2), a machine (2), daily necessities (2), fashion (1), continuously developing devices (1).
Philosophical approaches	art (3), light (2), an empty plate (2), a candle in a dark room (2), a changing pattern (1), bottomless pit (1), dominoes (1), the reality on the earth (1), the meaning of the world (1), the extreme bloody life struggle (1), philosophy (1), to open the light to the future (1), to a comprehensive process (1), Reality is everything is transparent (1), Definite

	knowledge (1), life (1), guide to understand the life (1), the past of life (1), a day in the life (1), treasure (1), human beings develop themselves (1), Human instinct (1), that the whole existence of the human being has become clear (1), wondering (1), case statements(1), bright lamp (1), a travelling car (1), an infinite space (1), an endless well (1), an endless sea(1), existence (1), cases in the every field of life (1), regeneration (1).
Space	Sun(11), universe (10), space (7), Earth (6), cosmos (1), endless universe where we live (1).
Information	technology (7), doing experiments (3), information (2), experiment (2), reading-writing (2), encyclopaedia (1), research and inquiry (1), all of the lessons especially science (1), searching (1), magnifying glass (1), result of experiment(1), science (1), laboratory for observations (1), invention (1), information awaiting our exploration (1), book (1), library (1), laboratory (1), objective knowledge (1), school (1), solving problems (1), systematic knowledge (1), an experiment (1), a book with useful information (1).
Creative answers	light (4), recycle bin (2), constantly evolving dynamic structure (2), I cannot give an example (1), an empty box (1), descendant tree (1), grandfathers (1), blue (1), the clothes are new and the clothes we bought when the better (1), film (1), raw material (1), snowball (1), Holy Quran(1), fun fair (1), babushka doll (1), bukme with lenticular (a special dish in Afyonkarahisar (1), pyramids in Egypt (1), candle (1), music (1), cry (1), game (1), stairs (1), blue (1), problem (1), cell phone (1), telescope (1), the nerves in the body (1), meal (1), cooking (1), a newborn (1), signs at the road (1).

When Table 1 is examined, "nature" (n = 18), which is included in the category of nature elements, is the most created metaphor from the metaphors set by prospective teachers. Secondly, in the "space" category, the sun (n11) was followed.

The first grade students of science teacher also referred to science as "nature" metaphorically. For example, S17 "science is similar to nature because it explains that it gains meaning when it searches". Prospective teacher produced 141 different metaphors in seven categories of "nature concepts", "philosophical approaches", "space", "information and science", "occupation", "emotional elements", "other". There are 35 different metaphors in the "other" category and 35 different categories in the "nature concepts" category. The "nature concepts" as the number of metaphors are ranked first with 68 metaphors. The metaphors created for the concept of nature of science are given in Table 2.

Table 2. Metaphors and categories of prospective teachers about the concept of nature of science

Categories	Metaphors
Nature elements	forest (13), tree (7), nature (6), ecosystem (5), environment (3), nature(3), rainbow (2), sky (2), seasons (2), seed (2), soil (2), flowers(1), natural resources (1), nature (1), apple (1), fruit of a tree (1), plant (1), a big forest (1), clouds in the sky (1), spring (1), processed material (1), our nature (1), view (1), fruit (1), daisy (1), wind (1), water (1), flowing river (1), endless ocean (1), rain forest (1), rain (1), our living space (1).
Philosophical approaches	Human's nature (3), knowledge that arises from the reality (2), unprocessed fashion (2), research journalist (1), light (1), naturalness in the science (1), conscious man (1), science as a way of knowing (1), real life (1), strange thing (1), going in a dark street (1), curiosity (1), kitchen (1), answer for the what question on searching the cases (1), learning way (1), Indian fabric (1), eternal human (1), art (1), a treasure filled with secrets (1), a child asking questions (1), everything that has lost its coherent reality (1), time (1).
Space	cosmos (11), space (5), cosmos (4), Earth (3), planet (2), Moon (1), Sun (1), Solar System (1).
Information – Science Concepts	ham matter (4), book (4), technology (4), computer (3), school (3), education (2), Maths (2), literacy (2), history (2), encyclopaedia (1), astrology (1), bacteria (1), computer (1), science for the study of the full range of knowledge (1), academic research (1), a very hard encyclopaedia (1), experiment (1), computer programme (1), scientific information (1), science (1), cell wall (1), concept mapping (1), navigation (2), phenomenon (1), a planned lesson (1), schema (1), dealing science in detail (1), history (1).
Profession	teacher (7), a detective trying to find the source of science (2), astronaut (1), cook (1), gardener (1), critics (1), a gardener who develops science (1), a little inventor (1), a profession that requires patience (1), writer (1).
Emotional	white (1), feeling (1), second spring (1), resembles a smug (1), curiosity (1), suspicion

Elements	(1).
Others	human (6), big family (3), life (3), natural disasters (2), human mind (2), machine (2), light (2), pyramids (2), life (2), resembles Afyon air that may changes (1), excuse (1), chameleon (1), unprecedented (1), old-age people's work (1), lover of science (1), dealing with science (1), a child since he has set up many hypotheses and worked on it (1), factory (1), movie content (1), things that are constantly changing in our lives (1), past of everything (1), medicine (1), human brain (1), human necessities (1), women in the neighbourhood (1), person questioning everything (1), Rıdvan Elmas (1), umbrella (1), ball (1), country (1), Rubik's Cube (1), smart people (1), father (1), camel in the desert (1), man who dedicates his life to a certain purpose (1).

While the most metaphor "forest" (n=13) was created by prospective teachers, second metaphor was "universe" (n=11).

The first grade students of science teachers also metaphorically say "forest" about the nature of science. For example, S37 " is similar to the natural forest of science because it is very diverse. Prospective teachers are divided into eight categories produced 141 different metaphors, namely "instrument-instrument-instrument", "nature element", "child", "philosophical approach", "occupation", "space", "science and information terms". In the "other" category with 30 different metaphors are in the first rank. The metaphors created for the concept of the scientist are given in Table 3.

Table 3. Metaphors and categories of prospective teachers about the scientist concept

Categories	Metaphors
Devices- Tools	machine (5), computer (2), robots (2), lamp (1), car (1), car headlights (1), magnifying glass (1), rudder (1), book (1), book-notebook (1), generator (1), pencil (1), microscope (1), a never ending clock (1), continuous producing machine (1), cell phone (1), brick (1), lamp (1).
Natural Elements	seed (6), fruit tree (4), bee (3), plane (3), plant (3), flower (2), ant (2), fruit (2), lion (1), herb (1), walnut (1), flower (1), sea (1), Poles (1), rock (1), liquid (1), water (1), fox (1), soil (1), home (1), an ant (1).
Children	a little kid (10), 3-5 year-old child (5), a child (5), a curious child (5), a child who is curious about everything (2), a dreamer child (1), a lost child (1), bicycle riding child (1), a newborn baby (1).
Philosophical Approach	people have a wide imagination (2), a surprise box (2), a hungry wolf (1), a hungry being (1), knowing the root of science (1), an empty pool (1), Mecnun in the desert (1), person saving the world (1), answer in the most difficult crossword (1), actors in a movie (1), life (1), person searching the realities in the life (1), treasure (1), human's patience (1), an island full of books (1), non-functional ads (1), a leader (1), curious man (1), a super hero (1), life (1), a guide man (1), round magic village (1).
Profession	teacher (5), astronaut (4), artist (3), journalist (2), a curious journalist (2), soldier (1), science people (1), a conscious teacher (1), farmer (1), detective (1), critics (1), a good observer (1), explorer (1), a recreational vehicle (1), a man working in the laboratory (1), adventurers (1), green grocer (1), musician (1), artist (1), writer- poet (1).
Space	Sun (10), stars (4), space (2), Earth (1), cosmos (1).
Sciences	library (9), research (4), science (1), brain (1), reading a hypothesis (1), a book reader (1), examination of a small part of the machine (1), crossword (1), studying (1), a hardworking student (1), Maths (1), reading writing (1), technology (1), a new journal (1), objective research (1).
Others	light (3), mother (2), camel in the desert (2), factory (2), smart man (2), a different being (1), following science news (1), someone trying to get information (1), growing (1), the person who finds something and explains it (1), a person who reads a lot of books (1), genius (1), a thinker (1), mice (1), people's skills (1), human being (1), a good student (1), need (1), a great honor for humanity (1), Uncle Hasan in the coffeehouse (1), reading book (1), a curious man (1), a curious student (1), leaders (1), artwork (1), questioning-searching-wondering man (1), water monkey (1), song (1), hands (1), arms (1).

Among the metaphors for prospective teachers for the scientist, "little boy" and "sun" (n = 10) were the most created metaphors.

The first grade students of science teacher also said that metaphorical perception about the scientist is mostly "teacher and a small child". For example, S11 states that "a scientist is similar to teacher because the goal is to teach something". S33 says that "Scientist is like a little child because he is curious about everything, researches and inquires".

Prospective teachers created a total of 137 metaphors in five categories, namely "occupation", "philosophical approach", "nature element", "instrument-tool-instrument", "science and information concepts", "other" related to scientific literacy. The "science and information concepts" category ranks first as both metaphor type (n = 37) and metaphor (n = 77). The metaphors created for the concept of scientific literacy are given in Table 4.

Table 4. Metaphors and categories of prospective teachers about scientific literacy

Categories	Metaphors
Profession	teacher (12), carpenter (3), cook (2), educator (2), journalist (2), researcher (1), philosopher (1), scriptwriter (1), traveller (1), carpenter (1), profession (1), engineer (1), conductor (1), writer (1), director (1), teacher (1).
Philosophical Approach	a hungry man (4), light (4), interpreting the information correctly (2), Mecnun in the desert (2), being curious (2), enlightenment (1), first steps of a baby (1), a leaking pool (1), proved truthness (1), critical thinking individual (1), understanding a different language (1), past and future (1), living life (1), art (1), passion (1), a pen (1), exploring new things (1), an essential necessity (1), a hard match (1), infinity (1).
Natural Elements	tree (2), sea (2), leaves in the wind (2), sunflower (1), changing weather (1), nature (1), Earth (1), sea (1), turtle (1), coal (1), cabbage (1), soil (1), flower (1), cosmos (1), fruit (1), seed(1)
Tools- Devices	computer (6), encyclopedia (3), closed box (2), machine (2), puzzle (2), sewing machine (1), newspaper (1), glass (1), pencil (1), keyboard (1), pencil case (1), compass (1), clock (1), generators (1).
Scientific Concepts	book (25), library (6), equation (4), objective research (4), Maths (3), journal-newspaper (2), real information (2), reviewing articles (2), knowledge steps (1), reading science (1), scientific result (1), scientific ways(1), experiment (1), dynamic process (1), doing experiments (1), experimental data (1), reading journals(1), knowledge in the books (1), thought and skills (1), education (1), science literate individuals (1), reading formulas (1), a comprehensive book (1), light (1), book with lots of information in it (1), human brain (1), concepts (1), unexplored atom (1), knowing how to read (1), one who reads (1), a process (1), technology (1), using technological devices (1), theoretic knowledge (1), speaking foreign language (1), discovering new things (1), love (1), vitamin (1), learning information (1).
Others	primary school child (4), person with certain knowledge (3), child (3), conscious book reader (2), raising a reading generation (2), student (2), family (2), mother (1), addiction (1), baby (1), a vertical bar (1), diamond (1), truthiness (1), the process of defining everything that exists in the world (1), developed university (1), travelling (1), food (1), hobbies of humans (1), a skilful person (1), reading books (1), pure mathematics (1), the lottery (1), scenario (1), cigarette (1), doing sports (1), like an ant (1), working constantly (1), unicorn (1), understanding foreign language (1), new student (1), love (1), feeding (1).

Prospective teachers constituted the most "book" (n = 25) and teacher (n = 12) metaphor related to scientific literacy.

Most of the second grade students of science teacher states "book" metaphorically in related to scientific literacy. For example, S16 says that "Scientific literacy kit is similar, because there are many topics in books that we do not know much about. It is known as long as you read it in scientific literacy." prospective teachers produced 134 different metaphors in six categories, namely "elements of nature", "philosophical approach", "concepts of science and information", "mine", "food" and "other" related to scientific knowledge. The metaphors constructed for the concept of scientific knowledge are given in Table 5. Most metaphor types (n = 36) and number of metaphors (n = 55) are in the categories of science and nature.

Table 5. Metaphors and categories of prospective teachers about the concept of scientific knowledge

Categories	Metaphors
Natural Elements	cosmos (3), tree (2), sea (2), ocean (2), soil (2), a flower (1), leaves (1), fire (1), moonlight (1), spider (1), flower (1), sea (1), nature (1), Earth (1), sky (1), stars in the sky (1), Sun (1), turtle (1), stone (1), seasons (1), river (1), seed (1), stars (1), clover (1).
Philosophical Approach	infinity (3), unchanging lines (2), educator (2), reality (2), constitutional rules (1), child waiting to be understood (1), knowing to know (1), a leaking pool (1), information about the future (1), reflects reality exactly (1), a secret treasure (1), life that we live (1), fineness (1), an unfilled ad (1), boiling water (1), hard to read and hard to understand article (1), immortality and metamorphosis (1), part of a puzzle (1), endless river (1), consistency (1), a pen (1), time (1).
Science Concepts	encyclopaedia (5), technology (4), phenomenon (3), theory (3), doing experiment (2), real knowledge (2), coming out reality completely (2), proved thought (2), law (2), certain knowledge (2), objectivity (2), paradigm (2), researched and tested information (1), knowledge (1), information essence (1), learning and searching knowledge (1), science (1), scientific result (1), who helped us, who we know (1), facts with fixed rules (1), information in the course book (1), proved truths (1), thoughts accepted by everyone (1), laws accepted by everyone (1), proved experiments (1), complex information net (1), concept (1), mathematics theory (1), objectivity (1), school (1), regeneration (1), bounded area (1), continuity (1), developing concept with technology (1), puzzle (1), provable information (1).
Mine	water (7), gold (5), diamond (1), pure water (1), jew found from the ground (1), salt (1).
Food	fruit (2), walnut (1), tea (1), favorite fruit (1), vinegar (1), meal (1).
Others	light (4), friendship (3), child (2), human (2), closed box (2), teacher (2), gun (2), mother's milk (1), a certain accumulation (1), changing weather (1), a vertical bar (1), effort (1), answer in the most difficult crossword (1), newspaper (1), life (1), medicine (1), primary school teachers (1), pearl (1), internet (1), generator (1), pencil (1), pencil case (1), stairs (1), fashion (1), written music (1), origami (1), student (1), professor (1), page (1), scenario (1), password (1), theatre (1), unicorn (1), recipe (1), star scientist (1).

The "universe" (n = 8) and "water" (n = 7) are among the metaphor created by the prospective teachers related to scientific knowledge.

The fourth grade students of science teachers also used metaphorically the most "water" statement about scientific knowledge. For example, S 23 says that "Scientific knowledge is similar to the water and it finds its way forward".

CONCLUSIONS

It has been found out that 219 prospective teachers produce a large number and variety of metaphors for each concept, as a result of analysis of science, science people, scientific knowledge, nature of science, and metaphors produced by elementary school mathematics prospective teachers in the research.

When we look at the metaphors created about the concept of science, it is seen that those who have high frequencies (such as nature, universe) are more in the definition of science and others are the metaphors of functioning of science (solar, technology, holding candle in the darkness). Teachers often produced realistic metaphors about this concept. Bıyıklı et al. (2014) studied secondary school and secondary school students' metaphors about the concept of science. According to the findings of this research, middle school and high school students produced 153 metaphors related to the concept of science. It has been seen that the metaphors produced by both middle school and high school students have a positive structure when the numbers and qualities of the metaphors produced by middle school and high school students differ. Aktamış (2016) states that the three metaphors with the highest frequency value and the highest frequency of knowledge in the metaphors of secondary school pupils related to the concept of "science", most of which are understood as "Dynamic Structure" "Science, technology and experiment". When metaphors produced by scientific knowledge are looked at, metaphors are produced by metaphors related to the functioning of proven scientific knowledge such as "real", "experiment", "technology" while producing metaphors in which space and space elements of scientific information such as "universe" and "water" are obtained by participants. At the same time, written material in which information such as "Encyclopedia" is included is a metaphor. In general, it can be said that prospective

teachers have created metaphors about the nature of realistic and scientific information and the way of getting it. Turgut (2009) pointed out that prospective teachers gave evidence that their scientific wisdom approaches are in line with realist understanding and that they believe in the existence of a scientific method with certain steps to bring accurate wisdom. While the other half believes that scientific knowledge will not change, Kaya et al. (2013) thought that primary school students would change the scientific knowledge of about half of the students over time.

When metaphors produced by prospective teachers about scientific literacy are evaluated, "book" and "teacher" are the most produced metaphors but not fully reflecting scientific literacy. Generated metaphors, such as a conscious book reader and a right interpretation of the scientific information, reflect scientific literacy more realistically.

Although a large number of metaphors are given, metaphors produced show that prospective teachers do not have enough perception about this concept. Generated metaphors related to the nature of science, which are in significant dimensions of scientific literacy, are more like metaphors produced about science and scientific knowledge. "Forest" metaphor is the most produced metaphor. In Lederman (1992), science is expressed as stereotypical beliefs and values in the development of science or scientific knowledge as a way of acquiring a natural knowledge. When looking at this definition, it seems that the prospective teachers' metaphor for this concept is far from the scientific belief and epistemology. In most of the research, it is stated that student and prospective teachers are not well aware of the nature of science and have widespread misconceptions. Aslan et al. (2009) stated that science and technology teachers have insufficient and inadequate views on the nature of science, the nature of observations, the nature of observations, the nature of scientific information, the nature of propositions, theories and laws, and science and technology in the study of science and technology teachers. Doğan Bora (2006) stated that high school 10th graders had many misconceptions about the nature of science, and they had traditional views about the definition of science, the characteristics of scientists, and the basic assumptions of science. Mıhladı and Doğan (2017) and Çınar and Köksal (2013) have achieved similar results to those mentioned above in their studies.

Prospective teachers are more likely to produce metaphors (such as computers, teachers, machine ants, bees) related to the functional and operational characteristics of scientists. Metaphors (such as small children, journalists, curious little children) are particularly noteworthy about the features of science, such as curiosity and research. While there are positive metaphors about the scientists, no negative metaphors have been found. However, Doğan et al. (2006) states that more than half of the students in their study have expressed insufficient views about scientists. In his study Aktamış (2016) indicates that secondary school students have metaphors such as "Researching, Interrogating, Efforting Person" and "Beneficiary" related to "Science People" concept. When the frequency values of the generated metaphors are examined, the three metaphors with the highest frequency value; "It seems to be" detective, professor and invention". In the same work ant, tree, oxygen, candle, sun, light etc. produced metaphors resemble the findings of our study. Kaya et al. (2013) stated that primary school students in general have similar characteristics such as inventing inventions, engaging in science, trying to be beneficial to humanity and working hard. Şenel and Aslan (2014) stated that pre-school prospective teachers had no negative metaphor in the metaphors for the concepts of "Science" and "Scientific People" and that they only had unrealistic, traditional perceptions for both concepts.

Köseoğlu et. (2008) declares that the nature of science is clearly emphasized and it is inevitable to be taught with opportunities to think deeply on learners. Köseoğlu et. (2008) suggests that teachers should take continuous professional development seminars to ensure that reforms play a role as key elements in science education reforms and that the reforms that require significant changes in the teaching of science classes in the classroom can be successful, and that the development of instructional materials on science teaching nature for both teachers and prospective teachers. As a result, it can be said that the prospective teachers who will be tomorrow's science and mathematics teachers do not have a sufficient level of opinion especially about nature of science and scientific literacy. Apart from the theoretical lessons, these can be applied to understand this concept and its contents. It seems difficult that a teacher who is not proficient in science and related concepts educate a science-minded and science literate student.

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PROTECTION AND PROMOTION OF MENTAL HEALTH

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ABSTRACT

The content focus of this conference contribution is the issue of mental health and possibilities of its promotion. WHO says that there are more than 450 million people with mental disorders in the world and 350 million of them suffer from depression. WHO estimates also point to the fact that depression along with cardiovascular disease will be the most commonly occurring diseases in the year 2020 and it will be the main cause of sickness absence in Europe in near future. The mental health is important not only for individuals, but it has growing importance in terms of economic growth and social development. WHO said that the programs of promotion of mental health are extremely important. It was mentioned in *“European policy framework for supporting the government and social activities for health and well-being”* already in the year 2013. Is necessary, that each state of EU involve, in accordance with their specific needs, social components which can participate in the promotion of mental health of inhabitants. Important social sector in all areas of prevention of mental diseases and disorders is nursing. Nurses, as the largest group of health professionals, form a significant potential in promotion, protection and development of mental health of the population of all ages. A research study is aimed to determine the effect of work on psyche and mental health, job satisfaction of interviewed employees and promotion of mental health. 262 respondents participated at the study, they were employed in different professional spheres in Slovak Republic. Two questionnaires were used to map the data: Meister questionnaire for subjective assessment of mental stress at work and questionnaire. The conclusions of the study showed job satisfaction of 54.2% of respondents surveyed. Inadequate surviving of work load was registered at 59,54% of respondents and inadequate surviving of work load statistically occurred in helping professions ironically ($p = 2,9 \cdot 10^{-5}$).

Key words: Mental health. Work environment. Nursing.

INTRODUCTION

According to MedlinePlus (2017) mental healthsanity includes emotional, psychological and social well-being. The World Health Organization (2009) describes the mental health as “a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community”. Mental health affects the way of thinking, acting and coping with all kinds of life events. It is important in every period of life.

Mental health has an increasing importance in terms of the global economic growth and social development. Bowis, the European Parliament’s rapporteur for mental health issues, said that the mental health disorders are the fastest-growing diseases affecting every fourth person in the world and not a single EU member state can deal with this problem. He also pointed out that even if health is not really an EU competence, health and safety at work is (EURACTIV, 2006).

As a reaction to the increasing global incidence of psychiatric illnesses, several major world and European studies and conferences were initiated:

- 1999 – WHO: Health for all in the 21st century (target 6: Improving mental health – to improve the psychosocial well-being of people, increase their ability to cope with stressful life events and reduce the suicide rate by at least a third by 2020),

- 2005 – The European Commission published *the Green paper – Improving the mental health of the population: towards a strategy on mental health of the European Union* (target: a debate on promoting the mental health with a wide range of relevant parties),
- 2007 – WHO: *Global plan of action on workers' health 2008-2017* (target: health promotion at workplaces),
- 2008 – the European Conference on Mental Health: *European pact for mental health and well-being* (targets: to highlight the importance and relevance of mental health and well-being of the European Union, its member states, interest groups and citizens, to deal with the mental health issues at workplaces, among young as well as elderly people and prevention of depression and suicide),
- 2009 – Brussels Conference – *European pact for mental health and well-being* under the auspices of the WHO also dealt with the mental health at workplaces (target: to develop activities for promoting mental health and well-being at workplaces),
- 2013 – WHO in *The European policy framework supporting action across government and society for health and well-being* (target: support of the mental health promotion programmes); (ILO, 2000),
- 2013 EU–OSHA Düsseldorf: International Congress (target: management of health protection at workplaces and psychological stress therapy),
- 2014-2015 EU–OSHA: Europe-wide campaign in 30 countries "Healthy workplaces manage stress" (targets: to improve the understanding of work-related stress and psychosocial risks at work, to support the management of these risks, to prevent significant negative impacts, to provide a support and guidance to employees and employers, and to promote the use of practical and simple tools to handle the work-related stress (WHO, 2017),
- 2016 – Brussels: International Congress (targets: to develop a strategy for the positive elimination of mental disorders that account for approx. 22% of all disabilities in the world today; to focus the attention of EU member states with regard to their specific needs on the effective prevention of mental disorders and mental health promotion (European Commission, 2016),
- In 2002, the National mental health programme for the Slovak Republic was drawn up in compliance with the *Mental health action plan for Europe*. Its aim was to develop a system of mental health care that will both effectively promote the mental health and lead to the liberation of people with the mental disorder from isolation. (Ministry of Health of the Slovak Republic, 2004). The importance of strengthening the mental health support programmes is emphasized also in the document published by the ministry in 2014 – *Strategic framework for health for 2014-2030*.

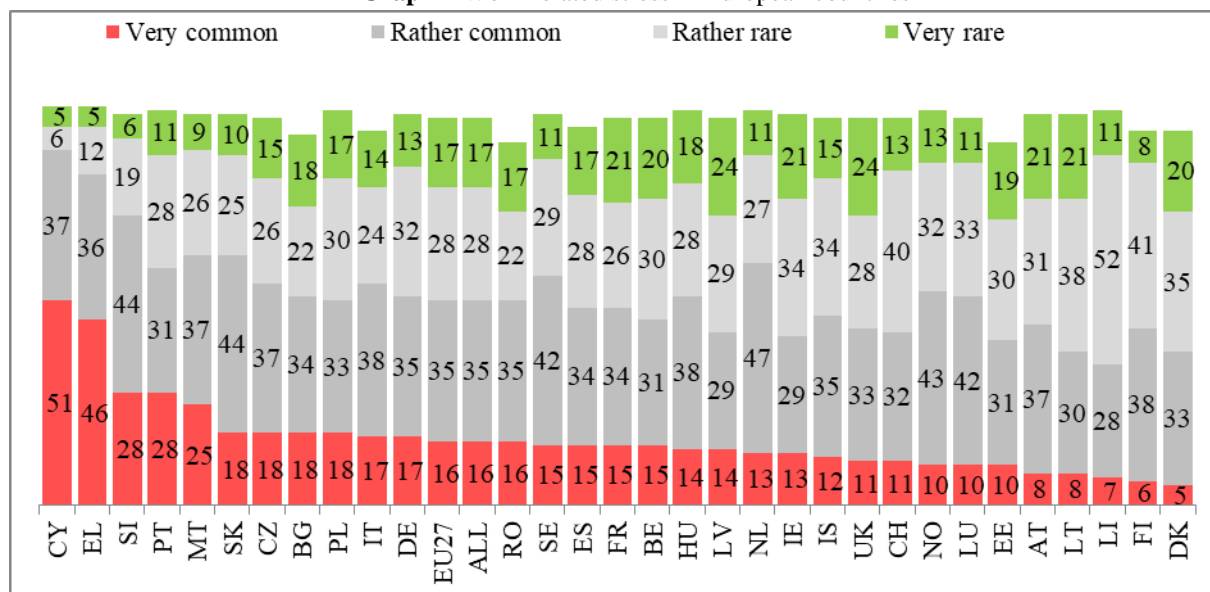
Mental health is affected by a number of psychosocial factors. One of the major determinants of the mental health is the workload and stress at work that is documented by the above-mentioned studies and conferences dealing with the mental health at workplaces. Among the work-related psychosocial risk factors, that have a major impact on the physical and mental health of employees, belongs (McNeely, 2005; Jettinghoff and Houtman, 2009):

- work on shifts,
- too busy or inadequate work schedule,
- failure to perform work,
- high demands on work,
- high workload, short deadlines, insufficient information,
- insufficient organizational justice,
- unsatisfactory teamwork,
- bad interpersonal relationships,
- insufficient social support,
- work in isolation,
- reduction of staff levels,

- lack of resources.

Graph 1 is an informative overview of the occurrence of work-related stress in European countries. The statistical results from UE-OSHA study (2013) are alarming. Work-related stress is the most prevalent in Cyprus, Greece, Slovenia, Portugal and Malta. The lowest rate of work-related stress is in Denmark, Finland, Italy, Lithuania and Austria.

Graph 1 Work-related stress in European countries



Source: UE-OSHA (2013)

In the context of psychosocial risk factors and increasing incidence of mental illnesses, the importance of mental health promotion is increasing. Its primary global socio-economic goal is to preserve, improve and eliminate the risk factors coming from various individual, working, social, economic, political and other areas. EU-OSHA (2013) has included the social support, sense of belonging at work, meaningfulness of work, finding a purpose of person's own work, ability to make decisions about work and organize work at one's own pace among the elements protecting mental health at work.

MENTAL HEALTH NURSING

One of the major social sectors in all areas of prevention of mental illnesses and disorders is the nursing care. Five million nurses working in the European region play an important role in improving the health of individuals, families and communities. They represent the largest integrated group of healthcare workers and they often provide the first contact with the health and social system (Farkašová, 2006). Already in 2000 at the WHO conference "Nurses and midwives: a force for health" in Munich, it was reported that nurses are one of the key sources in a strategy based on the principles of primary prevention and public health support. In the Slovak Republic, this role of nurses is declared in § 2 par. 1, letter s) indecree no. 364/2005 Coll. that determines the extent of nursing practice provided by the nurse independently or in cooperation with the doctor and the extent of midwifery practice provided by the midwife independently or in cooperation with the doctor: "... the nurse is involved in the protection, promotion and development of public health". In relation to this thesis, the nurse is able to support the symbiotic nature existing between health and work. The primary (universal) prevention is aimed at the elimination of situations endangering mental health. The secondary prevention can detect and cure the mental problems early enough to avoid temporary or permanent changes in mental health. The tertiary prevention includes a whole set of strategies aiming at the prevention of deterioration in health and reduce the consequences of mental disorders. The nurse should be prepared to promote the mental health at three levels: individual, family and community. The role of nursing can be fulfilled through education that is today understood as a controlled and documented activity of a nurse. The primary educational goal is to understand and acquire new information and skills, to create a personality structure with values,

attitudes, emotions and intentions, and achieve changes in person's behaviour and action. An educational plan containing the following components is essential to successfully meet the goals for mental health promotion:

a) **conditions for the realization of education:**

- environment – institutionalized (primarily ambulatory health care and family, community or work environment),
- time duration and number of educational units (sessions) as needed by the individual, family, community, employee/employees,
- selection of methods – monologic (explanation), dialogical (interview), printed word (bulletin, leaflet, reference to professional literature),
- form – one-to-one (individual, employee), group (family, community, employees),
- principles of education – purposefulness, succession, individual approach, activity, combination of theory and practice,
- phases of education – motivational, cognitive, performing, controlling,
- adaptation of communication based on the intellect of the educated person/people

b) **nursing diagnosis (NDg) (Nanda 2015-2017)**

- NDg1 – stress overload 00177
- NDg2 – ineffective coping 00069
- NDg3 – readiness for enhanced resilience 00212
- NDg4 – readiness for enhanced coping 00158
- NDg5 – deficient knowledge 00126
- NDg6 – readiness for enhanced knowledge 00161
- NDg7 – ineffective health maintenance 00099
- NDg8 – risk-prone health behaviour 00188

c) **educational units (EU):**

- EU1 – mental health,
- EU2 – work stress coping strategies.

Universal interventions of the nurse to educational units:

- to monitor the mental health of the individual, family and community, to identify stress symptoms of the employees and find appropriate solutions to mitigate the stress,
- to identify the at-risk individuals, families and communities using the assessment scales (Diagnostic and statistical manual of mental disorders, Minnesota multiphasic personality inventory – MMPI, Verbal association tests and sentence completion tests, Beck depression inventory, Zung self-rating depression scale, Liebowitz social anxiety scale),
- open communication on the problems and stresses arising from the work,
- to participate in organizing the supervising meetings at workplaces,
- to cooperate with a team of mental health professionals (psychiatrist, clinical psychologist, supervisor, social worker),
- to initiate and participate in the mental health research for all age groups.

Specific interventions/recommendations of the nurse to educational units:

- to inform/raise the level of knowledge of the individual, family and community about the mental health, its individual and social significance, protection and promotion,
- to recommend realization of coping strategies with the individual, family and community that can be helpful to deal with the workload (coping focused on valorisation, problem-oriented coping, emotion-oriented coping, trying to control the feelings in relation to the stressor and to maintain the emotional balance thanks to the emotional “discharge” and regulation,
- to help to identify the work plans and specify strategies for their implementation,
- to help to clarify the value of time for the mental health of the individual, family and community,
- flexible work plans and working hours,
- possibility to work from home,

- written lists of work assignments,
- flexible schedule of work breaks,
- to provide information about helplines as another possibility of promoting and protecting the mental health.

THE STUDY

Targets

The aim of the empirical research was to:

- map the psychosocial workload of respondents,
- compare the psychosocial burden of respondents by their gender, occupation and residence,
- determine the level of job satisfaction of the respondents,
- verify the differences in the level of job satisfaction of the respondents according to their gender, occupation and residence,
- verify the coincidence of psychosocial workload with the job satisfaction.

RESPONDENTS AND METHODS

The selected group consisted of 262 respondents. Their inclusion into the group was conditioned by a permanent job and willingness to answer the questions. The survey was attended by 130 (49.62%) respondents performing “assisting professions” and 132 (50.38%) respondents working in the industrial sectors. 128 (48.85%) men and 134 (51.15%) women participated in the survey, from which 194 (74.05%) said that they live in the city and 68 (25.95%) in the village. We used a standardized measuring tool to obtain the data – Meister questionnaire for assessing the psychological burden at work (decree of Ministry of Health of the Slovak Republic no. 542/2007 Coll.) Meister questionnaire is a standard method aimed at measuring the subjective psychological burden at work. It contains 10 questions that help to identify three factors: the overload factor, monotony factor and the factor of nonspecific burden (stress response). Each factor is characterized by some of these attributes: time pressure at work, low job satisfaction, high responsibility, dull work, problems and conflicts, monotony, nervousness, being fed up with work and tired, long-term tolerability. Respondent expresses his/her attitude towards the statement on the 5-point rating scale: yes, completely (5 points), rather yes (4 points), (3 points), rather no (4 points), not at all (1 point). We also added a scale of our own design that focuses on assessing the degree of job satisfaction to the Meister questionnaire. In this part of the questionnaire, respondents expressed their job satisfaction in five work area through the 5-point scale (5 – high job satisfaction, 1 – high job dissatisfaction).

The questionnaire was anonymous, voluntary and distributed electronically via www.surveymonkey.com in May-June 2016, and its response rate was 78.92%.

We used descriptive statistics for the interpretation of results, and for the testing of independence of two categorical variables, we used the χ^2 test. A two-choice T-test was used for assessing the difference between two average results of the independent groups and the correlation of selected variables was assessed by Pearson’s linear regression test. We considered $p \leq 0.05$ to be significant. SPSS Statistics was used for the statistical evaluation.

FINDINGS

When diagnosing the impact of work on the employee’s psyche, we evaluated Meister’s mental load factors and the way of coping with the burden. Chart 1 provides an overview of the descriptive characteristics of each statement in the Meister questionnaire.

Chart 1 Overview of the descriptive characteristics of each statement in the Meister questionnaire

Statement	Characteristics	Profession	Median	Standard deviation	Minimum	Maximum	Critical median value
I’m often pressed for time at work	Time pressure	Assisting	3	1.24	1	5	3.0
		Industry	4	1.3			
Job is not satisfying for various reasons	Low job	Assisting	3	1.15	1	5	2.5

	satisfaction	Industry	3	1.31			
My work psychologically burdens me because of high responsibility associated with serious consequences	High responsibility	Assisting	3	1.28	1	5	3.0
		Industry	3	1.28			
My work is mundane, little incentive, rather dull	Dull work	Assisting	2	1.31	1	5	2.5
		Industry	2	1.32			
Conflicts or problems often arise at my work and I'm not able to let it go even after the work shift ends	Problems and conflicts	Assisting	3	1.33	1	5	2.5
		Industry	3	1.29			
I hardly keep my attention and readiness at work because there is often nothing new and decisive going on	Monotony	Assisting	1	1.28	1	5	2.5
		Industry	2	1.39			
My job is psychologically so demanding that I feel nervous and agitated after a few hours	Nervousness	Assisting	3	1.26	1	5	3.0
		Industry	3	1.23			
I'm doing some work but I want to do something else after a few hours	Repulsion	Assisting	2	1.35	1	5	3.0
		Industry	3	1.34			
My job is psychologically so demanding that I feel lifeless and tired after a few hours	Exhaustion	Assisting	3	1.33	1	5	3.0
		Industry	3	1.2			
My job is psychologically so demanding that it is probably not possible to do it for years with the same performance	Long-term tolerability	Assisting	3	1.47	1	5	2.5
		Industry	3	1.3			

Based on the analysis of median values in each part of the Meister questionnaire for assessing the psychological burden at work, we can conclude that the most oppressive factors for respondents working in the industry, that exceed the critical values (standardized values set by W. Meister), are the following four areas: time pressure, low job satisfaction, problems and conflicts and long-term tolerability. For respondents performing assisting professions, the most oppressive factors were these three areas: low job satisfaction, long-term tolerability, problems and conflicts. Critical values were reached by respondents working in the industry in the following areas: high responsibility, nervousness, repulsion and exhaustion. In case of respondents with assisting occupations, critical values were found in these areas: time pressure, high responsibility, nervousness and exhaustion. For the group of respondents working in the industry, the least oppressive areas were the following areas: mundane work and monotony, and for the second group of respondents: mundane work, monotony and repulsion.

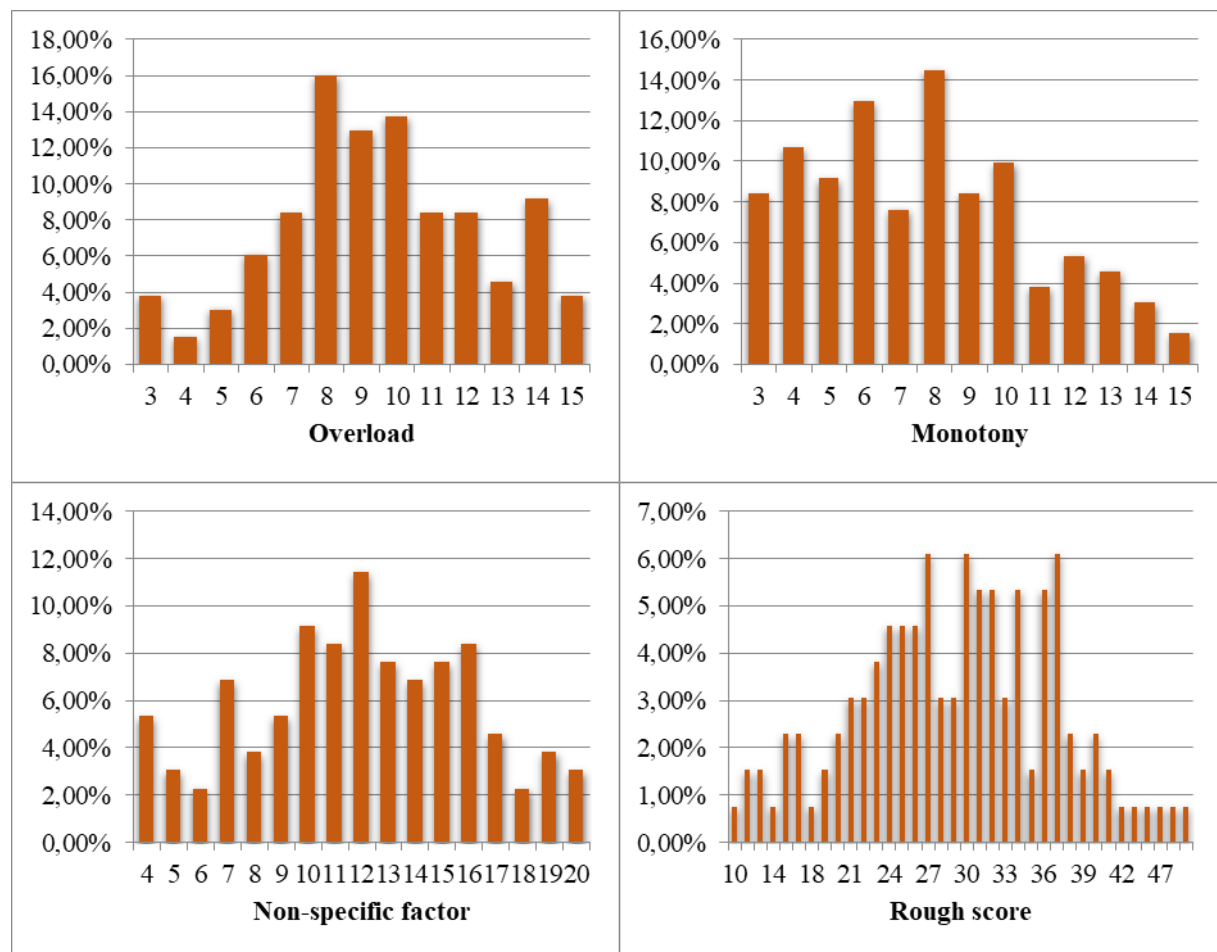
Then we assessed all factors of the psychological work-related burden as you can see in the overview of the descriptive characteristics of each factor in Chart 2.

Chart 2 Overview of the descriptive characteristics of each oppressive factor

Meister oppressive factors		Statements	n	\bar{x}	Median	SD	Min. value of selected sample	Max. value of selected sample	Maximum for Meister oppressive factors
I.	Overload	1+3+5	262	9.49	9	2.96	3	15	15
II.	Monotony	2+4+6	262	7.67	8	3.13	3	15	15
III.	Non-specific factor	7+8+9+10	262	11.95	12	4.15	4	20	20
RS	Rough score	I.+II.+III.	262	29.04	30	8.03	10	49	50

In the group of participant, the oppressive factor overload has the average value 9.49 (maximum 15), monotony 7.67 (maximum 15), non-specific factor 11.95 (maximum 20) and in the rough score, respondents reached the average value 29.04 (maximum 50).

Graph 2 gives an overview of the Meister oppressive factors and the attitudes of individuals categorized into degrees of the rating scale. In case of 10 (3.82%) respondents, the oppressive factor overload is at the maximum level (15). Monotony was indicated as a factor at the maximum level (15) by 4 (1.53%) respondents, and according to 8 (3.05%) respondents, the non-specific factor is at the maximum level (20).

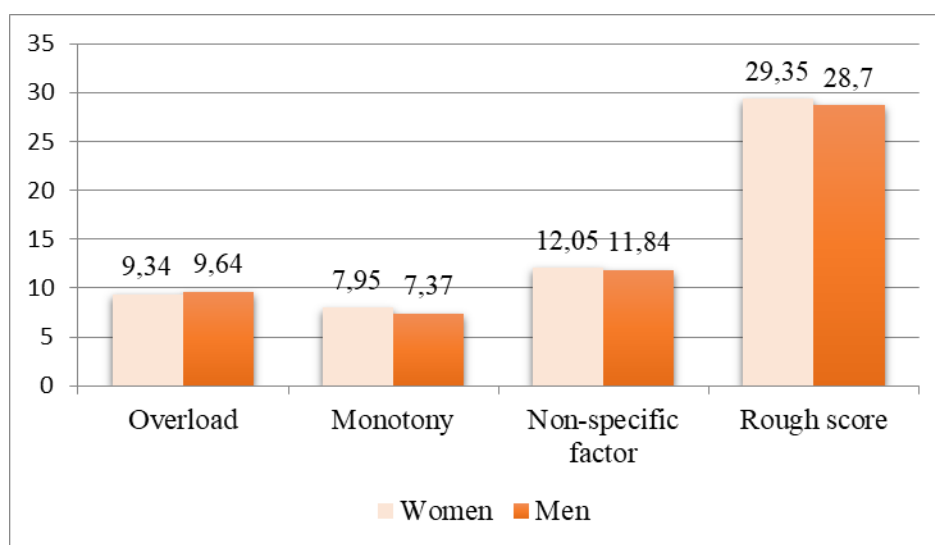


Graph 2 Meister oppressive factors – attitudes of individuals categorized into degrees of the rating scale

No statistically significant differences were found between men and women when comparing the evaluation of the Meister oppressive factors (Chart 3, Graph 3). We also found out that men and women show critical values only in the area of rough score. Within the individual factors, the critical values of the averages were not exceeded.

Chart 3 Comparison of the subjective workload evaluation by gender

Meister oppressive factors		Women				Men				p
		n	\bar{x}	SD	Critical value	n	\bar{x}	SD	Critical value	
I.	Overload	134	9.34	3.02	10	128	9.64	2.8	12	0.41
II.	Monotony	134	7.95	3.11	9	128	7.37	3.14	8	0.13
III.	Non-specific factor	134	12.05	4.43	14	128	11.84	3.85	12	0.67
RS	Rough score	134	29.35	8.57	29	128	28.7	7.44	26	0.51

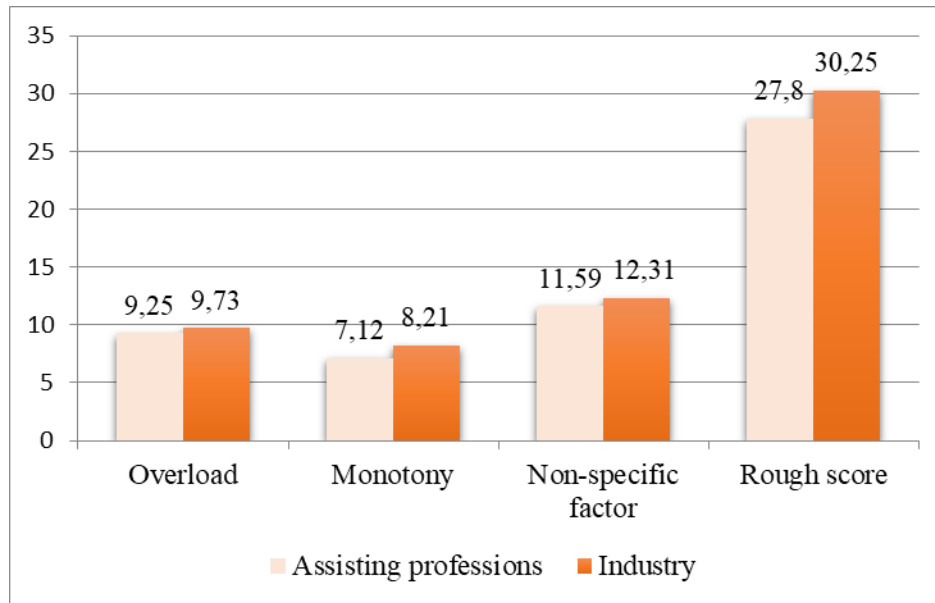


Graph 3 Comparison of the subjective workload evaluation by gender

Regarding the profession of respondents, our analysis showed some statistically significant differences in case of two factors between respondents performing the assisting professions and the respondents working in the industry. Low stimulation occurred mainly among respondents working in the industry ($p = 0.004$). They also achieved a statistically higher rough score ($p = 0.01$) than respondents with assisting occupations. Considering the level “overload” and “non-specific factor”, no significant differences were found among these two groups of respondents (Chart 4, Graph 4).

Chart 4 Evaluation of workload by profession

Meister oppressive factors		Assisting professions			Industry			p
		n	\bar{x}	SD	n	\bar{x}	SD	
I.	Overload	130	9.25	2.78	132	9.73	3.10	0.18
II.	Monotony	130	7.12	2.92	132	8.21	3.25	0.004
III.	Non-specific factor	130	11.59	4.21	132	12.31	4.08	0.15
RS	Rough score	130	27.8	7.59	132	30.25	8.29	0.01

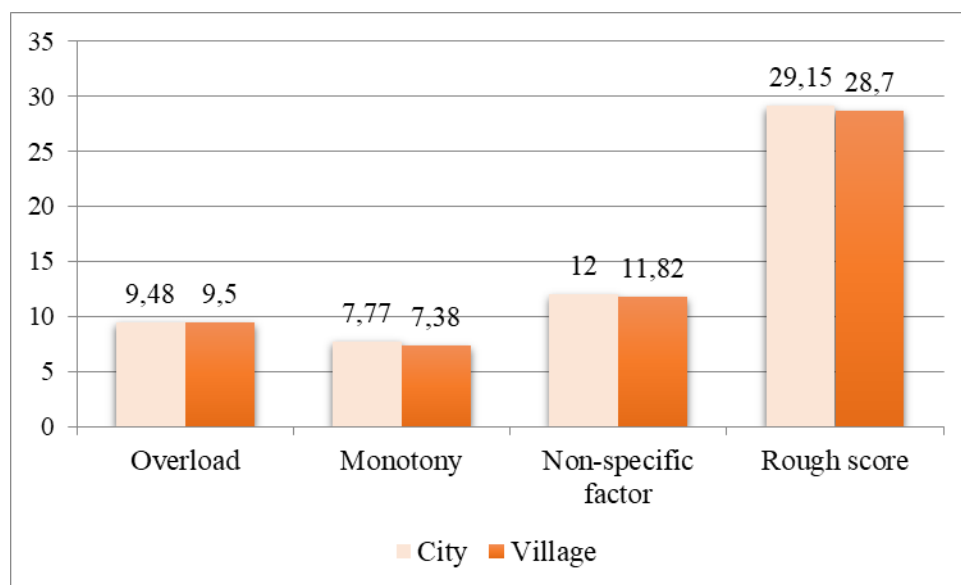


Graph 4 Evaluation of workload by profession

We also verified whether the residence of respondents has any impact on the psychosocial burden. Two-choice t-test showed that respondents living in the city do not differ from residents living in the village in any of the oppressive factors determining the extent of psychosocial burden (Chart 5).

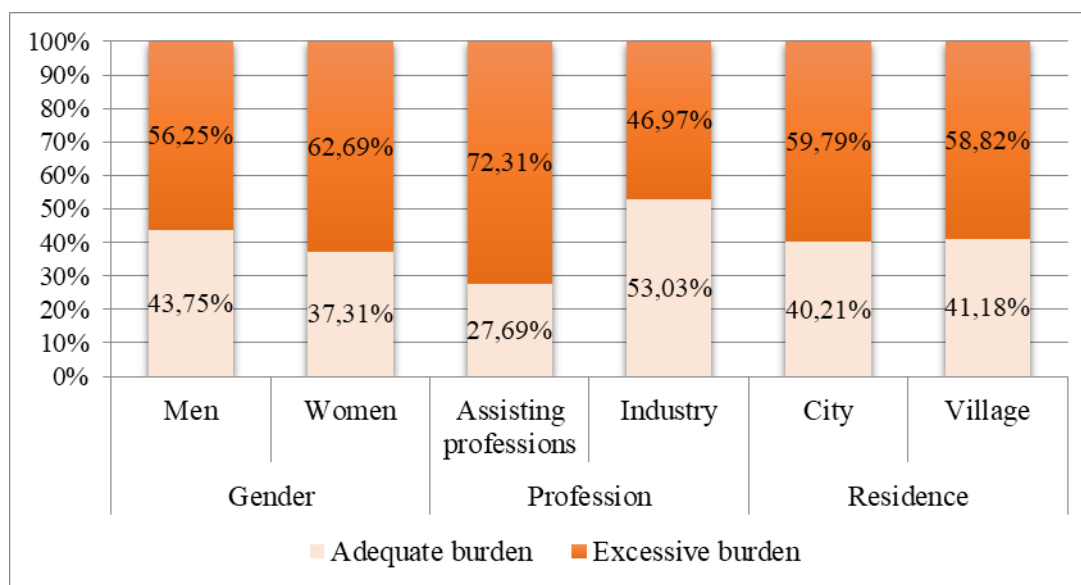
Chart 5 Evaluation of workload by residence

Meister oppressive factors		City			Village			p
		n	\bar{x}	SD	n	\bar{x}	SD	
I.	Overload	194	9.48	3.06	68	9.5	2.63	0.97
II.	Monotony	194	7.77	3.2	68	7.38	2.92	0.37
III.	Non-specific factor	194	12	4.16	68	11.82	4.14	0.76
RS	Rough score	194	29.15	8.39	68	28.7	6.94	0.66



Graph 5 Evaluation of workload by residence

In the second assessed area, we surveyed how respondents are experiencing the psychosocial burden at work. From all participants, 156 (59.54%) have felt an excessive burden while only 106 (40.46%) have dealt with it adequately. In the group of respondents with assisting professions, there were much more individuals ($p < 0.001$) who had problems to deal with the psychological stress at work than people working in the industry. Differences in handling the psychological burden between genders and types of residence were minimal and did not reach the statistical significance (gender: $p = 0.28$; residence: $p = 0.88$) (Graph 5).



Graf 5 Dealing with psychosocial burden at work according to gender, profession and residence

In the intentions of the third goal, we evaluated the job satisfaction of respondents. A positive assessment was ascertained in case of 54.2% of respondents (18.32% with high job satisfaction, 35.88% with slight job satisfaction). The job was negatively assessed by 36.64% of participants and 9.16% of respondents expressed the same level of job satisfaction and dissatisfaction. The basic data of the descriptive statics are presented in the Chart 6.

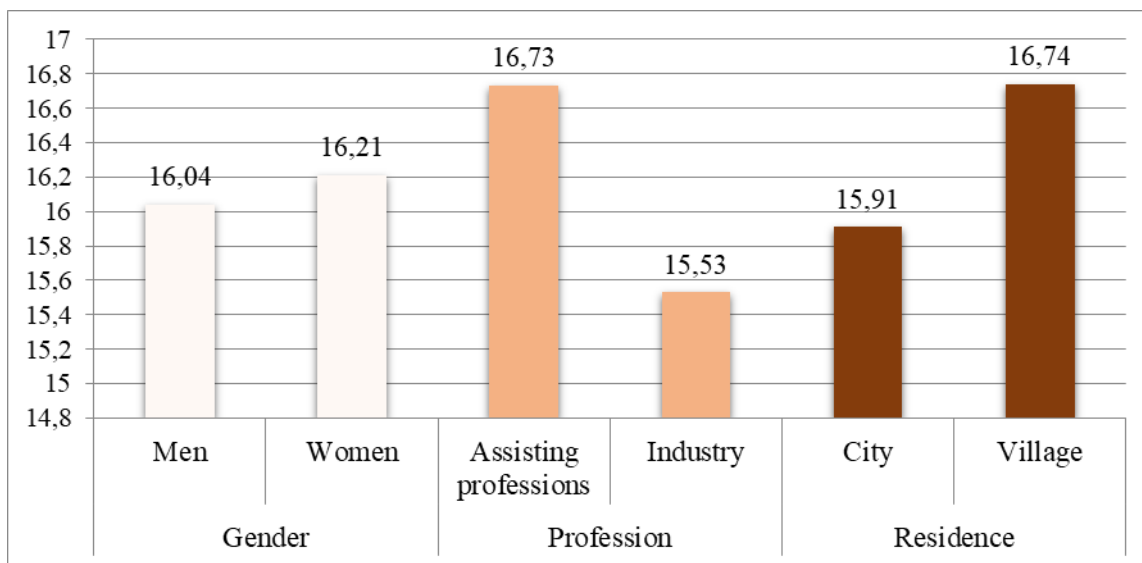
Chart 6 Scale of job satisfaction

	No. of respondents	Average	Minimum	Maximum	Modus	Median	Dispersion	Standard deviation
Job satisfaction	262	16.13	5	25	19	16	22.07	4.69

The aim of the study was to identify whether there are some differences in the subjective assessment of the job satisfaction of employees depending on their gender, profession and residence. We found out that men and women subjectively evaluate the job satisfaction equally ($p = 0.78$) and there also weren't any statistically significant differences among respondents based on their residence ($p = 0.19$). When comparing the results by professions, we found out that the subjective evaluation of the job satisfaction of respondents working in the industry and those performing assisting professions was much different. Participants with assisting occupation proclaimed a higher level of job satisfaction more often than respondents working in the industry ($p = 0.03$) (Chart 7, Graph 7).

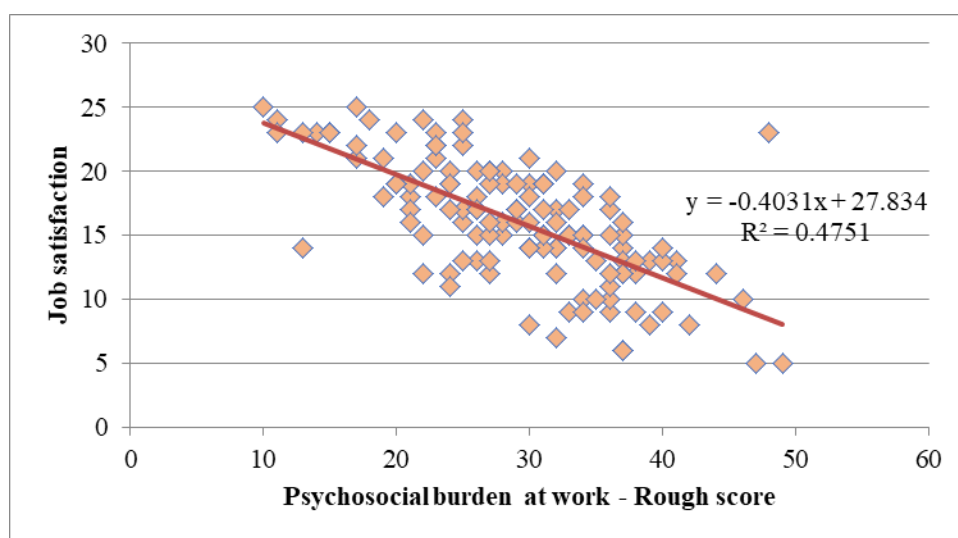
Chart 7 Results of T-test

Variables	F	Sig.	t
Gender	1.01	0.78	-0.27
Profession	0.77	0.03	2.09
Residence	1.08	0.19	-1.29



Graph 7 Average job satisfaction figures by gender, profession and residence

Considering the last goal of this empirical study, we verified the coincidence of the psychosocial burden at work with the job satisfaction of respondents. Our expectation was that with a rising level of psychosocial burden, the job satisfaction rate would decrease. The statistical analysis of the results confirmed our assumption. We also noticed a moderate negative correlation between the overload and job satisfaction ($r = -0.5$), monotony and job satisfaction ($r = -0.6$), non-specific factor and job satisfaction ($r = -0.53$) as well as rough score of Meister questionnaire and job satisfaction ($r = 0.68$) (Graph 7).



Graf 8 Relation between psychosocial burden at work and job satisfaction

DISCUSSION

When processing the discussion, several databases were used for searching (relevant articles dealing with our topic): Pubmed, ScienceDirect, Scopus, SpringerLink, Web of Science, ProQuest Central, Medvik, Database of Slovak Medical Library. Determining conditions were: English language, German language, Slovak language, Czech language and Polish language, numerous documents and the time frame 2000-2017. Altogether, 39 full-texts were found and 19 were used for the purpose of our discussion. It can be said that Meister standardized questionnaire isn't used by foreign authors very often. From this perspective, our discussion has a limited character. Already in 2001, WHO released "The world health report" to raise the awareness of the increased incidence of mental illnesses and their impact on human, social and economic sphere. The aim of our empirical study was to map the psychosocial

work-related burden of respondents, compare the psychosocial burden according to their gender, profession and residence, find out the level of job satisfaction also by the gender, profession and residence, verify the differences in the level of job satisfaction based on the gender, profession and residence, and prove the coincidence of psychosocial work-related burden with the job satisfaction.

In the intentions of the first goal, we can conclude that for respondents working in the industry, the most oppressive factors exceeding the critical values are the following four areas: time pressure, low satisfaction, problems and conflicts as well as the long-term tolerability. The most oppressive factors for participants performing the assisting professions were these three ones: low satisfaction, long-term tolerability, problems and conflicts. Findings of our study partially correspond to the results of Gurková and Macejková (2012), Židková (2002), Bubelová (2009), Urdziková and Kordošová (2016). In her study, Židková (2002) got similar results in case of the factor long-term tolerability. When analysing particular questions of the Meister questionnaire, authors Gurková and Macejková (2012) came to a conclusion that the critical value of median was above the limit in these four areas: long-term tolerability, time pressure, responsibility and exhaustion. Based on the sample of 206 participants performing the assisting professions, Urdziková and Kordošová (2016) found out that the most oppressive factors are problems, conflicts and the long-term tolerability. Factor time pressure exceeded the critical value in the studies of Bubelová (2009) and Židková (2002) but in our thesis, this assertion could be applied only on employees working in the industry. When assessing the individual factors, we did not detect any exceeding of critical values of the average results in the whole group, nor in relation to the gender differences. The same conclusion was reached by Obročniková et al. (2015). When comparing the assessment of Meister oppressive factors according to the profession, we found out that the low job stimulation was much more frequent among respondents working in the industry. Their rough score was also statistically higher. Hodačová et al. in a 2007 research, that focused on the psychosocial burden of 784 respondents from various professions, achieved the following results: in assessing the average median values, the most psychological burden for healthcare professionals was the factor overload; in case of teachers of elementary schools (men and women) and secondary schools (women only), the critical values of median was detected in the factor "stress reaction". By analysing the average median values, we found out that the group of workers (men and women) is also at risk of the factor monotony. By comparing the average values of individual factors for men and women, authors also noticed statistically significant differences in case of two types of occupation – clerks (four factors – mundane work, conflicts and problems, monotony, long-term tolerability) and between factors overload and monotony. Higher values have always been seen in men. They also showed a significant difference in one factor in case of another profession – worker (high responsibility) and the factor of overload again to men's detriment. The evaluation of the way of coping with the psychosocial work-related burden according to the rough score reached in the Meister questionnaire was favourable for 40.46% respondents with an appropriate way of handling the burden. An unfavourable situation was discovered in case of 59.54% participants performing the assisting professions who, paradoxically, dealt with the psychosocial burden rather inadequately.

In the next part, we mapped the job satisfaction of respondents. 54.2% of them assessed the job satisfaction positively, 36.34% negatively and 9.16% participants expressed the same level of job satisfaction and dissatisfaction. The job satisfaction was mapped also by Smith (2007). He came to a conclusion that the job satisfaction is higher when people have a profession with a social prestige, as can be seen on the results – 55.8% employees with the highest social status were highly satisfied with their job. Compared to that, the same level of satisfaction was expressed by only 33.6% employees with a lower occupational prestige. Munch-Hansen et al. (2009) surveyed in Denmark a relation between the work-related sickness and satisfaction with the work environment. This research was conducted on 13 437 employees from various 698 employers' organizations during one year. Results refer to a correlation of above-mentioned variables – sickness was 30.8% lower when the employees were satisfied (11.7 days/year) compared to the respondents who experienced worse psychosocial working conditions (16.9 days/year). The subject of our interest was also to verify the relation between the psychosocial burden and job satisfaction. We noticed a negative correlation between the job satisfaction and particular factors or the overall score. Several authors came to the same or similar conclusions (Arikan et al., 2007; Rehman et al., 2012; AbuAlRub, Al-Zaru, 2008; Saleh, AbuRuz, 2013; Applebaum et al., 2010). However, the statistically significant correlation between two variables was not confirmed by the study of Salam et al. (2014).

Mental health is currently an increasingly discussed topic in all areas of the social and working life at national and transnational level. Sováriková Sošová et al., 2016, Slezáková, 2014 are accentuating, that mental health should not be marginal theme and psychological approaches to assist it should be incorporated to the clinical practice more effectively. Already in 2001, the world health report emphasized the need to increase and improve the employee

care, particularly in promoting their mental health. To protect and promote the mental health, all components of the society must work in the symbiosis – healthcare professionals (doctors, nurses, psychologists, physiotherapists) as well as non-medical professionals (employers, social workers, teachers, work therapists, etc.). According to LaMontagne (2014), one of the main options for supporting the mental health optimization at workplace is to protect the mental health by reducing risk factors, developing positive aspects of work as well as positive abilities of employees.

CONCLUSIONS

Based on the research findings, there is an urgent need to monitor the mental health of employees and if necessary, to provide them with the mental health care. To keep their mental health at workplace in a good state, a cooperation of all relevant parties (e.g. employees, employers, industry groups, trade unions, policy makers, health professionals, researchers, etc.) is essential. Equally important is the public education that can significantly influence the opinions of employees and the general public on the need to protect and promote the mental health.

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RAPID VISUAL PROTOTYPE THROUGH VIRTUAL REALITY FOR GRAPHIC DESIGN

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Visual prototyping is used to experience a product or an environment virtually before its physical creation. It enables designers and users to explore design projects and to make necessary improvements in terms of design, colors, textures, shapes, forms, and other components before any physical production. In addition, it enhances collaborations by enabling design teams to discuss ideas more clearly (Jimeno & Puerta, 2007) and can work as a communication tool to assist in exploring all aspects of design (Sherrard & Narayanan, 1995). The purpose of this study was to experiment the rapid visual prototype using virtual reality for graphic design education. The research team of graphic design faculty and students developed several visual identities for a movable retail store and then built the virtual reality of the movable retail store with the several visual identities to experience and compare them in 3-dimensional environment by rapidly altering their placement, scale, texture, and other design elements. The visual prototype through virtual reality allowed testing the design concept in a cost-effect environment with a 360° view of the project. However, it was found that it could become a delay for implementation if repeating the assessment too many times. The further study might be conducted with more complex graphic design projects.

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REASONING AND MORAL JUDGEMENT IN HIGHER EDUCATION STUDENTS: REALITY AND CHALLENGE

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ABSTRACT

In higher education, the main purpose concerning morale is to stimulate the development of didactics based on principals that can enrich students' education, so that their actions may be a result of well-doing and supreme good critical appraisal, founded by standard ethical and moral patterns. The knowledge of students' perception and effective realities will allow the school to be promoted as a proactive scientifically sustained community and with an ethically directed learning. Objective of the study: To identify prevalent moral competences in higher education students.

A cross-sectional descriptive study was performed with 345 health students in Portugal's center region, 80% women, with a mean age of 20.82 years. The Workers and Doctors Moral Dilemma Questionnaire / Moral Judgment Test (MJT) by Lind (1998), Portuguese version of Bataglia (1998), adapted by Ribeiro & Menezes (2000), was applied.

The results indicate that the majority of the students (75%) presented adequate moral reasoning (50.1% average and 24.9% good). Nevertheless, 24.9% showed an inadequate moral reasoning. Age establishes an inverse relationship with moral reasoning, demonstrating that younger participants show better moral reasoning ($\beta = -0.12$; $p = 0.033$). Moral judgment was also adequate (75.5%) in most of the students, (50.1% average and 25.5% good). However, in 24.3% it was inadequate.

The importance of moral training is inferred from the study to provide reasoning and moral judgment skills. Therefore, health academic courses should include contents that will provide future professionals with updated knowledge/skills.

Keywords: higher education students; moral competences; moral judgment;

INTRODUCTION

Moral principles, also called morality, are defined as standards of conduct that distinguish right from wrong. And in this sense, judgment is seen as the skill that allows the individual to discover or claim an objective and intrinsic relationship between two objects or concepts. That is, to clarify its implicit meaning through the performance of a critical evaluation (Virtual Health Library - DeCS, 2015).

The word moral derives from the Latin *mos* and refers to "customs, norms and laws" (Tughendhat, 1999 & Weil, 2012 as quoted in Peter, 2013, p.485). Morality, unlike ethics, is eminently practical. It is focused on a concrete and real action, for a certain practical-moral know-how and for the use of moral norms coming from outside the most diverse spheres (politics, religion, philosophies, social customs, etc.), which is considered valid for all the members of a certain social group. While ethics always implies an introspective theoretical reflection on any moral, a rational and critical revision of the validity of human conduct to moral is the acceptance of given rules. Morale has an imperative dimension, since it makes us fulfil a duty founded on a moral value imposed by an authority. Although different these concepts are linked, thus drawing an important relationship of an increasing circularity and complementarity among them (Carapeto & Fonseca, 2012, p.89; Pedro, 2013, p.487).

Associated with the moral perspective of citizenship, the idea is that society must guarantee equality of rights and obligations for all its members, as well as create the minimum conditions for all citizens to express their ideas without affecting and colliding with the freedom of thought of others, because "the freedom of one ends where the freedom of others begins" (Grajales, Buitrago & Rincón, 2008, p.206). However, in order for this to happen, there must be a commitment by government bodies and educational institutions in an education of excellence that can prepare individuals for the realities of the community where they are inserted in.

One of the fundamental moral principles of modern democracies is the resolution of dilemmas or behavioural problems through negotiation and discussion, rather than the use of power, force or violence. Therefore, the individual's ability to listen to his/her peers, understanding their arguments, and collectively finding a moral basis for a fairer solution is, thus, an extremely important requirement for the design and preservation of a more democratic and pluralist society (Lind, 1999, p.4 as quoted in Nata, 2011, p.93).

There is also a significant interest in political and social matters, moral education and moral issues within the

academic world. Since events such as the threat of terrorism, global economic crises, growing crime among young people, teenage pregnancy and suicide, have rekindled the humanistic and scientific interest, by ethics and moral education, this has led some scholars to equate the hypothesis of the existence of a moral crisis in today's society (Bataglia, Morais & Lepre, 2010, p.27), which lacks the contributions of science and humanities for its resolution. Globalization has a considerable influence on citizens' beliefs, norms, values, attitudes and behaviours. Such a subject has gained increasing relevance in the scientific academies/educational institutions, since society expects them to play a structuring role in the education and training of young people who will become global citizens, capable of understanding the rules and norms of today's societies and to behave appropriately in various multicultural contexts (Banks, 2008; Stearns, 2009 as quoted in Cho & Chi, 2015, p.213).

In the case of university students, the main objective is to rescue, stimulate and improve contents and latent principles that may favour the education of a wise and simultaneously worthy professional, an active co-constructor of inclusive cultures that gathers an improved technical-scientific-cultural knowledge. Furthermore, following ethical principles, he/she should not be seen as a mere depository of humanistic aspirations that, despite guiding the rights of human beings, only stimulates the development of automaticity actions, which are not sustained by ethics and values. Such skills are an integral part of himself/herself that must justify and support his/her actions.

In this context, the study aimed to evaluate the moral skills prevalent in students of higher education.

THEORETICAL FRAMEWORK

Kohlberg conceptualizes moral competence as "the ability to make decisions and make moral judgments (based on internal principles) and to act according to such judgments." For the development of this competence, there is a universal and invariant sequence of six stages.

For Lind (2005), these moral skills and competences can and should be constructed throughout life, that is to say, childhood, youth and adulthood (Lind, 2005 as quoted in Melo, Souza & Barbosa, 2016, p.44).

Kohlberg's theory of moral development (1971) argues that moral judgments and norms should be understood as universal constructions of human agents that regulate their social interactions rather than passive reflections of any external fact or internal emotions. The developmental levels of this socio-moral perspective allow, according to Kohlberg, a general organization of moral judgment and serve to inform and link other more specific moral concepts, such as the nature of morally right or good, moral reciprocity, rules, rights, obligations or duties, equality, consequences of well-being and moral values such as obedience to authority, life preservation, maintenance of contracts, and affective relationships (Colby & Kohlberg, 1984, as quoted in Bataglia, Morais & Lepre, 2010, p.29-31).

Kohlberg (1964) organized a series of six stages and three levels (pre-conventional, conventional, and post conventional), two stages at each level, of the development and articulation of moral judgment, which goes from childhood to adulthood. He based his work on the classification of types of moral reasoning presented by individuals when they were confronted with hypothetical dilemmas. Its description goes from pre-moralism, through conformism, and encompasses the morality of individual principles. At the first level, the pre-conventional one, there is no internalization of moral principles. The act is judged by its consequences and not by its intentions, since individuals did not come to understand and respect shared norms and expectations (egocentric perspective and dominated by self-interest). This is a characteristic of most children under the age of 9, of some teenagers and of many teenage and adult offenders (Kohlberg, 1964 as quoted in Bataglia, Morais & Lepre, 2010, p.29-31). At the second level, called conventional, internalization is already present. The individual believes in the value and recognition of what he/she deems par excellence. Morality consists of social rules, roles, and norms. This level is the most common among most adolescents and adults in modern society (Colby & Kohlberg, 1984 as quoted in Bataglia, Morais & Lepre, 2010, p.29-31). At the third level, known as post conventional, there is the questioning of established laws and the recognition that they may be unfair and therefore must be changed. People understand and accept the rules of society, but this acceptance is based on the formulation of general moral principles that uphold those rules, following principles of conscience rather than the convention of the previous ones. This level is reached by a minority of adults (around 5%), usually after the age of 20 (Kohlberg, 1964, as quoted in Bataglia, Morais & Lepre, 2010, p.29-31). The stages of moral judgment, proposed by Kohlberg (1964), of which two are comprised within each of the levels described above, are described by Bataglia, Morais, & Lepre (2010, p.29-31) and Nata (2011 p. 110-112) as follows: First stage - punitive orientation and obedience to authority: characterized by the morality of the act defined in terms of physical consequences for the individual. If the action is indictable, it is morally wrong; if it is not reprovved, it is correct. Second stage - naive hedonic and instrumental orientation: morally correct action is defined in terms of pleasure or satisfaction of the person's needs. This stage is characterized by selfishness, relative morality and moral act is an instrument of personal satisfaction. Third stage - orientation based on interpersonal relationships or "good guy" type morality: morally correct behavior is one that leads to the approval of others. The concept of equality appears at this stage. Fourth stage - authority morality and conservation of social order: there is respect for authority, fixed rules and preservation of social order. Justice has to do with the established social order (by the individual and the system), and it is not a question of personal moral

choice. Fifth stage - morality of social contact, individual rights and democratically accepted law: the individual admits that moral laws or customs may be unfair and must be changed by legal channels and democratic contracts. This stage refers to the recognition of morality underlying democratic governance. Sixth stage - orientation of universal ethical principles: the individual recognizes the universal moral principles of individual consciousness and acts accordingly. These moral obligations involve: the principle of justice; role-taking principle, that is, the ability to put oneself in the other's shoes, and the principle of respect for personality (Bataglia, Morais & Lepre, 2010, p.29-31); (Nata, 2011, p. 110-112).

Lawrence Kohlberg guided his research towards the study of moral judgment and stages of moral development, while Georg Lind pursued studies towards competence. In order to measure these constructs, Kohlberg proposed a form of evaluation and measurement: The Moral Judgment Interview - MJJ (Espíndola & Lyra, 2005; Bataglia, 2010). In 1977, George Lind constructed the Moral Judgment Test (MJT) in order to evaluate the competence of moral judgment. This construct was formulated by Lawrence Kohlberg in 1964 as the "ability to make decisions and make moral judgments (based on internal principles) and to act according to such judgments." (Kohlberg, 1964 citing Lind, 1999, p. 1 quoted in Bataglia, Morais & Lepre, 2010, p.29).

The MJT assesses the ability of the subject to apply the structure of moral judgment in adverse situations therefore using moral dilemmas. However, it is requested to evaluate arguments with different moral orientations, reflecting opinions for and against the decision, that is, the individual should consider arguments for and against his/her own opinion (Bataglia, Morais & Lepre, 2010, p.29).

When we present a dilemma to the subject and he/she argues or acknowledges arguments in favour of his/her own opinion, the moral attitude based on his/her beliefs, values and concepts is evident. Instead of simply measuring the moral attitude of the subject, the MJT proposes a difficult moral task, which is the recognition of the quality of arguments contrary to the opinion of the subject. This presupposes another ability that naturally involves the cognitive structure, but more than that, it requires a non-dogmatic attitude towards his/her own attitude. It is this ability (competence) that the MJT proposes to measure (evaluation of counter-arguments). On the other hand, the MJT is based on the theory of the double aspect of moral development, that is, there are cognitive and affective aspects involved in moral competence. (Bataglia, Morais & Lepre, 2010, p.30).

Recent studies have revealed that, contrary to scientific rationalism, moral decision depends more on subjective emotional evaluation, conscious or unconscious, than on logical-deductive reasoning. It is currently consensual that both emotion and reasoning are involved in moral judgment, albeit dominating the automatic emotional processes. These inferences were made from experimental studies using decision-making tasks in the face of moral dilemmas, in which the psychological processes underlying moral judgment were explored. Given a certain dilemma our answer may be considered utilitarian or non-utilitarian (Koenigs, Kruepke, Zeier & Newman, 2012 as quoted in Carvalhinho, 2015, p.10). Personal moral dilemma entails direct and intimate offence to someone, and physical harm. For instance, pushing someone off a bridge to save five people. Underlying the resolution of personal moral dilemmas is, therefore, a high cognitive and emotional conflict on the part of those who decide, since the choice to sacrifice one person for the good of others is considered a "utilitarian" response, as it reflects a greater concern with a "mathematical" result than with emotional aversion by the means used: the means (emotionally reprehensible) justify the ends (mathematical gain). On the other hand, a "non-utilitarian" response is a more emotional response, that is, a response that involves an emotional reaction directed at someone who will be at a disadvantage in this dilemma, choosing not to sacrifice it for the good of others (Koenigs, Kruepke, Zeier & Newman, 2012 as quoted in Carvalhinho, 2015, p.10). The evaluation of the moral decision in nonclinical populations has suggested that it is contaminated by emotional processes provoking a high conflict, especially in certain types of dilemmas, which ends up conditioning the response (Carvalhinho, 2015, p.10).

To educate for the development of moral competences that privilege ethical-moral principles and that aim at the common good for the community in detriment of personal interests, it is absolutely necessary to set conditions that decisively contribute to the emergence of individuals with a way of being/being imbued with an appropriate ethical-moral aspect and revealing the primacy of human dignity. Hence, the challenge for the present study emerges.

THE STUDY

The descriptive study with an analytic-correlational approach sought to answer the following research question: What moral competences do the students of higher education demonstrate? And its main objective was to identify the moral competencies prevalent in students of higher education.

Sample

The non-probabilistic sample, obtained by convenience, was composed of 345 students from the health field of the Polytechnic Institute of Viseu, Portugal, of which 277 were female and 68 were male. The mean age of the students was 20.82 years (± 21 years), ranging between the minimum age of 17 and the maximum of 46.

Data collection instruments

The research protocol included, as instruments of measurement, the Workers and Doctors Moral Dilemma Questionnaire, (Moral Judgment Test - MJT, Lind, 1998), Portuguese version of Bataglia (1998), adapted by Ribeiro e Menezes (2000) quoted by Nata (2011).

The MJT aims to assess moral competence and to act in accordance with moral principles. The MJT results in a standardized continuum ranging from 1 (the lowest result) to 100 (the highest result), which particularly expresses the coherence of the respondents in valuing identically the arguments against and the arguments in favour of the position they stand by, which are equal with regard to moral complexity. This questionnaire presents the respondents with two short stories (workers' and doctors' dilemmas), in relation to which the moral arguments against and in favour of the protagonists' actions are presented, arguments that have different levels of moral complexity. First, respondents must decide whether they are against or in favour of these actions, and then give their degree of agreement with the arguments against and in favour of them. Based on the subjects' answers, an index of moral competence is calculated (Nata, 2011).

Regardless of whether the respondent is against or in favour of the skills of the workers or the doctor, the important thing is to equally value the argument in favour and counter argument in each stage of development (Nata, 2011). According to the same author, the smaller the difference between the argument against and the argument in favour of a particular stage, the greater the result of the respondent. In short, the differentiation between the stages is used only to evaluate the consistency between the pairs of items, meaning that the absolute value of the answers does not matter much, since the respondent will have the same score as long as he answers the same value for the item against and the item in favour. That is, a person who answers +4 in both items (against and in favour) will have the same result as the person who answered +1 in both items, which led Nata, in 2011, to assign different weights to the different stages of complexity, while emphasizing the congruence of the answers and the absolute value of the answers. Thus, a person who answers +4 on both items related to stage 6 will have a higher result than a person who responds +1 to the same items, which does not happen for the same case if this difference occurs in items in stage 1. That is, as the person values more the arguments against and in favour of the more developed stages, the greater the final result will be (Nata, 2011).

When applying the MJT, respondents must first decide whether they are against or in favour of these actions, and then assign their degree of agreement to the arguments against and in favour of them. Based on participants' answers, a Morale Competency Index - INDEX was calculated.

Since the dimensions found differ in number of items, which does not allow the comparison between them, it was chosen to proceed with their statistical transformation, in order to have the same common denominator. Thus, the formula $((\text{gross score} - \text{possible minimum value}) / \text{amplitude}) \times 100$ was used for this purpose. Hence, the two dimensions obtain a score that ranges from 0 to 100%, and its reading must be done in percentage values.

Procedures

The study complied with the standards of good conduct while carrying out the research, with the aim of safeguarding participants' rights and freedom, as well as respect for ethical principles. For this purpose, it obtained a favorable opinion from the Ethics Committee of the School of Health of the IPV and authorization to collect data. The application of the Questionnaire was authorized and the participants signed the Informed Consent form. The statistical treatment was processed through the SPSS program (Statistical Package for the Social Sciences) version 21.0 (2013) for Windows.

FINDINGS

Attending training in Citizenship, Morale, Bioethics/Ethics, Law and Values, prevails in the majority of the sample. There is a predominance of students (67.0%), attending training courses, especially those who partook in 40 or more hours of training. The most relevant contexts of receiving training were the undergraduate courses (82.6%), basic education (42.0%) and secondary level education (32.9%) and family (26.0%) ($X^2 = 4,742$; $p=0.029$). The percentage values of students who had attended training in the aforementioned areas were: 96.1% in values, 96.1% in law; 84.8% in citizenship; 59.3% in ethics; and 16.9% in bioethics/ethics. The average number of training hours was 31.44 hours (± 25.56 hours), ranging from a minimum of 1 hour to a maximum of 150 hours.

Moral Competence

The statistics regarding the actual scores of the moral competences allow to conclude that, for the Moral Reasoning - C-INDEX, a minimum of 0.00 and a maximum of 45.74 was registered, being the average of 13.21

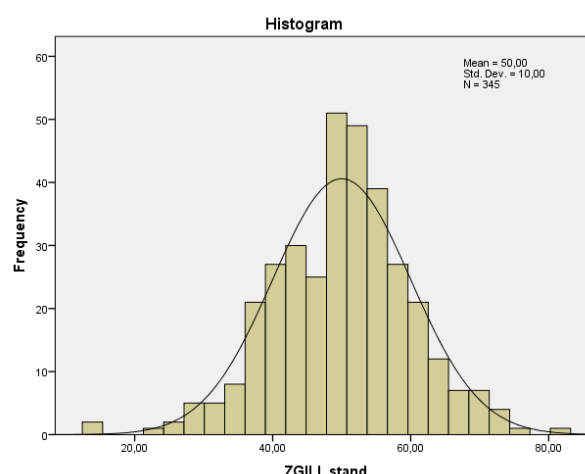
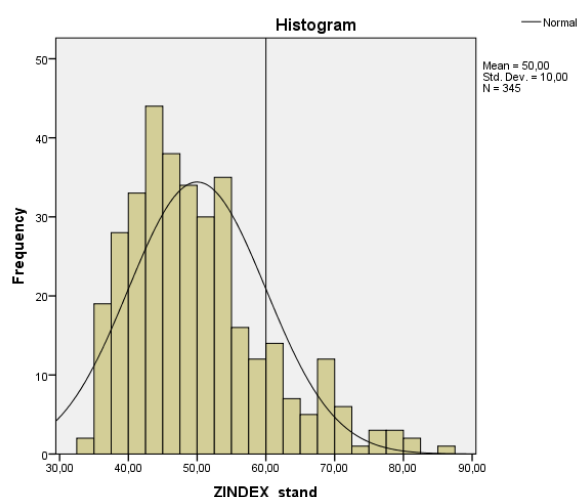
(± 8.778). In relation to the Moral Judgment - GILI (MJT), a minimum of -68.00 and a maximum of 45.00 was obtained, with a mean of -6.76 (± 16.955). (See Table 1).

The statistics on the percentages of moral competence indicate that, for Moral Reasoning - C-INDEX, a minimum of 34.95 and a maximum of 87.06 was obtained, with a mean of 50.00 (± 10.000). Regarding the Moral Judgment - GILI (MJT), a minimum of 13.89 and a maximum of 80.53 was obtained, with a mean of 50.00 (± 10.000). (See Table 1).

Table 1: Statistics on reasoning and moral judgment

	N	Min	Max	Mean	SD	Sk/error	Ku/error
Real Scores Concerning Moral Reasoning and Judgment							
Moral Reasoning - C-INDEX	345	0,00	45,74	13,21	8,778	7,37	2,73
Moral Judgment - GILI (MJT)	345	-68,00	45,00	-6,76	16,955	-1,38	2,49
Percentage values regarding moral reasoning and judgment							
Moral Reasoning - C-INDEX	345	34,95	87,06	50,00	10,000	7,37	2,73
Moral Judgment - GILI (MJT)	345	13,89	80,53	50,00	10,000	-1,38	2,49

The graphs concerning the frequency distribution of the final scores resulting from the application of both calculation methods.



Graphs 1 and 2 - Histograms of frequency distribution of the scores regarding Reasoning - C INDEX and Moral Judgment - GILI (MJT)

Levels of Moral Reasoning - C-INDEX according to socio-demographic and academic variables

It is verified that 75.0% of the students show adequate moral reasoning, being that in 50.1% they show an average moral reasoning and in 24.9% there is a good moral reasoning. However, 24.9% of students demonstrate inadequate moral reasoning. Female students showed higher percentages at all levels of moral reasoning, especially good moral reasoning (83.7%), as opposed to the 80.2% of students with inadequate moral reasoning (see Table 2).

The youngest students showed more positive moral reasoning (74.2%), 37.0% with an average moral reasoning and 37.2% with a good moral reasoning. Students aged 20-21 demonstrate mostly good moral reasoning (36.0%), contrary to the majority of older students whose score revealed inadequate moral reasoning (33.7%).

To what concerns moral reasoning according to the year of the course attended, the results indicate that in the inadequate moral reasoning, the 2nd year students (33.7%) stand out, followed by those who attend the 1st year (25.6%). At the level of average moral reasoning, the highest percentage corresponds to the students of the 2nd year (31.2%), as well as those who are in the 4th year (29.5%). Moral reasoning is found to be good for students in the 2nd and 4th year, with the same percentage value (29.1%, respectively) (see Table 2).

Apparently, it is the students who refer to have attended training in the scope of Citizenship, Moral, Bioethics/ethics, Law and Values that reveal, for the most part, average moral reasoning (70.5%), followed by those who have good moral reasoning (67.4%), and 59.3% showing inadequate moral reasoning. Of the 136 students who reported having attended training, and about an inadequate moral reasoning, it was found that students with more hours of training (40.2%) prevailed, whereas in the average moral reasoning students with 20-38 hours of training (40.3%) predominated, and in good moral reasoning, the predominance of students with fewer hours of training (48.6%), with statistically significant differences ($X^2=11,987$; $p=0.017$) (see Table 2).

Table 2: Moral Reasoning - C-INDEX according to socio-demographic and academic variables

Moral Reasoning C-INDEX	Inadequate moral reasoning		Average moral reasoning		Good moral reasoning		Total		Residuals			X ²	p
Variables	n (86)	% (24.9)	n (173)	% (50.1)	n (86)	% (24.9)	n (345)	% (100.0)	1	2	3		
Gender													
Male	17	19,8	37	21,4	14	16,3	68	19,7	,0	,8	-,9	0,947	0,623
Female	69	80,2	136	78,6	72	83,7	277	80,3	,0	-,8	,9		
Age													
<= 19 years old	31	36,0	64	37,0	32	37,2	127	36,8	-,2	,1	,1	1,155	0,885
20-21 years old	26	30,2	57	32,9	31	36,0	114	33,0	-,6	,0	,7		
>= 22 years old	29	33,7	52	30,1	23	26,7	104	30,1	,8	,0	-,8		
Course year													
1 st year	22	25,6	42	24,3	21	24,4	85	24,6	,2	-,2	-,1	1,513	0,959
2 nd year	29	33,7	54	31,2	25	29,1	108	31,3	,6	,0	-,5		
3 rd year	15	17,4	26	15,0	15	17,4	56	16,2	,4	-,6	,4		
4 th year	40	23,3	51	29,5	25	29,1	96	27,8	-1,1	,7	,3		
Training													
No	35	40,7	51	29,5	28	32,6	114	33,0	1,7	-1,4	-,1	3,280	0,194
Yes	51	59,3	122	70,5	58	67,4	231	67,0	-1,7	1,4	,1		
N. of hours of training	n (39)	% (28.7)	n (62)	% (45.6)	n (35)	% (25.7)	n (136)	% (100.0)	-	-	-		
<= 19 hours	12	30,8	15	24,2	17	48,6	44	32,4	-,3	-1,9	2,4	11,987	0,017
20-38 hours	9	23,1	25	40,3	4	11,4	38	27,9	-,8	2,9	-2,5		
>= 40 hours	18	46,2	22	35,5	14	40,0	54	39,7	1,0	-,9	,0		

Levels of Moral Judgment - GILI (MJT) according to sociodemographic and academic variables

It is observed that 75.5% of students have adequate moral judgment, being 50.1% average and 25.5% good. However, 24.3% of students show an inadequate moral judgment.

It is found that the female students have the highest percentages in the various levels of moral judgment, especially those who display an inadequate moral judgment (81.0%), followed by those with good moral judgment (80.7%).

The highest percentage in terms of inadequate moral judgment relates to students in the age group of 20-21 years (36.9%), being very close to the youngest students with 35.7%. As for average moral judgment, the most significant value is that of the youngest students (36.4%), followed by the older students (32.9%). Regarding

good moral judgment, the youngest students (38.6%) have a higher percentage, followed by 34.1% of the students aged 20-21 years (see Table 3).

In relation to moral judgment according to the year of the course, it was found that the students of the 4th year (33.3%) and the 2nd year (32.1%) showed the most inadequate moral judgment. Students in the 1st year (28.3%) and those in the 2nd year (28.9%) excel in the group of students with adequate moral judgment. In terms of good moral judgment, the highest percentage values go to students in the 2nd year (35.2%) and those in the 4th year (26.1%) (See Table 3).

With regard to moral judgment as a result of training in Citizenship, Morality, Bioethics/ethics, Law and Values, the most significant value belongs to the inadequate moral judgment of the students who confirm that they attended the aforementioned training. In terms of representativeness, students with good moral judgment (66.9%) come next, and students with average moral judgment (66.5%) follow very closely. Of the 136 students who attended the aforementioned training, and with respect to inadequate moral judgment, students with fewer hours of training (50.0%) prevail, while the majority of students with more hours of training (52.5%) show good moral judgment (cf. Table 3).

Table 3: Moral Judgment - GILI (MJT) according to sociodemographic and academic variables

Moral Judgment - GILI (MJT)	Inadequate moral judgment		Average moral judgment		Good moral judgment		Total		Residuals			X ²	p
	n (84)	% (24.3)	n (173)	% (50.1)	n (88)	% (25.5)	n (345)	% (100.0)	1	2	3		
Gender													
Male	16	19,0	35	20,2	17	19,3	68	19,7	-,2	,2	-,1	0,062	0,970
Female	68	81,0	138	79,8	71	80,7	277	80,3	,2	-,2	,1		
Age													
<= 19 years old	30	35,7	63	36,4	34	38,6	127	36,8	-,2	-,2	,4	1,731	0,785
20-21 years old	21	36,9	53	30,6	30	34,1	114	33,0	,9	-1,0	,2		
>= 22 years old	23	27,4	57	32,9	24	27,3	104	30,1	-,6	1,1	-,7		
Course year													
1 st year	14	16,7	49	28,3	22	25,0	85	24,6	-1,9	1,6	,1	5,638	0,465
2 nd year	27	32,1	50	28,9	31	35,2	108	31,3	,2	-1,0	,9		
3 rd year	15	17,9	29	16,8	12	13,6	56	16,2	,5	,3	-,8		
4 th year	28	33,3	45	26,0	23	26,1	96	27,8	1,3	-,8	-,4		
Training													
No	26	31,0	58	33,5	30	34,1	114	33,0	-,5	,2	,2	0,228	0,892
Yes	28	69,0	115	66,5	58	65,9	321	67,0	,5	-,2	-,2		
N. of hours of training	n (36)	% (26.5)	n (60)	% (44.1)	n (40)	% (29.4)	n (136)	% (100.0)					
<= 19 hours	18	50,0	17	28,3	9	22,5	44	32,4	2,6	-,9	-1,6	9,110	0,058
20-38 hours	9	25,0	19	31,7	10	25,0	38	27,9	-,5	,9	-,5		
>= 40 hours	9	25,0	24	40,0	21	52,5	54	39,7	-2,1	,1	2,0		

Moral Reasoning - C-INDEX and Moral Judgment - GILI (MJT) versus sociodemographic and academic variables in higher education students

The results related to gender show that male students have the highest scores in the Moral Judgment - GILI (MJT), (M=50.54), while the female students score more in Moral Reasoning - C-INDEX, (M=50.25). In other words, they present a better level of moral reasoning. However, when comparing the groups, it is verified that there are no statistical differences, suggesting that gender does not interfere in the participants' moral competence (see Table 4).

Table 4: T-test for difference of means of moral competences according to gender

Gender	Male	Female	t	p
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Moral Competences	Mean		Sd		Mean		Sd	
Moral Reasoning - C INDEX	48,97	8,528			50,25	10,327	-0,941	0,347
Moral Judgment - GILI (MJT)	50,54	9,820			49,86	10,056	0,503	0,616

Age-related results show that younger students (≤ 19 years) and older students (≥ 22 years) show higher values of moral judgment (GILI-MJT), while students in the age group of 20-21 years scored more in the Moral Reasoning - C-INDEX, revealing a better moral reasoning. Still, there was no statistical relevance, and it was therefore inferred that age groups do not interfere in students' moral competence (See Table 5).

Table 5: ANOVA Test between Age and the C-INDEX - Moral Reasoning and Moral Judgment - GILI (MJT)

Age	≤ 19 years old		20-21 years old		≥ 22 years old		F	p
	Mean	Sd	Mean	Sd	Mean	Sd		
Moral Reasoning - C INDEX	49,92	9,344	50,67	9,955	49,34	10,838	0,489	0,614
Moral Judgment - GILI (MJT)	50,37	10,420	49,31	10,634	50,29	8,735	0,396	0,673

The results referring to the averages of training participation in Citizenship, Moral, Bioethics/Ethics, Law and Values and moral competence, indicate that students with better moral judgment (GILI - MJT) are those who did not participate in the aforementioned training, while those who have already participated in this type of training present greater moral reasoning (C-INDEX). Nevertheless, there are no statistically significant differences between groups. (See Table 6).

Table 6: T-test for mean differences of the Reasoning - C-INDEX and Moral Judgment - GILI (MJT) due to training on Citizenship, Morale, Bioethics/Ethics, Law and Values

Training	Training No		Training Yes		t	p
	Mean	Sd	Mean	Sd		
Moral Reasoning - C INDEX	49,01	9,457	50,12	9,455	1,290	0,198
Moral Judgment - GILI (MJT)	50,48	10,241	49,93	10,277	0,163	0,870

The analysis of the results regarding the number of hours of training in Citizenship, Morale, Bioethics/Ethics, Law and Values indicates that students with a lower number of training hours (≤ 19 hours) show a higher mean value in Moral Reasoning - C -INDEX (M=53.64), followed by those with more training time (20-38 hours) who demonstrate more moral reasoning. In relation to the Moral Judgment GILI - (MJT), the highest value relates to the group of students with 23-38 hours of training in the area, seconded by those who have more hours of training. This means that these are the participants who demonstrate more capacity of moral judgment in the face of the dilemmas presented. There is no statistical relevance when comparing the study groups (see Table 7).

Table 7: ANOVA test between Moral Reasoning - C-INDEX and Moral Judgment - GILI (MJT) and the number of hours of training

N. of hours of training	≤ 19 hours		20-38 hours		≥ 40 hours		F	p
	Mean	Sd	Mean	Sd	Mean	Sd		
Moral Reasoning - C - INDEX	53,64	12,950	47,80	6,753	49,96	12,362	2,836	0,062
Moral Judgment - GILI (MJT)	47,62	12,469	50,82	9,748	52,01	9,058	2,212	0,113

Inferential Analysis: Moral Reasoning - C-INDEX and Moral Judgment - GILI (MJT)

Pearson's bivariate correlation between moral reasoning (C-INDEX) and moral judgment (GILI-MJT) is weak and inversely proportional ($r=-0.265$; $p=0.000$), and reflects the differences between the two calculation methods, showing that when one increases the other decreases.

On the other hand, **Model 1**, a translator of multivariate multiple regression, included the reasoning and the moral judgment as latent variables, and age, the practices of active citizenship, the ethical approach, gender and the attendance of training as manifested variables. These last two variables were transformed into mute variables (dummy variable).

The trajectories, critical ratios and beta coefficients, show that only age presents statistical significance ($p=0.033$) for moral reasoning and active citizenship practices a minor significance ($p=0.057$) for moral judgment. (See Table 8).

Table 8: Trajectories, critical ratios and beta coefficients of multivariate multiple regression

Trajectories			Estimates	Standardized Error	Critical Ratio	p	β
Moral Reasoning	<---	Gender	-,682	1,379	-,495	,621	-,027
Moral Reasoning	<---	Training	1,969	1,177	1,673	,094	,093
Moral Reasoning	<---	Attendance					
Moral Reasoning	<---	Citizenship Practices	-,057	,413	-,139	,890	-,007
Moral Reasoning	<---	Age	-,378	,178	-2,127	,033	-,118
Moral Reasoning	<---	Ethical Approach	,040	,061	,666	,506	,036
Moral Reasoning	<---	Age	,130	,179	,730	,466	,041
Moral Reasoning	<---	Gender	,211	1,385	,153	,879	,008
Moral Reasoning	<---	Training					
Moral Reasoning	<---	Attendance	-,204	1,182	-,173	,863	-,010
Moral Reasoning	<---	Citizenship Practices	-,790	,414	-1,906	,057	-,103
Moral Reasoning	<---	Ethical Approach	,027	,061	,440	,660	,024

Graphical outputs of the trajectories between the manifest variables and the latent variables are shown in figure 1. The manifest variables explain only 2% of the variability of moral reasoning and 1% of moral judgment. It is also inferred that age presents a predictive weight of $\beta=-0.12$ for moral reasoning and citizenship practices $\beta=-0.10$ for moral judgment, both varying inversely. That is, the younger participants have the best moral reasoning. On the other hand, rather than anticipated, the participants with the worst practices of citizenship are those who manifest the most adequate moral judgment.

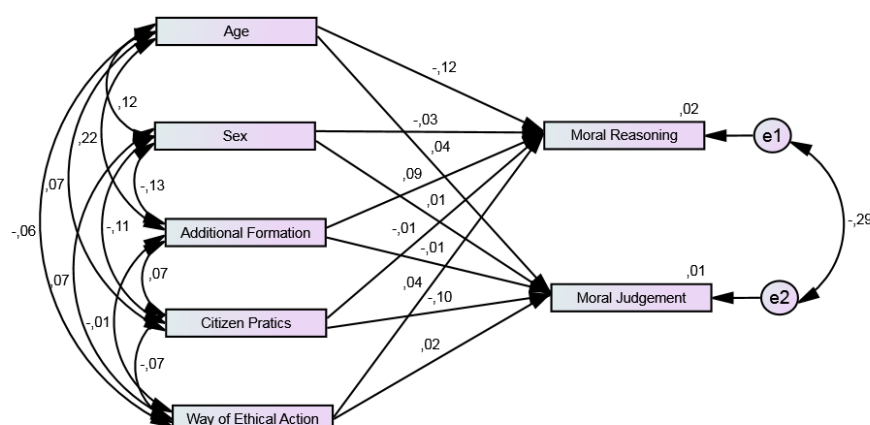


Figure 1: Graphical output of the relationship between the manifest and latent variables

The refinement of the model considering only the variables that presented statistical significance was translated into the final model in which age presents a weak predictive weight ($\beta=-0.09$), and not significant ($p=0.070$) of the moral reasoning. The practices of active citizenship revealed low predictive weight ($\beta=-0.10$), but significant ($p=0.042$) in relation to moral judgment, becoming its predictor. (See Table 9).

According to the beta coefficients, it was found that the Moral Reasoning - C-INDEX has an inverse relationship with age, indicating that younger participants show a better moral reasoning ($\beta=-0.12$; $p = 0.033$). After a refined model with a more significant variable (age), it was no longer seen as a predictor due to the weak predictive weight ($\beta=-0.092$) associated and a statistically non-significant value ($p=0.070$). In the case of Moral Judgment - GILI (MJT), none of the overt variables revealed a predictive character (p values are not statistically significant).

Table 9: Trajectories, critical ratios and beta coefficients of the refined model

Trajectories	Estimates	Standardized Error	Critical Ratio	p	β
Moral Judgment <--- Citizen Practices	-,799	,393	-2,031	,042	-,103
Moral Reasoning <--- Age	-,298	,164	-1,811	,070	-,092

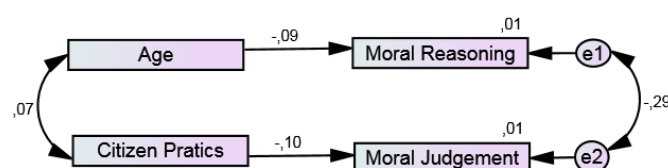


Figure 2: Graphical output of the relationship between age and moral reasoning and between the practice of citizenship and moral judgment

DISCUSSION

The Moral Reasoning - C-INDEX and Moral Judgment - GILI (MJT), established a weak but highly significant correlation (Pearson's bivariate correlation $r=-0.265$; $p=0.000$), which reflects the differences between the two calculation methods (when one increases the other decreases). In this respect, Nata (2011, p.238) reports that after performing a Spearman bivariate correlation between the same variables Moral Reasoning - C-INDEX and

Moral Judgment - GILI (MJT), it was possible to determine the existence of a very high and significant correlation ($\rho=0.657$; $p < 0.001$), also reflecting the differences between the two calculation methods, that is, when one increases the other also increases. In other words, the results of this study do not corroborate the results of Nata (2011) given that in the present research, individuals with better Moral Reasoning - C-INDEX present worse Moral Judgment - GILI (MJT), or vice versa. Whereas in the study by Nata (2011), individuals with better moral reasoning - C-INDEX, also showed a better moral judgment - GILI (MJT), or vice versa.

In a study by Siqueira (2005), which aimed to evaluate moral judgment among children and young adults in Brazil, aged between 6 and 21, when faced with moral dilemmas, the author found that younger children tended to tell the truth more often than older children and young adults, even though there was no significant relationship between the age group and the likelihood of a student telling the truth. This fact supports our results when we verify that age, as a latent variable, is not a predictor of Moral Judgment - GILI (MJT), ($\beta=0.041$; $p=0.466$). Through the beta coefficient, it was found that the Moral Reasoning - C-INDEX - establishes an inverse relationship with age, indicating that younger participants show better moral reasoning ($\beta=-0.12$; $p=0.033$).

The implications of our findings for teaching, it is suggested to resort to dilemma discussions that encompass the methodology of Kohlberg's dilemmas, whose inquiries have been widely disseminated, serving as a training and research tool for the construction of instruments of measurement of moral judgment. In order to do so, students may be asked to respond to hypothetical moral dilemmas, leading them to make a judgment about what should be done in the presented situation, legitimizing their answers. The use of Kolberg's dilemmas at increasingly precocious ages provides essential guidelines that will decisively contribute to a better/more adjusted knowledge of the "here" and "now" of today's society, triggering the most conscious, thoughtful and reflective of being. This activity may also help students reflect on their moral competence, an indispensable factor in making students more aware of what is going on, guided by ethics, morals and values.

As implications for the practice of future health professionals, it should be emphasized that health education sessions constitute one of the essential pillars for the development of health literacy that favours the maintenance and promotion of a good overall health status of the individual and, in this sense, it becomes urgent that this transmission of knowledge be anchored in an effective education of values. It is up to these professionals to advise and model the decision making, generating practice in the concern for the preservation of the values, beliefs and culture of the person who cares, as a principle of their conduct. Hence, it is the school's concern to provide the "tools" that stimulate the proactivity and the assertive moral decision making on the part of the individuals, enabling them, according to the Kantian presupposition, so that actions are practiced, not by a sensation, but by duty (Barata, 2008, p.7). For the philosopher, an action practiced by duty has its moral value, not in the decision that it is intended to achieve, but in the principle, that determines it. Thus, action must be subordinated to absolute respect for the form of law that Kant qualifies as universal law of actions in general, called the categorical imperative. The morality of action is therefore reintegrated into a morality of intention and only through this mean can it be ascertained whether a will was good and whether it was actually ethically acted upon.

CONCLUSIONS

Ethics and morality are important ontological compasses of human action, because they support the personal fulfilment of each citizen. The question of moral and ethical action implies a reflection on the practices of active citizenship, insofar as it leads to the potential and natural propensity of men for civil, social, political and doctrinal life in community. Thus, to study this problem, an observational study was developed in a sample of 345 Portuguese students from the health field, mostly female, with a mean age of 20.82 years. The objective of this research was to identify the moral competencies prevalent in higher education students, and 75.0% and 75.5% of the students showed adequate reasoning and moral judgment, respectively.

In a society of constant transformation in which one lives a permanent demand of *Having*, the school is a pedagogical organization whose role seems categorical in the life and in the learning of its students. Therefore,

its main purpose is to develop moral competences, preparing the students for the challenges of *Being* that the contemporary world currently poses to them.

In view of the results obtained, it is considered important that higher education schools promote further training in order to serve as an identification element, which should help students to engage in more sustained ethical and moral practices so that these are "fair" and responsible, and make sound decisions for the benefit of the community. Therefore, a cutting-edge education emerges as a frontier, with community experiences, presentation of cases and dilemma discussions, enabling students to develop their cognitive, affective and moral maturity. In this way, students will be prepared for the challenges of contemporary societies, which include, among others, promoting a culture of active citizenship, inclusion and personal/social well-being in the individual and collective dimensions.

There is a lack of knowledge regarding studies on reasoning and moral judgment, as well as research about them in relation to students of higher education. In this sense, it is necessary to develop new studies in the field with the purpose of ascertaining the existence or non-existence of elements and/or factors that may contribute to the existence of moral competences that favour a way of being, more supported by ethical-moral principles and invigorating the common good of the surrounding community. It would also be pertinent to determine the existence of social determinants that promote greater or lesser ease in the development of adequate reasoning and moral judgment.

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RECONCILING THE TERRIBLE TWINS: INVESTIGATING THE RELATIONSHIP OF LITERACY AND NUMERACY IN PRIMARY CLASSROOMS

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ABSTRACT

Literacy and numeracy are frequently found bound together in educational policies, statements, and manifestos. They are certainly perceived as the most important of subjects in primary school classrooms, claiming the lion's share of the teaching and learning time and being the focus of much testing, standardized and otherwise. While historically, many numeracy practices in ancient times led literacy practices, the twentieth century focus was heavily biased in favour of developing literacy practices with a somewhat secondary focus on numeracy. It appears that currently, the rapid and continual onslaught of information has created a situation in which numeracy has been hailed as the literacy for the 21st century, with an emphasis on critical numeracy skills for social justice, democracy, and global citizenship. This paper suggests a perspective which places considerable value on investigating the ways in which these two currently separate symbol systems can be explored as joint study in primary classrooms in ways in which critical thinking as cognitive capacities can be enhanced. This exploration takes as established the literacy components of numeracy competencies and instead promotes the numeracy components of literacy development using a frame work of analysing text at micro, meso, and macro levels. This framework considers the interpolated aspects of structure, sequence and sense that dominate English literacy practices and further extrapolate these and identify the critical mathematical concepts upon which these are based. Strategies for developing critical thinking skills which include authentically engaging with both symbol systems simultaneously are suggested.

INTRODUCTION

In the twentieth century, an educated citizen was one who was able to read and write. Whilst the twenty first century still requires these language skills, a new age has brought with it a demand for other literacies to be explored and mastered. The single most important of these is the capacity to use mathematical knowledge and skills in the context of everyday living, problem solving and citizenship. These competencies are known as numeracy skills or the capacities for applying quantitative literacy skills. Whilst this has been recognized in many policies, curriculum documents and documents that identify essential skills for 21st century education, the overwhelming focus has remained on the development of language skills and its integration in to the other areas of learning in primary schooling. This perspective not only underlines the importance of numeracy competencies for contemporary living, it often creates classroom contexts where students may be expected to have skills and capacities in one literacy but be incompetent in the other. The notion of having a 'maths brain' (Boaler, 2016) or a language preference is not only totally unsubstantiated, it denies the students and their teachers opportunities to investigate the interrelationships of these two basic capacities, to identify the reliance of one upon the other and to create a mindset which explores critical thinking (Cotterell, 2005; R. Paul & Elder, 2008) with regard to both these competencies. This writing explores the relationship of numeracy skills to language literacy as complimentary to the contribution of language to mathematical conceptual understanding (Sellars, 2017).

FINDING THE NUMERACY IN LITERACY

From the very beginning of learning to read and write in classroom contexts, students are encouraged to use their understanding of position to support written language activities such as reading and writing. The placement of letters in words, which extends to using plurals, verb declensions, prefixes and suffixes are very simple examples of using a sense of position to establish conventional spelling in ways that are commonly understood by others in this form of communication. This may be understood as working with numeracy at the micro level of developing words that are conventional in the students' reading and writing attempts. More complex work can be identified in examining and investigating the initial, medial and final sounds in words and determining patterns. These patterns can assist with the decoding and encoding of the focus vocabulary when it is found in diverse contexts, have multiple meanings and various language functions. Common ways in which pattern identification supports language development may be identified easily in the ways in which words with random meaning are often clustered together because of their structure. The identification of such words at a micro level involves students engaging their skills of repeating patterns, and at times, their understanding of their growing patterns. These numeracy strategies are particularly important for students' success in programs which emphasize formal literacy activities based on programs which have phonemic awareness as their foundational approach. Whilst there are opportunities to use mathematical concepts and strategies in 'whole language' approaches to language literacy,

they may not appear as obvious as those which are presented in the alternative pedagogies, however, they are present and combining the mathematical approach within the language learning context is still beneficial in breaking down the disciplinary boundaries and providing students with skill sets that are fluid and transferable.

A sense of space and position also play a major role at the meso level. Developing statements, exclamations and questions as isolated components of learning requires a complex understanding of the placement and function of the words used to develop the structure of each of these. A campaign slogan to support moderation in alcohol intake, for example, can easily be misconstrued by the placement of the symbolic conventions that are used in language learning as clues to the meaning of the statement. The replacement of a simple comma or different emphasis on the enunciation of the message can send a message which is far from which is intended. '*Dry July, pass on the glass*' could easily be interpreted as '*Dry July- pass on the glass*'. Much of the early years' learning and understanding of symbolic representation is learned through the interaction with mathematical symbolic structures. This is further complicated as students progress to more complex symbolic representations and the logic behind the order of operations in mathematics and learn to use quotation marks, for example in direct and indirect speech and in the written text that describes a two -person conversation. The meso level not only lends itself to the consideration of the interpretation of the symbolic representation of punctuation symbols, the emphasis placed on words in the structure and the accompanying characteristics in word placement and identifying symbols that characterize each of these structures, it also lends itself to an overview of sequence and sense, which are the two remaining characteristics of the overall framework with which teachers can support their students in a mathematical approach to language literacy by utilizing the students' numeracy competencies.

The notion of sequencing is based on the mathematical understanding of ordinal number and '*place*', each in relation to each other. The understanding of sequencing is critical to the development of statements, questions or exclamations which come together to present an idea, a narrative, a recount, a procedure or any other product of literacy learning. It is also important at a very basic level to establish the understanding of sets of sentences, questions or an interpolation of these and exclamations to provide writing and reading texts which are useful communications and are able to be understood by the audiences for such work. In its most sophisticated role, sequencing becomes a timeline. A timeline is required in simple and complex writing and reading and, while it may not always require the precision of calibration and scale as it does in historical texts and some informative writing, is a necessary component for narrative, recount, procedure and other reading and writing genre that seek to inform, entertain, instruct, retell and record. These capacities are not only necessary at the meso level but also at the macro level where making *sense* or making meaning are important aspects of reading and writing. The mathematical foundations of debate, position statements and analysis are heavily reliant on various forms of logical reasoning which are basic mathematical skills pertaining to finding patterns, function and relationships. These logical capacities are not confined to simple deductive logic, but also include capacities relating to inductive reasoning, adaptive and abductive reasoning. In this manner, the development of critical numeracy is able to complement the development of critical literacy and the overall perspective of logical examination of diverse perspectives, an appreciation of distinct views and their foundations and the capacity to identify the consequences of what is said and unsaid, epistemologies which are respected and those which are undervalued, those which are overstated and privileged and those which are neglected or ignored.

DEVELOPING A FRAMEWORK

For writing and reading skills to be fully understood as numeracy related competencies, it is important to have a frame of reference within which to place and make connections to learning in these disciplines, which are themselves frequently observed as distanced and unrelated, but which are important to understand as complimentary means of holistic learning. Table 1 illustrates the way in which these disciplines are effective as complimentary to the understanding of each other in the context of teaching language literacy skills.

Table 1

Levels of investigation.	Structure	Sequence	Sense
Micro	Word patterns Word structures Position in suffixes, prefixes Structures and patterning in spelling and decoding	Putting together word structures to create conventional sequence of questions, exclamations and statements	Ensuring common meaning and understanding in terms of logic and reasoning, making meaning
Meso	Punctuation structures Symbolic representation of symbolic punctuation,	Identifying communication structures which allow	Paragraphing, dialogue in its various written forms of direct speech,

	placement and conventions	conventional communication in reading and writing.	indirect speech and the conventions of writing and interpreting the structure of two- person conversations which do not necessary always identify the speaker explicitly
Macro	Developing statements that reflect the structures and conventionalities of diverse means of communication, including verb tense, participles, singular and plural nouns, adverbs and adjectives, including clauses which are functional in diverse ways.	Developing timelines, sequence, elapsed time and place, position and order of events that create the focus of the writing and support its purpose and conventions.	Developing models that exemplify the purpose of the writing or reading. Finding logical patterns in the ways in which structure supports purpose, clarity and logical development of the reading and writing and identifies it with a specific writing intention,, genre or text type.

By using frameworks similar to this example, students are able to use their mathematical knowledge in explicit ways to engage productively with increasingly complex language literacy and focus on the reasoning and logic skills which underpin criticality. Despite the notion that critical thinking is initially subject specific (R Paul, 2005), the exploration of the linkages, connections, patterns and relationships across these two learning domains not only facilitates the development of skills which are not content specific, but necessitates the types of thinking and reasoning that are pertinent to the informal learning experienced in everyday life in addition to the deeper understanding of literacy and numeracy in formal classroom contexts (Sellars, 2008) . Any pedagogical strategies that support the integration of classroom tasks aimed at students exploring how their mathematical knowledge is used as numeracy competencies to improve their understanding of language literacy has the potential to improve students thinking skills in relation to becoming critical thinkers in both subject domains. The implementation of integrated strategies is especially useful in models which are developed to explore the ways in which students use and interact with learning in these domains to develop critical literacy (Freebody & Luke, 2003) and critical numeracy (Watson, 2008). The use of mathematical visuals (Siemon et al., 2013) to explore literacy ideas and develop problem solving strategies also provides opportunities for integrated conceptual development (Afamasaga-Fuata'i, 2008)

CONCLUSION

Literacy and numeracy are frequently considered to be the most important school subjects, especially in education systems which are dominated by neoliberal policy and characteristics. Together, they demand the lion's share of the allocated curriculum time during the school day. By investigating and identifying how these subjects support and relate to one another in obvious and complex ways, students are able to develop deeper understanding of the roles that these pivotal learning areas play in developing thinking skills in both these domains and in others across the curriculum.

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Literacy and numeracy are frequently found bound together in educational policies, statements, and manifestos. They are certainly perceived as the most important of subjects in primary school classrooms, claiming the lion's share of the teaching and learning time and being the focus of much testing, standardized and otherwise. While historically, many numeracy practices in ancient times led literacy practices, the twentieth century focus was heavily biased in favour of developing literacy practices with a somewhat secondary focus on numeracy. It appears that currently, the rapid and continual onslaught of information has created a situation in which numeracy has been hailed as the literacy for the 21st century, with an emphasis on critical numeracy skills for social justice, democracy, and global citizenship. This paper suggests a perspective which places considerable value on investigating the ways in which these two currently separate symbol systems can be explored as joint study in primary classrooms in ways in which critical thinking as cognitive capacities can be enhanced. This exploration takes as established the literacy components of numeracy competencies and instead promotes the numeracy components of literacy development using a frame work of analysing text at micro, meso, and macro levels. This framework considers the interpolated aspects of structure, sequence and sense that dominate English literacy practices and further extrapolate these and identify the critical mathematical concepts upon which these are based. Strategies for developing critical thinking skills which include authentically engaging with both symbol systems simultaneously are suggested.

REDUCTION OF DYSORTOGRAPHIA IN PEOPLE WITH DOWN SYNDROME. PILOT STUDY FROM A LONGITUDINAL RESEARCH.

*Reduction of dysortographia in people with Down Syndrome.
Pilot study from a longitudinal research.*

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Background

This pilot study is part of a wider longitudinal research aimed to verifying the learning outcomes achieved and maintained over the years in students with Down Syndrome (DS). We present a first partial processing, examining the dysorthographia.

The sample it is composed by 15 people with DS (12 female and 3 male, from 12 year to 27 years old; $m=20,87$; $ds=4,74$), randomly selected from the whole champion that concern about one hundred participants. All the people of the examined champion have completed, the years, the same rehabilitation and cognitive program. The program started at the third/seventh month of life and lasted until the sixth years of life. The sperimental group, from the fifth and the seventh years of life, have done a special educative program to give a better preparation for primary school. This program includes competences of reading, writing and calculation.

The research wants to establish if the developed didactic and learning program has reached the attended result to reduce the dysorthographia. For the assessment we used a specific test for the evaluation of the dysorthographia in the general population of Italian student: DDE-2 (Sartori et al., 2007).

Method

The group has the followings characteristic: every one of them carried out an intense motor habilitation from the first period of life (from 3-7 months of life), a special educational and didactical activity in the period 3-7 years old, speech therapy, exercises of learning how to read and handwrite, and the use of instrument “Alfabetiere**”. We have been valued the DDE-2 results that measures the dysorthographia in general italian students population (in particular the part of the test concerning the competence in specifics tasks: Words, No Words and Sentences). We have compared the results with the sufficient performance recorded in the general population within the range of -0,6 ds, as expected from the diagnostic tool and we have individuated the actual level (primary or secondary school degree).

Results

This findings indicate also that in our pilot sample there isn't significant correlation with age, gender and level of QI, while the results obtained in the tests of writing show a results maintenance. It cannot be introduced any conclusion, given by the limitedness of the champion, but the preliminar study seems to confirm, that a specific job in precocious age (3 month – 7 years), on the motor abilities and on the scholastic abilities, contribute to the formation of the ability of learning and, therefore, facilitate the development of competences and their maintenance. In fact in our sample about 33% of people with DS attained the higher basic Italian scholastic level in Words, 60% in No-Words and 26% in Sentences, a good result considering that the average level of IQ sample was moderate ($m=48$; $ds= 6,59$ from 42 to 59).

Discussion

The person with DS that, continuously carry out the activity proposed, preserve the reached competences, also after different years without scholastic system. Analyzing this first dataset, we think that this method allows to reach a basic competence to develop a scholastic level able to improve ability in a dysorthographia context, respect to the general population. The children can to compose the word, letter by letter.

REFINING INCONSTANCY OF PRAYER AMONG UNIVERSITY STUDENTS BY USING DIGITAL VISUAL SCHEDULE

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ABSTRACT

Prayer is vital in every single life of Muslim. It is not only the first pillar of Islam after one accepting it as their main religion, but it also assists every Muslims to stay mindful of their faith and actions throughout the life. Its devotion is to put ourselves in touch with God. Despite prayer being so important, it is a worrying that many Muslims do not pray or fulfil the conditions of the prayer. In recent years, many university students who lose sight of the prayers because of too busy with their activities and assignment tasks. They also did not realise the importance of preserving prayer is an obligation that must be undertaken as a Muslim. As we enter the world of mobile technology, mobile learning has formed an outstanding outcome on the total education performance. Investigation of mobile learning, specifically on the digital visual schedule were conducted to fulfil the best approach on individual's enhancement of prayers, specifically among university students. The research objective is to investigate whether a digital visual schedule can improve their prayers consistency. Through this investigation, an evaluation can be made among respondents who utilise digital visual schedule to perform prayer and respondents who without using the prayer schedule.

Key words: Prayer, Muslims, Visual Schedule

INTRODUCTION

Prayer, or else known as As-Salah in Arabic is derived from the Arabic word meaning "connection". It is one amongst the pillar of Islam practised five times a day according to prayer cycle or raka'ats which varies depending on the type of prayer. It is compulsory for every Muslim whom has reach puberty to performs prayer. Prayer need to be established by every Muslim in home or with the Muslim community in order to benefit intended by God should be realised. However, keeping the prayer is a tough task if they are not cultivated and educated properly from the young age. According to Bidin, Baharuddin, and Mustari (2015) in their research that negligence of prayer among institutional of higher learning must be viewed as a national issue that needs unravelling as these students are the predecessor to their country. The main objective of this study is to examine the rate of improvement in prayer among students with the aid of digital visual schedule. In other words, whether by using digital visual schedule is the right approach to heighten the consistency in student's prayer. Moreover, if the digital visual schedule is upheld to assist and improve student's prayer, then it is appropriate to investigate the effectiveness of the digital visual schedule in keeping prayer in check (Jalaluddin, Bakeri, Nasir, Rani, & Kamaruzaman, 2016; N. M. Rani, Ramli, Legino, Azahari, & Kamaruzaman, 2016). This research study can be beneficial to university students and also to all Muslims globally, as it helps refining the consistency and the significance of performing prayer. Preliminary research was done to gain an overview of the university students status quo regarding their prayer. This was done by distributing questionnaire among university students. Then, a handful of samples were taken to be used for the further study that involves using the digital visual schedule itself.

Prayer

The Islamic definition of prayer is the name given to the formal prayer of Islam. The prayer is one of the compulsory rites of the religion, to be performed five times a day by every obedient adult Muslim and it is the second Pillar of Islam. It is a connection between the human beings and his creator Allah SWT. Prayer is the key to success in this world and in the hereafter. The five prayer consists of Al-Fajr (dawn, before sunrise), Al-Zuhr (midday, after the sun passes its highest), Al-Asr (late part of the afternoon), Al-Maghrib (just after sunset) and Al-Isha (between sunset and midnight). It is best to carry out each of five obligatory prayer as soon as the time has commenced, as it is not acceptable to delay the prayer without a realistic reason, and it must not be delayed beyond its permitted time. Before prayer can be performed, every human need to consummate a ritual ablution. It is performed by using a clean water or sand (tayammum) when water is unavailable. Furthermore, for prayer to be considered valid, ones must have the confidence

of the time of worship, facing the Mecca (Qibla), covering their awrah as well as clean and tidy. Allah SWT has spoken in His Glorious Book (Al-Quran) which mean, 'Successful indeed are the believers who are modest in their prayers' and in another verse, 'And who pay heed to their prayers. These are the successors who will inherit in Firdaus Paradise. They will abide therein.' (Al-Mu'minun, verse 1-2, 9-11).

Visual schedule

A visual schedule is a learning tool that is focused on visual aids. It is based on the sequential presentation of a series of tasks, clear and rationalised as well as simplified form of visual to simplify the schematic (Kamaruzaman & Azahari, 2014). As the name implies, a digital visual schedule is a visual schedule that is available digitally. It can help every person to understand the status quo, and anticipate the various events that will happen. It is relevant to note that, by using visual schedules, it be able to assist one aspect of their life. According to Stahmer et al. (2015) and N. M. Rani et al. (2016) visual schedules can utilise the individual's visual strengths and therefore provides a receptive communication system to increase understanding, helps the individual learn new things and also enhance their flexibility.

State of the art

Regarding the related research and literature, it is noted that there are many studies pertaining to prayer in Malaysia, but a small amount of them emphasis on the university students. According to a study by Yusoff, Zain, and Senik (2008) they mentioned the lack of emphasis in performing prayer affects student's personality and behaviour. In their initial phase of their study, they had asked random students about their prayer performance and consistency and the outcome were many of the students neglect their prayers. As prayer keep on being neglected, those who neglect it are exposing themselves to the threat of social problems which lingers around the society nowadays (Ahmad & Othman, 2017). There are reasons why prayer is compulsory for Muslims; a well-performed prayer helps in preventing wrongdoing from being done. That is why the negligence of prayer is dangerous. Jusoh and Suhardi (2004) in their research had found and categorised three types of students, dissented by their performance of prayer. The first type is the one who is committed to performing prayer. They concern and are aware of their prayer. Followed by the second one who rarely misses in performing prayer and if they miss it, it was not regularly. If they started to skip their prayers frequently, they would fall to the third type, the ones who are whether ignorant or thoughtless about performing prayer. Al-Krenawi and Graham (2000), Hassan, Abidin, Legino, Anwar, and Kamaruzaman (2015) as well as Amirebrahimi (2016), mentioned that these days, technology devices are something common in the society. Applying the usage of technology know how in assisting the improvement of prayer can be seen as an engaging approach to the university students as it fits with the current trend (N. Rani, Legino, Mudzafar, & Kamaruzaman, 2014). Amirebrahimi (2016) and N. M. Rani, Yusoff, and Kamaruzaman (2015) also suggest using tables and graphs to keep track of prayer daily and weekly. The timetable works as a reflection of efforts done by the person, where one can see their development and enhancement in performing prayers.

METHODOLOGY

As mentioned by Patton (2002), the qualitative approach has permitted scholars to stock up a sound understanding on the outcome of reality value. Qualitative approaches are naturalistic to the extent that the research takes place in real world setting and scholars does not attempt to manipulate the phenomenon of interest. The phenomenon of interest unfolds naturally. Creswell (2013) in his book stated to immerse oneself in naturally occurring complexity involves what qualitative methodologist. It is also relevant to note that the qualitative research can provide answers and illuminate issues underpinning the research topic. According to Richards (2014), "research method is a structure and strategy of the investigation, so conceived to enable obtaining answers to research questions or problems". In any research study, a research method is important to support the research operations to furnish determined information to the scholars. Hence, according to Anwar (2016), there is an exigency to recognise the ideal method which to drive this research streamline with the research findings. The research method is based on the behavioural and attitudinal way. For this reason, the qualitative method will be the appropriate approach in carrying out this research. This is due to understanding, exploring and evaluating the digital visual schedule in refining the inconsistency of prayer among the university students.

Survey

According to Hackos and Redish (1998), Kamaruzaman, Azahari, and Anwar (2012) as well as Maguire (2001), the survey approach is ways of gathering information from individuals regarding their perceptions, behaviours, characteristics, thoughts, or feelings. Beside is the right and effective process to collect the amount of data in a short

period of time from a large sample. There are two major techniques in collecting survey data. First, one is using questionnaire, either self-completed or read to the participant and completed by the investigators. The second way is structured interviews, which is conducted in person by phone or through numerous communication technologies.

However, the survey may not be accurate regarding thoughts, feelings, behaviour, or even perception. The main objective of this research study is to examine the effectiveness of digital visual schedule and its improvement rate in prayer among university students in Klang Valley, Selangor, Malaysia. One hundred students from Universiti Teknologi MARA (UiTM) Puncak Alam campus have been chosen randomly from any faculty. The respondents consist of fifty males' students and fifty females' students to represent the whole population of Klang Valley university students. UiTM was selected due to its demographic that most of their students are Muslim youths. The selected students will be given a set of questionnaire. The enquiry in the questionnaire will include the background of the respondent, basic knowledge about prayer and the effect and consequences of negating prayer as referred to (Jusoh & Suhardi, 2004) research study.

Usability Testing

Based on behavioural studies, usability testing process focuses on evaluating a technique that allows observing an individual's experience. It is also an established way to gather rich qualitative data from respondents. The respondents will be given a task and scenario to practice. He or she will be through the phase according to the given task. A specific, concrete, and reflect actual goal is the criteria that the task should be. The task needs to provide extra information necessary to complete the task. According to Virzi (1992) and Azman and Kamaruzaman (2016), result of human being factors practice is related to the type of the usability test and the usability test goal.

The one hundred respondents were randomly selected for the experiment. The respondents were divided into fifty male respondents and also fifty female respondents. This is to balance the results and to avoid bias outcome. They were given an assistive learning technology such as tablet, smart phone and iPad with a prayer track application installed in it. At this point the apps that have been installed into the assistive learning technology device is Salaat Tracker. In reference to Figure 1 and Figure 2, it shows the Salaat Tracker model. This is also to remind them about time and frame of the prayers. Before that, they were given one-week trial without using the apps. After they submit the result, they once again are given one more week to tabulate their prayer with Salaat Tracker apps helps. This is due to see the result of having apps to help and before using it.



Figure 1: The Salaat Tracker Index page



Figure 2: Five essential prayer indicator in Salaat Tracker

Data Collection and Data Findings

A questionnaire was distributed evenly to one hundred respondents in UiTM Puncak Alam campus, Selangor, Malaysia. The one hundred respondents which consist of fifty male respondents and fifty female respondents. Subsequently, data were collected from all the respondents and were analysed. The data findings was later on tabulated into pie charts. Figure 3 displays the age when the respondent starts to perform prayer as early as seven years old. The majority of the respondent starts performing prayer around age 8 to 10 years old. Figure 4 describes the factor that encourages the respondent to perform prayer that they have been exposed to the teaching of Islam and that performing prayer are compulsory to Muslim. The least of the respondent perform prayer due to teacher's order.

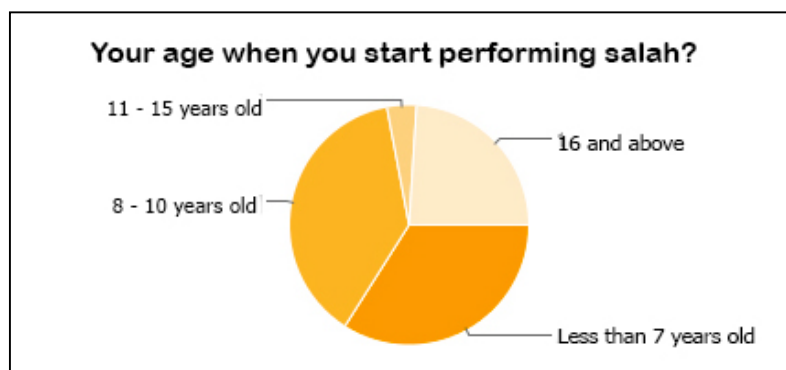


Figure 3: Age of the respondents starts to perform prayer

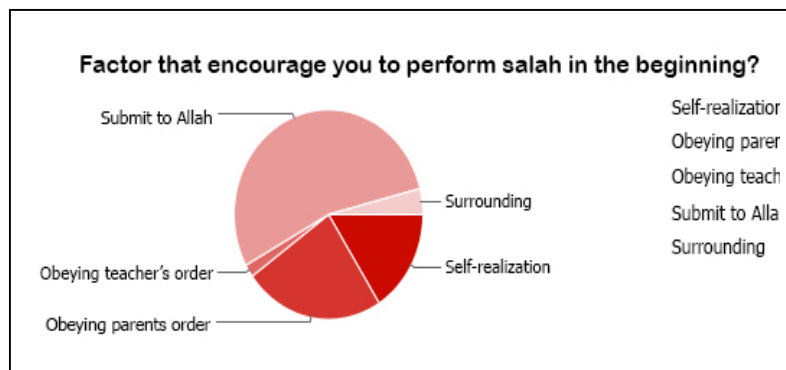


Figure 4: Encouragement factor to perform prayer

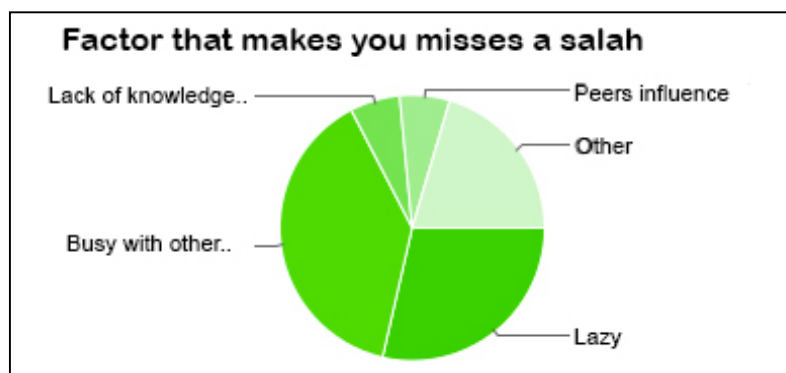


Figure 5: Factor that respondents misses their prayer

Figure 5 displays respondent's answer to the factor that causes them to missed prayer while in reference to Figure 6, it reveals the action that respondent took once they miss a prayer. Two of the most prominent factor that causes them to miss a prayer is being busy with other thing and just being lazy to perform prayer.

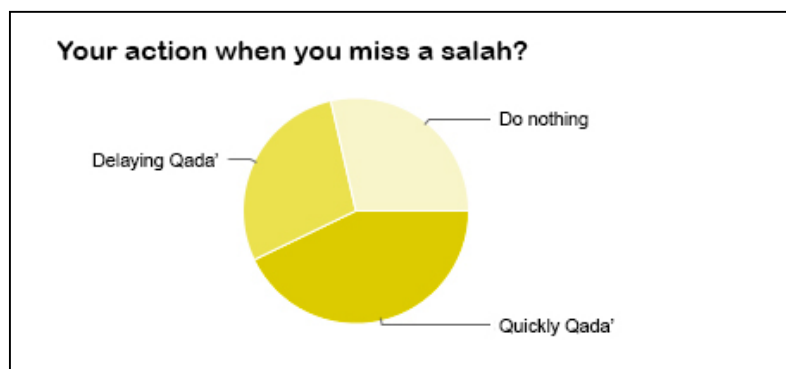


Figure 6: Action been taken once the respondents missed their prayer

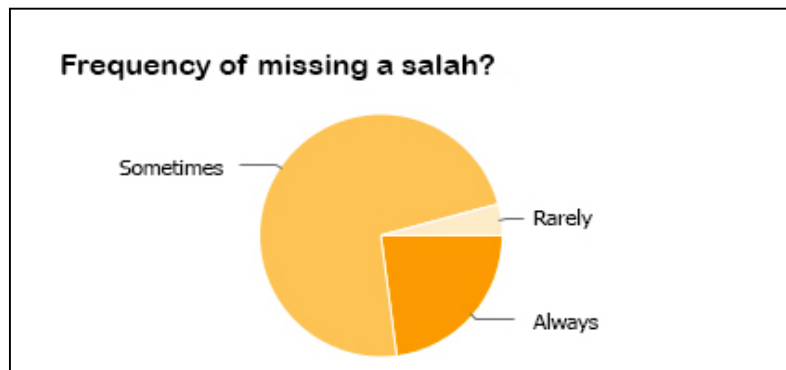


Figure 7: Regularity rate in neglecting prayer

Figure 7 reveal that most of the respondents did not regularly miss their prayer. Fifty respondents were asked to install a Salaat Tracker apps that enable them to track the performance of their prayer and at the same time reminding them about the time frame of the prayers. In 1 week time, the data of their prayer performance were collected and tabulated to measure the difference before and after using the prayer manager. The result of the seven days before and after of testing is presented below. Each column consists of 5 times of prayer each day. Where “X” represents the time of prayer that the respondent missed and “O” as the time of prayer fulfilled.

Table 1: Before the installation of Salaat Tracker apps

Respondents	Gender	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1	Male	x,x,x,o,x	x,o,o,o,o	x,x,o,x,o	o,o,o,x,o	x,o,o,o,o	x,o,o,o,x	x,o,o,x,x
2	Male	x,o,o,x,o	x,o,o,x,o	x,o,x,x,o	x,o,x,o,o	x,o,o,o,x	x,o,o,o,x	x,o,o,x,x
3	Male	x,o,o,o,x	o,o,x,o,x	x,x,o,o,o	x,o,x,x,o	o,o,x,o,o	o,o,x,o,x	o,o,o,o,o
4	Male	x,o,o,o,o	x,x,o,o,o	x,o,o,x,o	x,o,o,x,x	o,o,o,o,o	x,o,o,x,o	x,o,o,o,x
5	Male	x,x,x,x,x	x,x,o,o,o	x,x,o,x,o	o,o,o,x,o	x,o,o,o,o	x,o,o,o,x	x,o,o,x,x
6	Male	x,o,x,x,o	x,x,o,x,o	x,o,x,x,o	x,o,x,o,o	x,o,o,o,x	x,o,o,o,x	x,o,o,x,x
7	Male	x,o,o,o,x	o,o,x,o,x	x,x,o,o,o	x,o,x,x,o	o,o,x,o,o	o,o,o,o,x	x,o,o,o,o
8	Male	x,o,o,o,o	x,x,o,o,o	x,o,o,x,o	x,o,o,x,x	o,o,o,o,o	x,o,o,x,o	x,o,o,o,x
9	Male	x,x,x,o,x	x,o,o,o,o	x,x,o,x,o	o,o,o,x,o	x,o,o,o,o	x,o,o,o,x	x,o,o,x,x
10	Male	x,o,o,x,o	x,o,o,x,o	x,o,x,x,o	x,o,x,o,o	x,o,o,o,x	x,o,o,o,x	x,o,o,x,x
11	Male	x,o,o,o,x	o,o,x,o,x	x,x,o,o,o	x,o,x,x,o	o,o,x,o,o	o,o,x,o,x	o,o,o,o,o
12	Male	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	x,o,o,o,o	x,o,o,o,o
13	Male	x,x,x,o,x	x,o,o,o,o	x,x,o,x,o	o,o,o,x,o	x,o,o,o,o	x,o,o,o,x	x,o,o,x,x
14	Male	x,o,o,x,o	x,o,o,x,o	x,o,x,x,o	x,o,x,o,o	x,o,o,o,x	x,o,o,o,x	x,o,o,x,x
15	Male	x,o,o,o,x	o,o,x,o,x	x,x,o,o,o	x,o,x,x,o	o,o,x,o,o	x,o,x,o,x	x,o,o,o,o
16	Male	x,o,o,o,o	x,x,o,o,o	x,o,o,x,o	x,o,o,x,x	o,o,o,o,o	x,o,o,x,o	x,o,o,o,x
17	Male	x,x,x,o,x	x,o,o,o,o	x,x,o,x,o	o,o,o,x,o	x,o,o,o,o	x,o,o,o,x	x,o,o,x,x
18	Male	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o
19	Male	x,o,o,o,x	o,o,x,o,x	x,x,o,o,o	x,o,x,x,o	o,o,x,o,o	o,o,x,o,x	o,o,o,o,o
20	Male	x,o,o,x,o	x,x,o,o,o	x,o,o,x,o	x,o,o,x,x	o,o,o,o,o	x,o,o,x,o	x,o,o,o,x
21	Male	x,x,x,o,x	x,o,o,o,o	x,x,o,x,o	o,o,o,x,o	x,o,o,o,o	x,o,o,o,x	x,o,o,x,x
22	Male	x,o,o,x,o	x,o,o,x,o	x,o,x,x,o	x,o,x,o,o	x,o,o,o,x	x,o,o,o,x	x,o,o,x,x
23	Male	x,o,o,o,x	x,o,x,o,x	x,x,o,o,o	x,o,x,x,o	o,o,x,x,o	o,o,x,o,x	o,o,x,x,o
24	Male	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o
25	Male	x,x,x,o,x	x,o,o,x,o	x,x,o,x,o	o,o,o,x,o	x,o,o,o,o	x,o,o,o,x	x,o,o,x,x
26	Female	x,o,o,x,o	x,o,o,x,o	x,o,x,x,o	x,o,x,o,o	x,o,o,o,x	x,o,o,o,x	x,o,o,x,x
27	Female	x,o,o,o,x	x,o,x,o,x	x,x,o,o,x	x,o,x,x,o	o,o,o,o,o	o,o,o,o,x	x,o,o,o,o
28	Female	x,o,o,o,x	x,x,o,o,o	x,o,o,x,o	x,o,o,x,x	o,o,o,o,o	x,o,o,x,o	x,o,o,o,x
29	Female	x,x,x,o,x	x,o,o,o,x	x,x,o,x,o	o,o,o,x,x	x,o,o,o,x	x,o,o,o,x	x,o,o,x,x

30	Female	x,o,o,x,o	x,o,o,x,o	x,o,x,x,o	x,o,x,o,o	x,o,o,o,x	x,o,o,o,x	x,o,o,x,x
31	Female	x,o,o,o,x	x,o,x,o,x	x,x,o,o,x	x,o,x,x,o	o,o,x,o,o	o,o,x,o,x	x,o,o,o,x
32	Female	x,o,o,o,o	x,x,o,o,o	x,o,o,x,o	x,o,o,x,x	o,o,o,o,o	x,o,o,x,o	x,o,o,o,x
33	Female	x,x,x,o,x	x,o,o,o,o	x,x,o,x,o	o,o,o,x,o	x,o,o,o,o	x,o,o,o,x	x,o,o,x,x
34	Female	x,o,o,x,o	x,o,o,x,o	x,o,x,x,o	x,o,x,o,o	x,o,o,o,x	x,o,o,o,x	x,o,o,x,x
35	Female	x,o,o,o,x	o,o,x,o,x	x,x,o,o,o	x,o,x,x,o	o,o,x,o,o	o,o,x,o,x	o,o,o,o,o
36	Female	x,o,o,o,o	x,x,o,o,o	x,o,o,x,o	x,o,o,x,x	o,o,o,o,o	x,o,o,x,o	x,o,o,o,x
37	Female	x,x,x,o,x	x,o,o,o,o	x,x,o,x,o	o,o,o,x,o	x,o,o,o,o	x,o,o,o,x	x,o,o,x,x
38	Female	x,o,o,x,o	x,o,o,x,o	x,o,x,x,o	x,o,x,o,o	x,o,o,o,x	x,o,o,o,x	x,o,o,x,x
39	Female	x,o,o,o,x	o,o,x,o,x	x,x,o,o,o	x,o,x,x,o	o,o,x,o,o	o,o,x,o,x	x,o,o,x,x
40	Female	x,o,o,o,o	x,x,o,o,o	x,o,o,x,o	x,o,o,x,x	o,o,o,o,o	x,o,o,x,o	x,o,o,o,x
41	Female	x,x,x,o,x	x,o,o,o,o	x,x,o,x,o	o,o,o,x,o	x,o,o,o,o	x,o,o,o,x	x,o,o,x,x
42	Female	x,o,o,x,o	x,o,o,x,o	x,o,x,x,o	x,o,x,o,o	x,o,o,o,x	x,o,o,o,x	x,o,o,x,x
43	Female	x,o,o,o,x	o,o,x,o,x	x,x,o,o,o	x,o,x,x,o	o,o,x,o,o	o,o,x,o,x	o,x,x,o,o
44	Female	x,o,o,o,o	x,x,o,o,o	x,o,o,x,o	x,o,o,x,x	o,o,o,o,o	x,o,o,x,o	x,o,o,o,x
45	Female	x,x,x,o,x	x,o,o,o,o	x,x,o,x,o	o,o,o,x,o	x,o,o,o,o	x,o,o,o,x	x,o,o,x,x
46	Female	x,o,o,x,o	x,o,o,x,o	x,o,x,x,o	x,o,x,o,o	x,o,o,o,x	x,o,o,o,x	x,o,o,x,x
47	Female	x,o,o,o,x	o,o,x,o,x	x,x,o,o,o	x,o,x,x,o	x,o,o,x,x	o,o,x,o,x	o,o,o,o,o
48	Female	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	x,o,o,o,o	x,o,o,o,o
49	Female	x,x,x,o,x	x,o,o,o,o	x,x,o,x,o	o,o,o,x,o	x,o,o,o,o	x,o,o,o,x	x,o,o,x,x
50	Female	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o

Table 2: After the installation of Salaat Tracker apps

Respondents	Gender	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1	Male	x,o,o,o,o	x,o,o,x,o	o,o,o,o,o	o,o,o,x,o	x,o,o,x,o	o,o,o,o,x	o,o,o,o,o
2	Male	o,o,o,o,o	x,o,o,o,o	x,o,o,x,o	o,o,o,o,o	o,o,o,o,o	x,o,o,o,x	x,o,o,x,x
3	Male	x,o,o,o,o	o,o,x,o,x	x,x,o,o,o	o,o,o,o,o	o,o,x,o,o	o,o,o,o,x	o,o,o,o,o
4	Male	o,o,o,o,o	o,x,o,o,o	x,o,o,o,o	o,o,o,o,o	x,o,o,o,o	o,o,o,o,o	o,o,o,o,o
5	Male	x,o,o,o,o	x,o,o,x,o	o,o,o,o,o	o,o,o,x,o	x,o,o,x,o	o,o,o,o,x	o,o,o,o,o
6	Male	o,o,o,o,o	x,o,o,o,o	x,o,o,x,o	o,o,o,o,o	o,o,o,o,o	x,o,o,o,x	x,o,o,x,x
7	Male	x,o,o,o,o	o,o,x,o,x	x,x,o,o,o	o,o,o,o,o	o,o,x,o,o	o,o,o,o,x	o,o,o,o,o
8	Male	o,o,o,o,o	o,x,o,o,o	x,o,o,o,o	o,o,o,o,o	x,o,o,o,o	o,o,o,o,o	o,o,o,o,o
9	Male	x,o,o,o,o	x,o,o,x,o	o,o,o,o,o	o,o,o,x,o	x,o,o,x,o	o,o,o,o,x	o,o,o,o,o
10	Male	o,o,o,o,o	x,o,o,o,o	x,o,o,x,o	o,o,o,o,o	o,o,o,o,o	x,o,o,o,x	x,o,o,x,x
11	Male	x,o,o,o,o	o,o,x,o,x	x,x,o,o,o	o,o,o,o,o	o,o,x,o,o	o,o,o,o,x	o,o,o,o,o
12	Male	o,o,o,o,o	o,x,o,o,o	x,o,o,o,o	o,o,o,o,o	x,o,o,o,o	o,o,o,o,o	o,o,o,o,o
13	Male	x,o,o,o,o	x,o,o,x,o	o,o,o,o,o	o,o,o,x,o	x,o,o,x,o	o,o,o,o,x	o,o,o,o,o
14	Male	o,o,o,o,o	x,o,o,o,o	x,o,o,x,o	o,o,o,o,o	o,o,o,o,o	x,o,o,o,x	x,o,o,x,x
15	Male	x,o,o,o,o	o,o,x,o,x	x,x,o,o,o	o,o,o,o,o	o,o,x,o,o	o,o,o,o,x	o,o,o,o,o
16	Male	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o
17	Male	o,o,o,o,o	x,o,o,x,o	o,o,o,o,o	o,o,o,x,o	x,o,o,x,o	o,o,o,o,x	o,o,o,o,o
18	Male	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o
19	Male	x,o,o,o,o	o,o,x,o,x	x,x,o,o,o	o,o,o,o,o	o,o,x,o,o	o,o,o,o,x	o,o,o,o,o
20	Male	o,o,o,o,o	o,x,o,o,o	x,o,o,o,o	o,o,o,o,o	x,o,o,o,o	o,o,o,o,o	o,o,o,o,o
21	Male	x,o,o,o,o	x,o,o,x,o	o,o,o,o,o	o,o,o,x,o	x,o,o,x,o	o,o,o,o,x	o,o,o,o,o
22	Male	o,o,o,o,o	x,o,o,o,o	x,o,o,x,o	o,o,o,o,o	o,o,o,o,o	x,o,o,o,x	x,o,o,o,x
23	Male	x,o,o,o,o	o,o,x,o,x	x,o,o,o,o	o,o,o,o,o	o,o,x,o,o	o,o,o,o,x	o,o,o,o,o
24	Male	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o
25	Female	x,o,o,o,o	x,o,o,x,o	o,o,o,o,o	o,o,o,x,o	x,o,o,x,o	o,o,o,o,x	o,o,o,o,o
26	Female	o,o,o,o,o	x,o,o,o,o	x,o,o,x,o	o,o,o,o,o	o,o,o,o,o	x,o,o,o,x	x,o,o,x,x
27	Female	x,o,o,o,o	o,o,x,o,x	x,x,o,o,o	o,o,o,o,o	o,o,x,o,o	o,o,o,o,x	o,o,o,o,o
28	Female	o,o,o,o,o	o,x,o,o,o	x,o,o,o,o	o,o,o,o,o	x,o,o,o,o	o,o,o,o,o	o,o,o,o,o

29	Female	x,o,o,o,o	x,o,o,x,o	o,o,o,o,o	o,o,o,x,o	x,o,o,x,o	o,o,o,o,x	o,o,o,o,o
30	Female	o,o,o,o,o	x,o,o,o,o	x,o,o,x,o	o,o,o,o,o	o,o,o,o,o	x,o,o,o,x	x,o,o,x,x
31	Female	x,o,o,o,o	o,o,x,o,x	x,x,o,o,o	o,o,o,o,o	o,o,x,o,o	o,o,o,o,x	o,o,o,o,o
32	Female	o,o,o,o,o	o,x,o,o,o	x,o,o,o,o	o,o,o,o,o	x,o,o,o,o	o,o,o,o,o	o,o,o,o,o
33	Female	x,o,o,o,o	x,o,o,x,o	o,o,o,o,o	o,o,o,x,o	x,o,o,x,o	o,o,o,o,x	o,o,o,o,o
34	Female	o,o,o,o,o	x,o,o,o,o	x,o,o,x,o	o,o,o,o,o	o,o,o,o,o	x,o,o,o,x	x,o,o,x,x
35	Female	x,o,o,o,o	o,o,x,o,x	x,x,o,o,o	o,o,o,o,o	o,o,x,o,o	o,o,o,o,x	o,o,o,o,o
36	Female	o,o,o,o,o	o,x,o,o,o	x,o,o,o,o	o,o,o,o,o	x,o,o,o,o	o,o,o,o,o	o,o,o,o,o
37	Female	x,o,o,o,o	x,o,o,x,o	o,o,o,o,o	o,o,o,x,o	x,o,o,x,o	o,o,o,o,x	o,o,o,o,o
38	Female	o,o,o,o,o	x,o,o,o,o	x,o,o,x,o	o,o,o,o,o	o,o,o,o,o	x,o,o,o,x	x,o,o,x,x
39	Female	x,o,o,o,o	o,o,x,o,x	x,x,o,o,o	o,o,o,o,o	o,o,x,o,o	o,o,o,o,x	o,o,o,o,o
40	Female	o,o,o,o,o	o,x,o,o,o	x,o,o,o,o	o,o,o,o,o	x,o,o,o,o	o,o,o,o,o	o,o,o,o,o
41	Female	o,o,o,o,o	o,o,o,x,o	o,o,o,o,o	o,o,o,x,o	o,o,o,x,o	o,o,o,o,o	o,o,o,o,o
42	Female	o,o,o,o,o	x,o,o,o,o	x,o,o,x,o	o,o,o,o,o	o,o,o,o,o	x,o,o,o,x	x,o,o,x,x
43	Female	x,o,o,o,o	o,o,x,o,x	x,x,o,o,o	o,o,o,o,o	o,o,x,o,o	o,o,o,o,x	o,o,o,o,o
44	Female	o,o,o,o,o	o,x,o,o,o	x,o,o,o,o	o,o,o,o,o	x,o,o,o,o	o,o,o,o,o	o,o,o,o,o
45	Female	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	x,o,o,o,o	o,o,o,o,o	o,o,o,o,o
46	Female	o,o,o,o,o	x,o,o,o,o	x,o,o,x,o	o,o,o,o,o	o,o,o,o,o	x,o,o,o,x	x,o,o,x,x
47	Female	x,o,o,o,o	o,o,x,o,x	x,x,o,o,o	o,o,o,o,o	o,o,x,o,o	o,o,o,o,x	o,o,o,o,o
48	Female	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o
49	Female	x,o,o,o,o	x,o,o,x,o	o,o,o,o,o	o,o,o,x,o	x,o,o,x,o	o,o,o,o,x	o,o,o,o,o
50	Female	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o	o,o,o,o,o

From the tabulated data, can be seen improvement in the subject's execution of prayer. The prayer performed by the respondents improves slowly but not consistently. This condition may be caused by subject's excitement to see their progress in the prayer managing application. Furthermore, they have the apps to remind them whether they perform prayer or not. From Table 2, it can still be seen that there is a lesser prayer that the respondents missed compared to table 1.

CONCLUSION

Based on the finding it can be conclude that with the assistance of digital visual schedule, there are slightly improvement on the selected respondents' prayer execution, although some respondents are not gradually consistently on their prayer. There is a various aspect that can cause the improvement in such a short time and to prove it; it will need another test which can be conducted in other time. In a nutshell, digital visual schedule turns out well in refining the inconstancy of prayer among university students.

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REFLECTIONS ON MOVES AND CONTEXTUAL FACTORS IN THE GENRE ANALYSIS OF ACKNOWLEDGEMENTS

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In academic discourse, acknowledgements serve as an expression of gratitude toward help from individuals and institutions in either academic or social environment of the researcher. The variations in both discoursal and contextual patterns of acknowledgements enrich the corpora for academic writing. Therefore this paper attempts to investigate the acknowledgements in MA and PhD dissertations written by student writers from different cultural and academic backgrounds, in order to reveal both the generic structure along with the lexical and grammatical patterns used to realize the moves and steps, and the contextual influences over these structures. The sample acknowledgements were taken from 92 dissertation acknowledgements (DAs): 48 MA and 44 PhD acknowledgements in DAs. Throughout the genre analysis process, the generally accepted steps in the literature were initially adopted to reach the data. In the analysis process, first, rhetoric move analysis from the related literature was employed. Second, linguistic features at the vocabulary, grammatical and discoursal levels of the text were identified. The results revealed that the student writers mostly followed the “three tier structure”: ‘reflecting move’, ‘thanking move’ and ‘announcing move’. In the analysis, the thanking move was the most observed and obligatory one where the reflecting move and the announcing move was rarely seen. Among the addressees, supervisors, both in MA and PhD dissertations, seemed to be the single and indispensable category of addressees that are mentioned in all of the acknowledgements. Moreover, some divergences were found among the texts due to the different contextual factors such as academic, socio-cultural and geographical backgrounds. Therefore socio-cultural and contextual factors such as the institutional conventions, the geographical position, the religion, the academic status and the native language of the student writer were observed as the most influential factors affecting the general flow of the acknowledgements and the construction of moves and steps in them. In light of these findings some implications for pedagogical practices and suggestions for further analysis were also offered.

REFLECTIONS ON PEOPLE'S NEEDS IN BANGKOK COMMUNITY BASED ON LIFELONG LEARNING CONCEPT

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ABSTRACT

Rapid growth of urbanization such as Bangkok, Thailand remains increase continuously with over consumption of resources which leads to be problems on people lives and environments. Therefore problems of the three selected communities were surveyed where located in central, east and west of Bangkok. The problems of the people were studied in five aspects; (1) living condition (2) occupation and income (3) education (4) environment and (5) health. The gathering data were critically analyzed to be the needs of the people in each community then the three projects were developed from their needs, the contexts of the communities including the problems. The evaluation on the completed projects which were studied in three aspects; (1) satisfactions (2) application for learning and (3) impacts on the communities. The evaluation results were reflected based on lifelong learning concept then proposed to be challenging points for future development in Bangkok communities as well as similar urban communities in Thailand.

INTRODUCTION

In 2014, Asia-Pacific developing countries mobilized 17.6 per cent of their gross domestic product in tax revenues, which is only half the average across the Organization for Economic Cooperation and Development countries (ESCAP 2017). Thus, the Asia-Pacific region as a whole has made impressive gains in global economic development over the last forty decades and further gains are expected. In 1990, the Asia-Pacific region constituted roughly 21% of the world's gross domestic product (GDP), while by 2011 the region accounted for 30% of world GDP (World Bank, 2014 cited in UNESCO Bangkok 2014a).

The evolving economic and employment structures are accompanied with a move towards regional integration as Asia-Pacific countries become more economically interconnected with each other as well as with the global market. The number of Free Trade Agreements (FTAs) has skyrocketed since 2000. This trend is expected to continue with the Association of Southeast Asian Nations (ASEAN) moving towards its economic integration as the ASEAN Economic Community (AEC) in 2015, alongside other major trade agreements, such as ASEAN+6 FTAs and the Trans-Pacific Partnership (TPP), being discussed.

Countries in the Asia-Pacific region are now facing increasingly challenging tasks of ensuring the global competitiveness of nations, while avoiding the potential pitfalls of globalization and regional integration such as increased inequality, environmental degradation, youth unemployment and loss of cultural identity (UNESCO, 2014). Accordingly, the relevance of education for decent life and work such as for older learners, the 2012 Programme for International Student Assessment (PISA) showed that 15-year-old students in countries such as Indonesia, Kazakhstan, Malaysia and Thailand performed well below the OECD average in reading, mathematics and science (OECD, 2013). In addition, the region is home to 65% of the world's adult illiterate population, accounting for close to 513 million adult illiterates, which is likely to remain as a serious challenge in the foreseeable future. Moreover, the gap prevails between what is taught in school and what is actually needed in the labour market and society. All learners should acquire relevant skills including technical and vocational skills for decent work and entrepreneurship as well as the transferrable skills and competencies to be creative and innovative, to think critically, to communicate effectively, to solve problems independently, and to be able to adapt to and assimilate change (UNESCO, 2014).

Thailand is one of the ASEAN countries which Bangkok has been the capital city for more than 230 years. Bangkok has gradually developed to be one of world's top destination cities in tourism with a registered population of over 5.6 million and estimated actual population of up to 8 million. Besides, the explosive growth of the urbanization of Bangkok started in the fifties and sixties. The quick rising of industrialization and economic development together with the centralization of the national government's activities are the main origins of its primacy. Until present, Bangkok continues to be the major centre of economic activities, which mainly rely on industry, trade and services (Suganya Boonprasirt, 1997).

Consequently, the rapid increasing of population causes the change on community, lifestyle of local people

including resource consumption. The new comers are adults who come from rural area and neighborhood countries. Regarding the OECD result and the adult illiterate population, their characteristics would affect to the primitive way of the community. However, the economic benefits would be also the results from the movers, according to the World Bank report, there were 15 low-income countries and 15 middle income countries in the Asia-Pacific region in 1990. By 2012, the number of low-income countries decreased by more than half (7 countries) while the number of middle income countries increased to 32 (World Bank, 2014).

Although many countries have enjoyed sustained economic growth, some are feeling that they might be heading to or are already in the so-called “middle income trap” as they lose their competitiveness in sectors such as manufacturing to newly emerging countries. In order for these countries to avoid such a trap, transformation to a knowledge-based economy is crucial. Education sector reform to improve access to learning and the quality of education, especially post-basic education, is critically important. Moreover, countries are increasingly acknowledging that such a transformation requires more focus on the acquisition of a range of “transversal competencies”, also known as 21st century skills, such as innovative thinking, creativity, adaptability, respect for diversity, global awareness and communication.

The labour market landscape has also changed notably in the region as employment rates in the agriculture sector have shrunk significantly while employment in both service and industry sectors is growing far more than in other regions of the world. These developments have resulted in substantial adjustments to economic structures and have had direct impacts on the human resources required for different and evolving labour needs. This trend calls for expansion and improvement of post-basic education, including technical and vocational education and training (TVET) as well as continuing education, so that learners can equip themselves with the relevant skills required in the labour market and stay adaptable and abreast with changes in labour market demands (UNESCO, 2014).

It would conclude that lifelong learning concept should be blended in the current learning style in order for fulfill the skills regarding the labour needs and demands because lifelong learning is a continuously supportive process which stimulates and empowers individuals to acquire all the knowledge, values, skills and understanding they will require throughout their lifetimes and to apply them with confidence, creativity and enjoyment, in all roles circumstances, and environments (Watson 2003).

Therefore, the surveyed study on problems in the selected communities identified the needs of the local people with the social and environmental impacts from the new comers, the projects were developed from the needs and the contexts then, the evaluation results of the projects were critically reflected based on lifelong learning concept to be the challenging guideline for such an urban community development. The guideline would be an alternative of balance community development together with decent life and work in current contexts.

THE STUDY

Problems in the selected Bangkok communities were studied by surveying at; (1) Jarurat Ton Sai community, Rajathevi district (Central Bangkok) (2) Ramkamheang 53 community, Wangthonglang district (East Bangkok) and (3) Klong Lat Mayom Floting Market community, Taling Chan District (West Bangkok). The sampling people answered the questionnaire which was used in quantitative survey on the problems in five aspects; (1) living condition (2) occupation and income (3) education (4) environment and (5) health. The interview was used to get qualitative data which the leaders in the communities gave the data on general contexts of the communities. Then the collected quantitative and qualitative data was critically analyze to be the needs of the people.

The three projects for the three communities were developed from the needs; (1) Quality of life for elderly project in Jarurat Ton Sai community (2) Fire Prevention project in Ramkamheang 53 community and (3) Local Wisdom museum project in Klong Lat Mayom Floting Market community. Then the projects were operated in the three communities by the research team.

After completing the projects, the evaluation on the projects by using the questionnaire, interview and discussion were studied in the participants' satisfactions, adaptation of learning in real life and also impact to their communities. The evaluation was critically reflected based on lifelong learning concept and the challenging guideline for urban community development was proposed as the final step of the study.

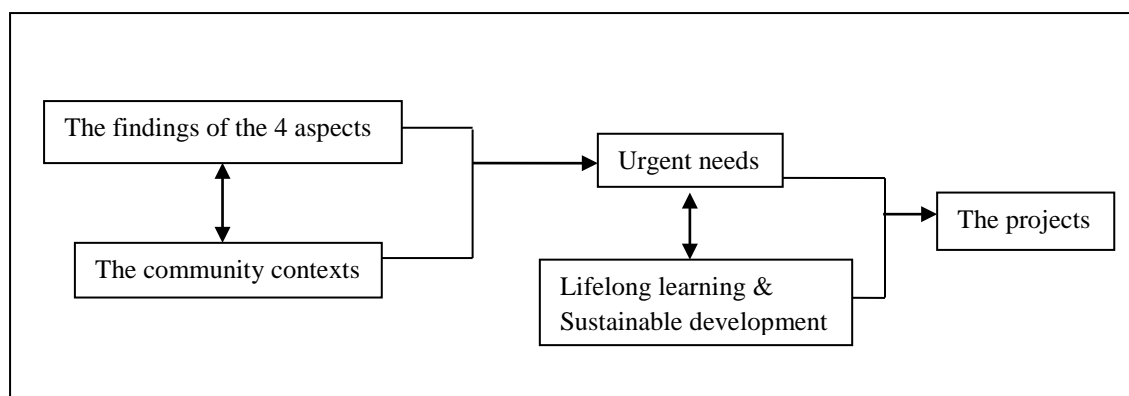


Figure 1: Framework of the study

FINDINGS

The survey results on problems of the communities in each aspect were defined as follow; the results in living condition aspect showed that the residences were built by various materials; one storey houses with non-permanent materials, three to five storey commercial concrete buildings and one to two storey wood sheet houses. Most residences were very close to the others with narrow alley, proper to walking but not for car driving. The results in occupation and income aspect showed that the local people were merchants in flea markets and in the floating market, government and private company officials and also unemployment. Their incomes were in the level of lower to moderate. The results in education aspect showed that their qualifications were high school level (grade 12), vocational certificate, bachelor degree and rarely in higher undergraduate degree. The results in environment aspect showed that there were water pollution from wastes, air pollution from motor boats as well as their noises. The results in health aspect showed that the people in elderly had physical health problems; high blood pressure and diabetes symptoms and mental health problems such anxiety and depress for middle-aged people.

Table 1: Findings of the communities in four aspects

Aspects/Communities	<i>Jarurat Ton Sai</i>	<i>Ramkamheang 53</i>	<i>Klong Lat Mayom</i>
<i>Living condition</i>	Non-permanent houses	Concrete buildings	Wood houses
<i>Occupation</i>	Merchants	Merchants	Merchants and officers
<i>Education</i>	High school	High school and Vocational Cert.	Vocational Cert. and Undergraduate
<i>Environment</i>	Water and air pollution	Water and air pollution	Wastes
<i>Health</i>	Health problems in elderly	Mental problems in middle-aged	Mental problems in middle-aged

The surveyed problems and the contexts of the communities were content analyzed to be the needs of the communities. The needs were classified, considered and arranged by urgent necessity in order to develop to be proper projects of each community. The three projects were; (1) Quality of life for elderly project in Jarurat Ton Sai community (2) Fire prevention project in Ramkamheang 53 community and (3) Local wisdom museum project in Klong Lat Mayom Floting Market community.

The finding results of the satisfaction questionnaire found that the participants' satisfaction level on the projects was high and very high.

Table 2: Findings of satisfaction level in the communities

Projects/ Satisfaction level	<i>Quality of life for elderly project</i>	<i>Fire prevention project</i>	<i>Local wisdom museum project</i>
<i>The learning activities</i>	Very high	Very high	Very high
<i>The trainers</i>	Very high	Very high	Very high
<i>The project location</i>	Very high	Very high	Very high
<i>Benefits of the participant</i>	Very high	High	High
<i>Benefits of the community</i>	High	Very high	High
<i>Impact to the community</i>	Moderate	Moderate	Moderate

The results of the interview on their adaptation of learning found that most of them could adapt their knowledge they had learned into their daily lives as the example of speech as follows:

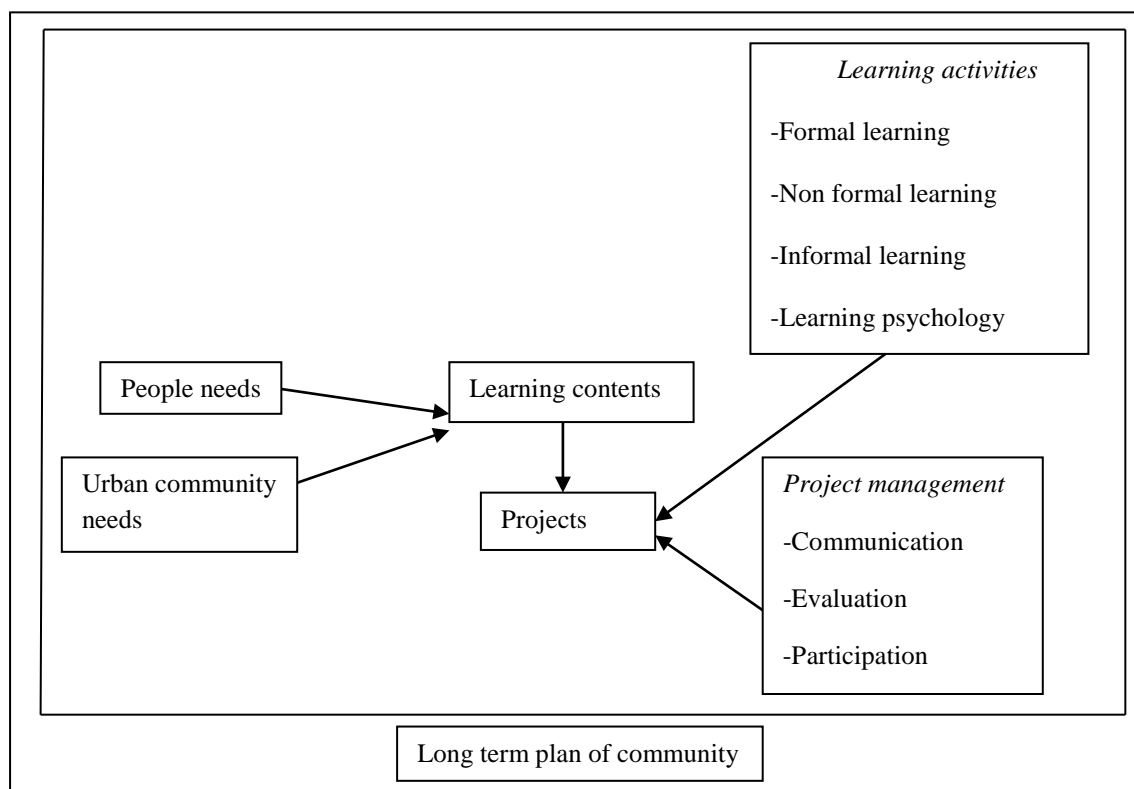
“I think this activity is very useful for me in order to stimulating my hygienic and promote my health. I have learned how to take pills and select healthy food as well as easy exercises.”

“This activity makes me know my neighbors and learn to recognize on benefit sharing for my community.”

“The museum will support our local economics and I also appreciate to our local wisdoms and prolong the wisdoms by telling to my younger generation.”

The findings were critically reflected based on lifelong learning concept and discussed to be guideline for urban community development as follows:

- Understanding on real contexts of community should be realized as well as principles of project operation.
- Effective communication and evaluation as well as participation are the key success of project.
- The project should be operated according to varieties of people needs, learning activities for multi aged people.
- Learning activities should be flexible design and consist of formal, non formal and informal learning.
- Learning psychology should be applied in learning activities, learning contents should be derived from learners' needs as well as community needs.
- The continuation of the projects running in the long term plan should be also realized.

**Picture 2:** Guideline for urban community development

CONCLUSIONS

Although, the focusing on real needs of the people and blended with lifelong learning concept but the results from the projects remain unclear impact to the communities. Thus the lack of understanding on the importance of participation in their communities might be due to their education or individual attitudes. Most of them are merchants, they have no times to pay attention to the activities in their communities whereas aging people prefer joining the activities but their physical health is in difficulties. The recommendations of the study were proposed that (1) Because of urban community contexts, the participation of people in the communities was essential and it should be sufficient for running the successful projects. (2) It should be possible to expand the projects to be long term projects for studying on their learning impact to the communities' sustainable development. This study was concluded that the development of lifelong learning projects in urban contexts (Bangkok) depended on (1) learning needs (2) learning styles (3) participation of people and (4) living environments which should be identified from results on community education based on sustainable community development.

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REJECTION SENSITIVITY AND LONELINESS IN KOREAN COLLEGE STUDENTS: MEDIATING ROLES OF STRUCTURAL AND FUNCTIONAL ASPECTS OF SOCIAL NETWORK

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The purpose of this study is to examine the interrelationship of Korean college students' rejection sensitivity(RS), structural and functional aspects of social network(SN), and loneliness and test the mediating effects of various aspects of SN in the relationship between RS and loneliness. Participants were 330 college students who were freshmen, sophomores, juniors or seniors at one of 4-year universities in South Korea. They completed a online survey containing social network(SN) measures of structural aspects (i.e., number of relationships and contact frequency) and functional aspects (i.e., friendship quality, social support, and social conflict). Correlational analyses showed that RS was positively correlated with loneliness and social conflict and negatively with social support, while it was not correlated with structural aspects of SN. A series of hierarchical regression analyses further revealed that social support and social conflict, which are functional aspects of the social network, partially mediated the relationship between RS and loneliness. These findings implicate that college students who report a high level of loneliness would benefit from an psychological/counseling intervention to improve their functional aspects of current SN, such as social support and social conflict, as well as one to reduce their RS. Other implications and limitations of our study will be discussed, along with suggestions for subsequent studies.

loneliness will help to make measures on education and counseling by understanding social support and conflict in interpersonal relationships as the intervention to alleviate the loneliness which is experienced by some of college students, and it can also provide a direction for future research.

RELATIONSHIP BETWEEN MEDIA LITERACY, SMOKING MEDIA LITERACY AND SMOKING HABIT*

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ABSTRACT

The purpose of this study was to measure how messages pertaining to smoking scenes in movies were perceived by viewers according to media literacy knowledge. A total of 444 people (254 non-smokers and 190 smokers) were surveyed. The participants' media literacy and smoking media literacy levels were measured separately and the findings of how the audience perceives messages directed at smoking scenes in movies were compared according to participants' smoking habits, age, education and gender. The results of the research demonstrate that media literacy knowledge and smoking media literacy knowledge of the participants are not associated. As the level of education increases, the knowledge of media literacy also increases, but the knowledge of smoking media literacy remains unchanged. While smoking media literacy knowledge increases, smoking rates decline. The findings also show that young people have the lowest knowledge of smoking media literacy. The research did not find any significant difference between men and women in terms of smoking media literacy knowledge. On the other hand, the study also showed that the level of smoking media literacy knowledge of the smokers was lower than the non-smokers. According to the findings, it is necessary to increase smoking media literacy knowledge rather than media literacy knowledge in order to understand and interpret the smoking messages and to avoid negative effects of these messages.

INTRODUCTION

Every year, considerable number of people worldwide dies from cigarette-related causes. Turkey is one of the countries with the highest smoking rates in the world. According to the figures of the Ministry of Health of Turkey (2012:2), 27.1% of the population in Turkey use tobacco products. High mortality rates from tobacco consumption are seen in Turkey. The number is around a 100 thousand people every year (2012:1). Smoking-related deaths will continue to increase unless serious measures are taken. Turkey is also one of the countries where young people smoke the most. The average age for starting smoking in Turkey is 17.1, and 58% of smokers have started smoking before the age of 18 (2012: 2).

Reducing the rate of cigarette smoking also depends on the reduction of media messages targeted at audiences by cigarette companies. Therefore, smoking media literacy education is very important to understand and interpret smoking messages as well as to avoid the negative effects of these messages. Despite this fact, education on smoking media literacy is still limited in Turkey. Smoking media literacy education should be one of the most important tools for preventing smoking. Smoking media literacy education should emphasize how messages affect people, and how people perceive those messages without questioning. Smoking media literacy education can help individuals develop better decision-making skills, and people's resistance can be increased to such persuasive messages through smoking media literacy knowledge (Page et al, 2010, p. 455).

The aim of this research was to measure from the point of view of audiences, how messages pertaining to smoking scenes in movies were perceived according to smoking media literacy knowledge. Thus, it was aimed to provide the theoretical conclusions to understand and interpret the smoking messages and to avoid the negative effects of these messages. In this direction, the following research questions were asked within this study:

Research Question 1: *Is there a difference between media literacy knowledge and smoking media literacy knowledge?*

Research Question 2: *Will the participants' media literacy and smoking media literacy knowledges differ according to their education status?*

Research Question 3: *Will the participants' media literacy and smoking media literacy knowledges differ according to their age?*

Research Question 4: *Will the participants' media literacy and smoking media literacy knowledges differ*

* This Study Supported by Scientific Research Projects Coordination Unit of Cukurova University. (Project Code: SED-2017-8356)

according to their gender?

Research Question 5: Does smoking status affect smoking media literacy knowledge?

THE STUDY

In the scope of the research, the study of Primack et al. (2009) and the study of Page et al. (2010) were used for creating a survey questionnaire. A total of 20 questions were used in the questionnaire, which included specific strategies for smoking media literacy knowledge (e.g. most movies show that people smoking make it look more attractive than it really is) and general media literacy knowledge (e.g. when you see a smoking advertisement, it is important to think about what was left out). 5 Likert scale was used for the measurement items (1. I strongly disagree; 5. I strongly agree).

Four questions were asked about the personal information of the participants, including gender, age, education levels and smoking status. Within the scope of the survey, a total of 444 people (190 smokers and 254 non-smokers) were surveyed. 47.3 per cent (210) of the survey participants were women and 52.7 per cent (234) of the survey participants were men. 55.9 per cent (248) of the survey participants had university education whereas 44.1 per cent (196) of the survey participants did not have university education. There were 26 people in the age group 15-17, 196 people in the age group 18-25, 114 people in the age group 26-45, and 108 people were of an age of 46 or above. For the age group 15-17, the questionnaire was implemented by their parents or other family members. A careful selection of the sample was made in this age group considering that there might be people who hid smoking from their parents or family members. So, only 26 people could be included to the study from this age group.

FINDINGS

In the reliability analysis, the internal consistency of the 20-item scale for media literacy and smoking media literacy resulted in a good level, namely 0.773 according to the Cronbach's Alpha.

Research Question 1: Is there a difference between media literacy knowledge and smoking media literacy knowledge?

Participants' media literacy and smoking media literacy knowledges were measured and compared for the purpose of answering the research question 1. The results indicated that smoking media literacy knowledge of the participants was lower than their media literacy knowledge, regardless of their age, gender, education level and smoking status. According to the analyzes done by using SPSS data techniques, the average media literacy score of 444 participants was measured as 4.00 with 0.55 standard deviation over 5.00, as demonstrated in table 1. Whereas, the participants' average smoking media literacy score was 3.49 with a standard deviation of 0.57 over 5.00.

Table 1: Media Literacy and Smoking Media Literacy Average Scores

	Mean	N	Std. Deviation	Std. Error Mean
Smoking Media Literacy	3.4941	444	.57252	.02717
Media Literacy	4.0027	444	.55006	.02610

These results show that participants' smoking media literacy knowledge rates are lower than their media literacy knowledge. According to the T-test result, there was a significant difference between media literacy and smoking media literacy knowledges of the participants ($t(443) = -17.212$, $P = 0.000$).

Research Question 2: Will the participants' media literacy and smoking media literacy knowledges differ according to their education status?

The participants' media literacy and smoking media literacy knowledges were measured and compared according to their educational status to answer the research question 2. The average score for media literacy knowledge of the participants who didn't get university education was 3.90 with a standard deviation of 0.53. The average score for smoking media literacy knowledge was found 3.48 with a standard deviation of 0.58. The results are given in table 2. The T-test result showed that the difference between media literacy and smoking media literacy knowledges of the participants who didn't get university education was significant ($t(97) = 6.910$, $P = 0.000$).

Table 2: Comparison of Media Literacy and Smoking Media Literacy Knowledges of the Participants Who Didn't Get University Education

	Mean	N	Std. Deviation	Std. Error Mean
Smoking Media Literacy	3.4827	196	.57860	.04133
Media Literacy	3.9020	196	.52604	.03757

The average media literacy score of the people who got university education was found 4.08 with a standard deviation of 0.56 over 5.00. The mean score of smoking media literacy was found 3.50 with a standard deviation of 0.57 over 5.00. The results are shown in table 3. According to the T-test result, the difference between media literacy and the smoking media literacy knowledges of the university educated participants was significant ($t(247) = -14.411$, $P = 0.000$).

Table 3: Comparison of Media Literacy and Smoking Media Literacy Knowledges of the Participants Who Got University Education

	Mean	N	Std. Deviation	Std. Error Mean
Smoking Media Literacy	3.5032	248	.56867	.03611
Media Literacy	4.0823	248	.55660	.03534

These results demonstrate that smoking media literacy rates of the people (whether they are university educated or not) are significantly lower than media literacy rates.

The university educated participants' smoking media literacy score was higher than the participants who didn't get university education, but the difference between them was not significant. " $t(442) = -.376$, $p < .707$ "

Research Question 3: Will the participants' media literacy and smoking media literacy knowledges differ according to their age?

The participants' media literacy and smoking media literacy knowledges were measured and compared by age groups for the purpose of answering the research question 3. The results are shown in table 4.

Table 4: Comparison of Media Literacy and Smoking Media Literacy Knowledges of the Participants by Age Groups

Age Group	Smoking Media Literacy	Media Literacy
15-17		
Mean	3.3692	3.9308
N	26	26
Std. Deviation	.65774	.56197
18-25		
Mean	3.4442	4.0513
N	196	196
Std. Deviation	.54617	.52732
26-45		
Mean	3.5256	3.9491
N	114	114
Std. Deviation	.61989	.48697
46 +		
Mean	3.6000	3.9641
N	108	108
Std. Deviation	.55939	.62545

Media literacy knowledge of the participants of the age group 15-17 was measured as 3.93 with .56 standard deviations over 5.00, while smoking media literacy knowledge was measured as 3.37 with 0.66 standard deviations. According to the T-test result, there was a significant difference between them ($T(25) = -4.088, P = 0.000$).

Media literacy knowledge of the participants aged 18 to 25 was measured as 4.05 with .53 standard deviations over 5.00, while smoking media literacy knowledge was measured as 3.44 with .55 standard deviations. According to the T-test result, the difference between them was significant ($T(225) = -14.295, P = 0.000$).

Media literacy knowledge of the participants aged 26 to 45 was measured as 3.95 with .49 standard deviations over 5.00, while smoking media literacy knowledge was measured as 3.53 with 0.62 standard deviations. The T-test results showed that the difference between them was significant ($T(113) = -6.728, P = 0.000$).

Media literacy knowledge of the participants aged 46, or over, was measured as 3.96 with .63 standard deviations over 5.00, whereas smoking media literacy knowledge was measured as 3.60 with .56 standard deviations. The T-test results demonstrated a significant difference between them ($T(77) = -6.479, P = 0.000$).

Research Question 4: Will the participants' media literacy and smoking media literacy knowledges differ according to their gender?

Media literacy knowledge of the women participants was measured as 4.01 with .55 standard deviations over 5.00, whereas smoking media literacy knowledge was measured as 3.47 with 0.57 standard deviations. According to the T-test result, there was a significant difference between them ($T(209) = -11.816, P = 0.000$).

Media literacy knowledge of the men participants was measured as 4.00 with .55 standard deviations over 5.00, while smoking media literacy knowledge was measured as 3.52 with 0.57 standard deviations. The T-test result showed that the difference between them was significant ($T(233) = -12.589, P = 0.000$).

Table 5: Comparison of Media Literacy and Smoking Media Literacy Knowledges by Gender

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Smoking Media Literacy	Women	210	3.4667	.57035	.03936
	Men	234	3.5188	.57456	.03756
Media Literacy	Women	210	4.0105	.55076	.03801
	Men	234	3.9957	.55052	.03599

Although the male participants' smoking media literacy score was higher than that of the female participants, the difference between them wasn't significant ($F = 918, 0.339 > 0.05$).

Research Question 5: Does smoking status affect smoking media literacy knowledge?

For the purpose of answering the research question 5, smoking media literacy knowledge of the participants was measured and compared according to their smoking status. The average smoking media literacy rates of the smokers were 3.45 with a standard deviation of 0.65 over 5.00, whereas the average score of the non-smokers for smoking media literacy knowledge was 3.53 with a standard deviation of 0.51 over 5.00. The results are shown in table 6.

Table 6: Smoking Media Literacy Knowledge According to Smoking Status

	Mean	N	Std. Deviation
Smokers	3.4426	190	.64613
Non-smokers	3.5327	254	.50850
Total	3.4941	444	.57252

These results show that smoking media literacy rates of the smokers were lower than the non-smokers. However, the difference between them was not significant ($F = 2.699, 0.101 > 0.05$). Smoking media literacy knowledge data for the smoking and non-smoking participants according to different personal characteristics are shown in table 7.

Table 7: *Comparison of Smoking Media Literacy Knowledge by the Participants' Smoking Status*

	Smoking Literacy Knowledge
University Educated (Smokers)	3.35
University Educated (Non-smokers)	3.59
Non-University Educated (Smokers)	3.50
Non-University Educated (Non-smokers)	3.47
Ages 15-17 (Smokers)	3.20
Ages 15-17 (Non-smokers)	3.48
Ages 18-25 (Smokers)	3.44
Ages 18-25 (Non-smokers)	3.52
Ages 26-45 (Smokers)	3.41
Ages 26-45 (Non-smokers)	3.54
Ages 46 + (Smokers)	3.70
Ages 46 + (Non- smokers)	3.59
Male (Smokers)	3.52
Male (Non-smokers)	3.57
Female (Smokers)	3.25
Female (Non-smokers)	3.56

The lowest smoking media literacy knowledge by age groups was among the participants from the 15-17 age group. This age group's smoking media literacy score was 3.20 with a standard deviation of 0.65 over 5.00.

CONCLUSIONS

General media literacy rate of the participants gave a score above the average (4.00). However, the participants' smoking media literacy knowledge gave a lower score (3.49) compared to media literacy knowledge. Significant differences were found between the participants' smoking media literacy and media literacy scores. These findings show that media literacy knowledge cannot suffice to understand and interpret cigarette images and messages as well as to avoid the negative effects of these messages, and that smoking media literacy knowledge is needed.

Another important finding of this research on smoking media literacy is that there is a relationship between smoking media literacy knowledge and the age groups of participants. Although no significant difference was found between the age groups of the participants with regard to smoking media literacy, however, findings showed that as the average age of participants decreased, the smoking media literacy also decreased. Smoking media literacy knowledge is low especially in the 15-17 age group. Likewise, the people who did not get university education had lower smoking media literacy knowledge than those who got university education according to the findings. These results indicate that smoking media literacy knowledge should be given at an early age. The findings did not demonstrate any significant difference in smoking media literacy knowledge by gender either. Another finding of the study was that the smokers had lower smoking media literacy knowledge than the non-smokers.

It can be deduced that smoking habits can be reduced by showing actual information in movies. Therefore, smoking messages must be revealed by smoking media literacy education. The harms of smoking should be given within the smoking media literacy education. Thus, the meanings of cigarette images and messages should reveal and make people clearly understand that the harmful effects of smoking are on the health because cigarette companies hide these harmful facts of smoking and use many techniques and methods to motivate people for smoking.

Smoking media literacy knowledge can be considered as a preventive factor to understand and comment on smoking images and messages and to avoid the negative effects of these messages. Thus, smoking media literacy knowledge can be considered as an additional effort to prevent smoking habits. Yet, smoking media literacy knowledge studies in Turkey are unfortunately inadequate today.

In this study, smoking media literacy knowledge of the participants was measured by their age, smoking status, education level and gender factor. However, further personal characteristics of the participants should be also examined in future researches in order to obtain more detailed results. Moreover, this research was carried out

only in one region, and therefore, it does not represent other regions in Turkey. Different additional studies on smoking media literacy should be done as this information may vary from region to region.

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RELATIONSHIP BETWEEN STUDENT TEACHERS' READING MUSIC ABILITY AND THEIR MUSICAL ENVIRONMENTS

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ABSTRACT

The aim of this research is to figure out the change of the degree in reading music ability of student teachers for elementary schools in Korea. There are 3 problems of the study. First, would time to practice be the fact that can affect the change of the reading music ability degree? Second, what factors would be affecting the student teachers' reading music ability. Third, would the student teachers who have a difficulty reading music be a problem to teach their music classes in the future? As the result, the progress change of the reading music ability of the student teachers in the research was not significant. The number of 5.7% students shows no difficulty reading music whereas 34.3% students have a difficulty with reading music. 60.3% students, however, getting accustomed to reading music during the 8-week class. It is certified that the factor of enjoying singing does not directly affect to the ability of reading music much, but affect to the students' sense of tonality and pitches. It is also found that while experience of playing the piano affects the ability of reading music, experience of learning to sing does not affect it much. It is discovered that the less confident with reading music, the more reluctant to music class for student teachers in the future.

Keywords: Reading Music Ability, Student Teachers, Musical Environments

INTRODUCTION

It is essential for the student teachers who will teach general music class in the future to read music (Abeles, 2010). In Korea almost every elementary school teacher is to teach 5 core curriculum subjects including art classes like music and fine art. It means that they must be equipped to teach music whether they have an experience of receiving music lessons before entering the college of education or not. Every college of education provides several music courses including sight-singing. Since there is no right to select students who have a high level of musical aptitude in terms of college admission, the faculty members of music education department concern about how to improve the students' reading music ability. Out of the several important researches of the music education field, Gordon (2007) affirmed that the musical aptitude grows until the age of 9 and after that the musical aptitude is to become stabilized. The result of Gordon's study implies that it is not easy for student teachers in Korea to be fully equipped unless they had adequate experience of music activities and lessons when they were young. Even though there is such limitation, student teachers should have enough training and lessons to be ready as teachers with confidence and should aware of the psychological stages of children in music education (Hargreaves, 1986). There are 3 problems of the study. First, would time to practice be the fact that can affect the change of the reading music ability degree? Second, What factors would be affecting the student teachers' reading music ability. Third, would the student teachers who have a difficulty reading music be a problem to teach their music classes in the future?

METHODS

1. Study period: September 1, 2016 ~ December 1, 2016, for 3 months.
 2. Subject of the study: 159 college students (Men 75, Women 84).
 3. Questionnaire: 8 questions (7 closed-questions, 1 opened and closed-one).
 4. Reading music material: *Chorübungen*, Revised by Sekwang music publication 1997.
 - 4-1. *Chorübungen** No.1~No.11: For class work used for 6 weeks.
 - 4-2. *Chorübungen* No.12~No.20: For individual work used for 8 weeks.
- * "*Chorübungen der Münchener Musikschule, Erste-dritte Stufe*" by Franz Müller, A music book for chorus practice setting.

STUDY

The subject and participants of the study was 159 undergraduates in the first year of the college of education and took the reading music course. The number of male students was 75(47.2%) and 84(52.8%) female students. The musical characteristics of the students are as following based on the answers from the questionnaire provided as the course was beginning. The result of the survey is followed below.
[Table 1] shows that 22% of the responding male enjoys singing while 17% female enjoying singing. The both of

39% students enjoy singing, 61%, however, does not seem to enjoy singing which is to be affecting their sense of the pitch and tonal sense as well.

Table 1: The degree of enjoying singing

Enjoyment of singing			
Answer	M(n/%)*	F(n/%)**	Total
Very likely	20(12.6)	9(5.7)	29(18.3)
Likely	15(9.4)	18(11.3)	33(20.7)
Normal	19(11.9)	31(19.5)	50(31.4)
Unlikely	12(7.6)	18(11.3)	30(18.9)
Very unlikely	9(5.7)	8(5.0)	17(10.7)
Sub	75(47.2)	84(52.8)	159(100)

* M=male, **F=female, n=number of people

To the question that they have had any experience to learn to sing, only 1.9% of the female students answered 'yes'. None of the male students answered they had any experiences to learn how to sing. They do not count the experience of singing in their general music classes from elementary to high schools. [Table 2] shows the result.

Table 2: Experience to learn how to sing

Having experience to learn to sing			
Answer	M(n/%)	F(n/%)	Total
Yes	0	3(1.9)	3(1.9)
No	75(47.2)	81(50.9)	156(98.1)
Sub	75	84	159(100)

Unlikely poor experience of learning to sing, the rate of the experience of learning to play the piano was comparatively very high. Out of the 75 male students 47(62.7%) answered they had or have learned to play the piano. 61(72.6%) female students answered the same. They answered that they had piano lessons in a private academy when they were in elementary school. The number of the both male and female who have or had experiences to learn to play the piano was 108(68%). [Table 3] shows the result.

Table 3: Experience to learn to play the piano

Having experience to learn to play the piano			
Answer	M(n/%)	F(n/%)	Total
Yes	47(29.6)	61(38.4)	108(68.0)
No	28(17.6)	23(14.4)	51(32.0)
Sub	75	84	159(100)

Majority of the students likes pop-music especially K-pop (Korean pop-music) as it shows below [Table 4]. Classic is not an attractive musical genre for this generation of student teachers. Although they have rarely experience to learn to sing, their favorite music is pop, which is song music.

Table 4: Favorite music

Your favorite genre of music			
Answer	M(n/%)	F(n/%)	Total
Classic	6(3.8)	6(3.8)	12(7.6)
World music	1(0.6)	1(0.6)	2(1.2)
Pop-music(English world)	11(6.9)	14(8.8)	25(15.7)
K-pop(Korean pop-music)	53(33.3)	61(38.4)	114(71.7)
Etc.	4(2.4)	2(1.2)	6(3.6)
Sum	75	84	159(100)

57.2% of the students answered that they possess individual musical instrument. The list of the musical instruments includes guitars, the pianos, flutes, violins, cellos, clarinet, trumpet, and so on and so forth. In male students, the number of no possessing instruments is larger than the number possessing instruments. In contrast, the double size of female students has musical instruments. See [Table 5].

Table 5: Possession of musical instruments

Possessing any musical instruments			
Answer	M(n/%)	F(n/%)	Total
Yes	34(21.4)	57(35.8)	91(57.2)
No	41(25.8)	27(17.0)	68(42.8)
Sub	75	84	159(100)

Total 62.9 % (22.6% of men and 40.3% of women) students answered that they are able to play more than one musical instrument. Their available instruments were including ocarina, recorder, and *danso*, a Korean traditional instrument. In a reference [Table 5] says that despite of not having instrument, there is a number of students who can play musical instrument. [Table 6] shows the result.


Table 6: Playable musical instruments

Available musical instruments to play			
Answer	M(n/%)	F(n/%)	Total
Yes	36(22.6)	64(40.3)	100(62.9)
No	39(24.6)	20(12.5)	59(37.1)
Sub	75	84	159(100)

13.2% of men and 5% of women students answered that they would be avoiding or try to be evitable attitude toward music class if they are possible in the future when they become elementary school teachers. At the time of the survey, they felt like music as a subject to teach is difficult and they wanted to try to be away from it if possible. If adding the number of Normal answers, the situation is critical that 47.2% almost half of the student teachers are tend to avoid general music class in the future. [Table 7] shows the result and [Table 7-a] explains further regard of the respond of the answers like 'very likely', 'likely', and 'normal' in [Table 7].

Table 7: Seeming to avoid music class as a student teacher

Avoiding general music class in the Future			
Answer	M(n/%)	F(n/%)	Total
Very likely	5(3.2)	1(0.6)	6(3.8)
Likely	16(10.1)	7(4.4)	23(14.5)
Normal	15(9.4)	31(19.6)	46(29.0)
Unlikely	22(13.8)	27(16.9)	49(30.7)
Very unlikely	17(10.7)	18(11.3)	35(22.0)
Sub	75	84	159(100)

 the numbers will be used for table.7-a.

Out of the 159 students, 75 students (male 36, female 39) answer that they might be trying to avoid or be reluctant teaching music classes due to some reasons. [Table 7-a] shows the reasons and the rate. One of the reasons, why to be reluctant teaching music classes is a lack of accompaniment skill with the piano for the class. The number of the rate was 34.7%. A lack of singing ability is also one of the reasons for them to be reluctant teaching music class and the rate of the answer was 29.3%. Next reason is a lack of score reading ability that they have a difficulty reading music with various keys and meters. The number of the rate was 21.3%. Lastly 14.7% of the students responds that their reason of being reluctant teaching music class is a lack of music teaching methods. Interestingly the number of female students who might be reluctant music class in the future is bigger than the number of male students.

Table 7-a: Reasons to be reluctant with music class as a student teacher

Reasons to be reluctant music class			
Answer	M(n%)	F(n%)	Total
lack of singing ability	6(8.0)	16(21.3)	22(29.3)
lack of accompaniment skill	14(18.7)	12(16.0)	26(34.7)
lack of score reading ability	10(13.3)	6(8.0)	16(21.3)
lack of music teaching methods	6(8.0)	5(6.7)	11(14.7)
Sub	36(48.0)	39(52.0)	75(100)

For the 3 months any changes of improvement in terms of reading music had been screened and observed by the researcher to see the students' any changes of the ability in reading music. First for the 6 weeks the 159 students (divided into 6 classes) were provided class instruction to read music and other musical activities as well. After the period the students were asked to prepare and practice *Chorübungen* individually and informed to be screened and instructed individually as well every week in the class. For the 8 weeks after the 6 week- class provided, they had a time to practice and prepare to read music, especially *Chorübungen* from No.12 which contains 7 pieces of music for practice.

Table 8: Ability degree of reading music

Degree	Poor	Mediocre			Intermediate			Total
<i>Chorübungen</i>	<i>no.12~13</i>	<i>no.14</i>	<i>no.15</i>	<i>no.16</i>	<i>no.17</i>	<i>no.18</i>	<i>no.19</i>	
M(n%)	37(23.3)	36(22.6)	13(8.2)	4(2.5)	1(0.6)	2(1.3)	0	75(47.2)
F(n%)	17(10.7)	21(13.2)	15(9.4)	7(4.4)	2(1.3)	3(1.9)	1(0.6)	84(52.8)
Sub(n%)	54(34.0)	57(35.8)	28(17.6)	11(6.9)	3(1.9)	5(3.2)	1(0.6)	159
	54(34.0)	96(60.3)			9(5.7)			159(100)

[Table 8] shows the result of the 8-week individual screening and observing class. It tells that only 5.7% students approach No.17~19 of *Chorübungen* that is considered as intermediate level. Majority of the 60.3% students shows a progress getting into mediocre level while 34% students remain in poor level of reading the music. In the poor and intermediate levels, the number of men is double size less than women (10.7%: 23.3%, 1.9%: 3.8%). During the 2 months each student tried to be equipped to read music and wanted to progress their ability. Their competency of reading music, however, is not sufficient enough to lead music class.

CONCLUSIONS

The progress change of the reading music ability of the student teachers in the research was not significant which means that having time to practice for 8-week cannot be the factor to affect the students' reading music ability. The number of 5.7% students shows no difficulty reading music whereas 34.3% students have a difficulty with reading the score. 60.3% students, however, getting accustomed to reading music during the 8-week class. It is certified that the factor of enjoying singing does not affect to the ability of reading music much, but affect to the students' sense of tonality and pitches. While experience of playing the piano affects the ability of reading music, experience of learning to sing does not affect it much.

It is also discovered that the less confidence with reading music, the more reluctance to music class for student teachers in the future. It is suggested that the musical aptitude test be provided to student teachers before class begin and their reading music ability be checked how it changes throughout the class. It needs to be confirmed that degree of musical aptitude is to be affective to the reading music ability and any musical environments of the students are to be more affective one or not. New approaches to promote the ability of reading music for students are needed and any means that help students not be reluctant to music class should be found.

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RELIGIOUS EDUCATION IN NORTH CYPRUS

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ABSTRACT

Religious education is one of the most debated issues especially in the context of primary and secondary education. This is mainly because in many countries the content of religious education is set by the state and may not reflect the ideal religious education. This issue became controversial in North Cyprus especially after 2009 as a result of three very important developments: 1) Opening of the Qur'an courses in the summer of 2009; 2) Making "Religious Culture and Morality" courses compulsory as of the 2009-2010 school year; 3) The opening of Hala Sultan Divinity College in the 2012-2013 school year.

This paper aims to discuss religious education in North Cyprus especially after 2009 by taking into consideration these developments. In this context, after describing the process in which the Qur'an courses and the Hala Sultan Divinity College and also the compulsory religious courses were initiated, reactions of the Turkish Cypriot public and the reasons for these reactions will be explained.

Keywords: Religious Education, North Cyprus, Qur'an Courses, Religious Culture and Morality Courses, Hala Sultan Divinity College.

INTRODUCTION

Following Turkey's military intervention in 1974, efforts were made to create an ethnically and religiously homogenous Turkish or Turkish Cypriot nation-state in North Cyprus. To this end, the north of the island, where mostly Greek Cypriots lived until 1974, was mostly Turkified with Turkish Cypriots migrating from the south and Turkish immigrants who came or were encouraged to come from Turkey (Dayioğlu, 2014). Apart from Turkification, attempts were made to show or strengthen the Islamic side of the north of the island. In this regard, two points came to the fore. The first one was that with the influence of Turkey, the Hanafi-Sunni belief was always in the dominant position, compared to other beliefs in the post-1974 period. The second point was that Islamic activities and investments were mostly carried out and provided by Turkey. Nevertheless, the situation varied according to who was in power in Turkey.

The advent of the Justice and Development Party (*Adalet ve Kalkınma Partisi*-AKP) to power in Turkey in 2002 constitutes a turning point not only for Turkey's but also for North Cyprus's economic, social, political and cultural life. One of the most important consequences of the AKP's rule in Turkey turned out to be the strengthening of the dominant religious doctrine; the Hanafi-Sunni belief. Given the political and financial dependence of the Turkish Republic of Northern Cyprus (TRNC) on Turkey, an increase has been observed in the Hanafi-Sunni based Islamic activities mainly in the field of education. This is seen especially after the centre-right National Unity Party (*Ulusal Birlik Partisi*-UBP) came to power in North Cyprus in 2009. Among these activities, opening of the Qur'an courses in the summer of 2009; making "Religious Culture and Morality" courses compulsory as of the 2009-2010 school year; and the opening of Hala Sultan Divinity College in the 2012-2013 school year were striking.

1) Opening of the Qur'an Courses

Qur'an courses are one of the divisive issues regarding the religious education in North Cyprus. This is because except for the Alevis, people who were originally from Turkey to settle down, or were encouraged to settle in Cyprus after 1974, are generally conservative and demanded these courses, but the Turkish Cypriots who have a secular nature were mostly against the courses. Turkish Cypriots saw these courses as reactionary activities that posed a threat to the Turkish Cypriot community's secular nature. Despite the objections posed by the Turkish Cypriot public, these courses were either permitted or banned consecutively depending on the ruling political party in Turkey.

When the AKP came to power in 2002, organising Qur'an courses in North Cyprus was forbidden due to the 28 February 1997 decisions of the National Security Council of Turkey. Yet, the courses were provided in some villages, but the fact that it was illegal led to police raids of these locations. After the AKP came to power, courses were re-opened in 2004 in some villages inhabited by Turkish immigrants with the help of the Religious Affairs Counsellor of the Turkish Embassy. Almost all of the non-governmental organisations (NGO) and trade

unions, and the left wing parties in North Cyprus reacted strongly against this decision. As a result of these reactions, the Turkish government was compelled to step back and it did not insist on reopening the courses. This was because in 2004, Annan Plan which had been drawn up to find a permanent solution in Cyprus was put to a referendum. As the Turkish government backed the plan and showed willingness to solve the Cyprus problem, it did not want to incur any further reaction from the Turkish Cypriots.

The turning point in this issue occurred in 2009, when the UBP came to power. The UBP government declared that the hours dedicated to the “religious culture and morality” course in schools was insufficient. Therefore, a course on religion, to be administered at public secondary and high schools and supervised by the Ministry of Education was required. Also, the courses would be given under the title “Religious Education Courses”, were religious culture and morality courses, not Qur’an courses as alleged. In addition, it was announced by the Ministry that the courses would be organized five days a week for one month in the summer, and that students aged 10-18 could attend the classes half a day (Günalp, 2009).

The teachers’ trade unions, most of the non-governmental organisations, Alevi associations and left wing parties in North Cyprus reacted strongly against the opening of these courses. They considered the attempts to open these courses as the new government’s subservience to Turkey, and as an extension of the attempt of the Turkish government to bring a model of Turkish education to North Cyprus. Further evidence to this claim was that the majority of the teachers were brought from Turkey for these courses. Despite the criticism, the UBP government did not back down on the issue and the courses started in August 2009 mainly in primary schools. Teachers’ trade unions reacted greatly to the opening of the courses and prevented the Qur’an courses in the schools. Many NGO’s supported these actions. The teachers’ trade unions went further and demanded from the Attorney General to conduct investigation about these Qur’an courses, they have described these courses as illegal and accused the government use religion in politics (Havadis, 2009). Upon these reactions, the government declared that the courses were not on Qur’an but on religion and morality (Yenidüzen, 2009).

Despite intense criticisms, courses continued in the following years. In 2010, Ministry of Education declared that courses would be held half day in July and they would be open to the students in the 10-18 age range, who were willing to attend. The Ministry further announced that these courses would take place at secondary and high schools in the five districts of Northern Cyprus. The Ministry reiterated that these courses stemmed from necessity and that failing to grant permission would open the way for students to go to Turkey as in previous years, in which case their supervision would be impossible.

In the summer of 2011, these courses on religion were given five days a week; three days at schools and two days in mosques. Religion teachers rather than imams taught the applied courses at mosques. Courses continued in 2012. However, public protests continued against the courses, with the argument that these state-sponsored classes perpetuated the Hanafi-Sunni doctrine and therefore violated the principle of laicism. In 2013, officials of the Ministry of National Education in North Cyprus described the course as a three-stage religious theoretical and practical education that was being given in 22 schools and mosques under the title, “Summer Term Religion Course”. During stage one, children received education for four days at school and one day at the mosque; during stage two, they spent two days at school and three days at the mosque; and during the third and final stage, they had one day at school and four days at the mosque. Officials noted that the education given in these courses was under the Ministry’s control. Officials also stated that the Ministry had given permission for the practical part of the course, conducted in mosques, to be under the control of the Directorate of Religious Affairs (*Din İşleri Başkanlığı*). The Cyprus Turkish Teachers’ Trade Union (*Kıbrıs Türk Öğretmenler Sendikası-KTÖS*) officials claimed that despite the Ministry’s claim of control, courses were also given at *tariqa*-controlled mosques and other locations (Çağda, 2013). On the other hand, even though the age limit for attending the courses was set at 10, it appeared in the press that the majority of the attendees comprised of children between the ages of 5 and 10 (Konuralp, 2013). Reactions against the courses continued in the following years as they were mostly held in mosques instead of schools (Menteş, 2015). On the other hand, families that send their children to these courses reported that they faced strong public criticism, particularly from local teachers (U. S. Department of State, 2013). As a result of these reactions, some families that wished to give their children religious and Qur’an education applied to the Directorate of Religious Affairs to send their children to summer courses in Turkey.

In 2016 a new debate started regarding the courses given only in mosques, without the permission of the Ministry of Education (Yenidüzen, 25 August 2016). While the Minister of Education asserted that it was illegal to conduct classes outside its purview, these courses were organised by the Directorate of Religious Affairs and hence outside the Ministry’s control. Following the summer holiday, schools reopened but as the Qur’an courses continued in the mosques the issue came to the agenda once again. While Minister of Education said that he was

unaware of such courses (Özdağ, 2016), Cyprus Turkish Teachers' Trade Union made a call for banning children's attendance at these courses (Kıbrıs, 2016). Discussions on the subject continued throughout the year and also in 2017.

As for the students that attended the courses, it was announced by the Directorate of Religious Affairs in July 2009 that there had been 2,000 applications to attend the courses, the majority of whom were from families that had migrated to North Cyprus from Turkey (Moral, 2009). While the number of students attending these courses remained at around 2,000 between 2009 and 2013, in 2014 this figure rose to 4,500 and to 5,000 in 2015 (Alan, 2015). There is no any data made available on the number of participants in 2016 and 2017.

2) Making Religious Culture and Morality Courses Compulsory as of the 2009-2010 School Year

Religion courses had been compulsory at primary and secondary schools until 2005. It was after 2005 that the centre-left Republican Turkish Party-United Forces (*Cumhuriyetçi Türk Partisi-Birleşik Güçler*, CTP-BG) came to power and declared elective courses at secondary schools in the TRNC, leaving the decision to the administration's discretion. Taking this decision into consideration, many schools started to exclude the course from their curriculum as of the 2005-2006 school year.

But, after the UBP came to power in 2009, the course was made compulsory from fourth to eighth grade but this drew a reaction from the majority of the Turkish Cypriots and the Alevis. The most important reason for the reaction was that as with the "Religious Education Courses", the content of the religious culture and morality course was mostly devoted to the Hanafi-Sunni doctrine rather than a general knowledge of religion and morality. This meant violating the freedom of religion and conscience of the sections of society not belonging to the Hanafi-Sunni faith, notably the Alevis. In fact, the decision in the *Hasan and Eylem Zengin v. Turkey* case that was concluded on 9 October 2007 at the European Court of Human Rights (ECtHR) states that making the religious culture and morality course (which was mainly based on teaching the Sunni Islam doctrine) compulsory in Turkey was a violation of the freedom of religion and conscience (European Court of Human Rights, 2007). On 16 September 2014, a similar decision was given by the ECtHR in the *Mansur Yalçın and Others v. Turkey* case (European Court of Human Rights, 2014).

The new religious culture and morality books introduced in the 2016-2017 academic year once again fuelled the controversy around the religious culture and morality courses. In addition to the books being mainly based on the Hanafi-Sunni teachings, the fact that they included abstract and incomprehensible concepts such as "spirits, angels, djinnis," etc. for children was the main point of this criticism (Batman, 2016).

3) The Opening of Hala Sultan Divinity College in the 2012-2013 School Year

The idea that it was necessary to open a divinity high school in Cyprus was first brought forward in 1956, when the Democratic Party (*Demokrat Parti-DP*) was in power in Turkey (Dayıoğlu, 2012). In 1980s, a divinity high school was opened in North Cyprus, but after its first graduates it was closed down (Suiçmez, 2016). The issue was raised again in 2011. Two months after the 2011-2012 school year commenced, in November 2011, the divinity department of Haspolat Vocational School was opened and students were admitted to 9th grade. Even though the Prime Ministry and Ministry of Education claimed that this department was opened upon requests made by the public, opposition parties, teachers' unions and many NGOs claimed that the department was opened upon the pressures exerted by the government of Turkey. The strongest reaction to the opening of the department came from the Cyprus Turkish Secondary Education Teachers' Union (*Kıbrıs Türk Orta Eğitim Öğretmenler Sendikası*, KTOEÖS) which declared an indefinite strike at the school in question (Havadis, 2011).

The most important development was the opening of Hala Sultan Divinity College in the 2012-2013 school year. This issue of opening the College was first initiated in accordance with the decision of TRNC Council of Ministers on 25 January 2012. This decision was on the lease of 200 acres of *Waqf* (Evkaf) Foundation land, in Nicosia's Haspolat area, to the Cyprus Science, Ethics and Social Assistance Foundation (*Kıbrıs İlim, Ahlak ve Sosyal Yardımlaşma Vakfı-KİSAV*) for 30 years at a yearly cost of 100 TL (approximately €24) with the purpose of building an "Education Complex". In accordingly, a new building for accommodation, halls for social gatherings and sports events, religious facilities and a large mosque would be constructed as part of the school project but the majority of the society opposed the project on the ground that what was intended was not an "Education Complex" but a *Külliye*. They claimed that the Turkish government was behind KİSAV, and that the project was approved under pressure from the Turkish government. Despite the reactions, the UBP government announced that the project would go ahead and that the entrance exam for the College would be administered on 23 June 2012.

The issue was brought to the TRNC Parliament after the accusations on the improper way to lease the land of *Waqf* Foundation. As a result, an investigation committee was formed, the Attorney General's Office and the

Judicial Office were consulted. However, in its judgment dated 15 June 2012, the Judicial Office did not address the issue of the land lease. Instead, it declared that under the current laws and directives, a private divinity branch or college, i.e., one not regulated by the state, could not be opened in the TRNC. Moreover, it invited the government to put an end to its efforts to open the college as the necessary laws were not in place, and to prioritize making the necessary laws if there is a necessity to open a divinity college or any other type of school that was not mentioned in the law (Güler, 2012; Kişi, 2012). The government ignored the judgment and on 23 June, before the investigation committee finalized its work, the College entrance exam was administered. Furthermore, it was announced that the divinity department of the Haspolat Vocational High School would operate under the Divinity College.

Following the exam, the groundbreaking ceremony for the college was held on 20 July 2012. As the building could not be completed in time for the 2012-2013 academic year, the Hala Sultan Divinity College opened in September 2012 in another building that belonged to a Turkey-based college. The teachers for the courses on religion were appointed from Turkey (Menteş, 2012). It was announced that the Divinity College, which started education with students from the Divinity Department of Haspolat Vocational High School, would continue education here until its own building was completed.

On 24 January 2013, “Hala Sultan TOBB Divinity College Protocol” was signed in Ankara. With the protocol, the Union of Chambers and Commodity Exchanges of Turkey (*Türkiye Odalar ve Borsalar Birliği*-TOBB) undertook the construction of the so-called “education complex”. After the ground-breaking ceremony for the College was held on 20 July 2012, the College was officially opened on 27 September 2013. On the very day, the construction of buildings for additional facilities started, including dormitories for male and female students along with the Hala Sultan Mosque. The Ministry of Education authorities announced that as of September 2013 the College had around 400 students, and that with the completion of the additional buildings a total of 1,200 students would receive education there (Havadis, 2013).

The vast majority of the relatively secular Turkish Cypriot society opposed the opening of the Divinity College. They believed that the opening of the College was part of Turkey’s efforts to establish a more religious conservative mentality in Cyprus. As a part of these reactions, in January 2014, KTÖS and KTOEÖS filed a lawsuit against the Ministry of Education over the Hala Sultan Divinity College and *Küllüye* project. They demanded to close down the College to terminate religion-based education (Kıbrıs, 2014).

The Supreme Administrative Court announced its decision on 17 June 2016, and stated that the Vocational Technical Education Department, in which the Divinity College was the subject, had the authority to open schools to provide vocational education, but that the College has failed to do so. Based on this decision, the Court stated that the decision to open the College had been rescinded as its establishment was unauthorised. Expressing their delight with the Court’s decision, KTÖS and KTOEÖS argued that curriculum had to be changed and that the school should adopt the structure of the other colleges (Yenidüzen, 18 June 2016).

Following the Supreme Administrative Court’s decision, the Council of Ministers decided on 28 July 2016 that the Divinity College will continue its educational activities under the General Secondary Education Department instead of the Vocational Technical Education Department (Yenidüzen, 12 August 2016). As a result of this decision, the issue was once again taken to court by KTOEÖS and the school’s closure was requested on the ground that it was against the Constitution. The case was closely followed by circles who were against the closure of the College, and prior to each hearing protests were carried out outside the court against the attempt and KTOEÖS to close down the school. The protestors carried banners saying “Don’t Touch My School” and “Right to Education Can’t Be Denied” (Özbil, 2016; Uysal, 2016). As of August 2017 the lawsuit regarding the Divinity College is pending.

4) Other Developments

Further developments are seen in the field of education for the period after 2009. For example, for the 2009-2010 academic year, for the first time Turkey’s Higher Education Council (*Yükseköğretim Kurulu*-YÖK) included divinity faculties in the quotas allocated to TRNC students in Turkish universities. Moreover, three of 13 PhD quotas were allocated to the departments of “Religious Education”, “Religious Psychology” and “History of Religions” (Sonay, 2009). A more important development was the opening of the Faculty of Theology at Near East University (NEU) in September 2011. Thus, Faculty of Theology was opened in Cyprus for the first time. Also, in the 2013-2014 academic year, NEU opened a Religious Culture and Morality Education program for undergraduate students.

CONCLUSION

Opening of Qur'an courses, religious and morality courses and establishing a divinity college can be considered as progress in education and as measures to fulfil a human right. It is a fact that every parent has the right to demand an education system in their own religious and philosophical beliefs for their children. Indeed, some of the developments intend to fulfil requests of the society, especially Turkish migrants that for the most part known to be conservative. However, between 2009 and 2015 the state's initiation to open Qur'an courses and allocation of the state resources to these courses was not compatible with an understanding of a secular state. The courses were held in public schools and all of the students' needs, including transportation, were met from the state's budget. More importantly, the courses mainly covered the Hanafi-Sunni doctrine and its practices and the opportunities, provided by the state were denied to other faith holders, particularly to Alevis. As mentioned above, in 2016 a new problem has emerged regarding the religion courses. They started to be delivered only in mosques without the permission of the Ministry of Education. Since then, these courses are not under the control of the Ministry.

Furthermore, a significant number of Turkish Cypriots considered these developments as an attempt of imposing a Sunni Islamic tradition on Turkish Cypriots. So, the best way to meet the expectations and demands of people for religious education of children and eliminate the doubts of the secular circles is to take the decisions of the ECtHR seriously. In the *Hasan and Eylem Zengin v. Turkey* case, for example, the Court stated that countries that were party to the European Convention on Human Rights (ECHR) could not design the curriculum at schools in such a way so as to ignore parents' religious and philosophical beliefs, and aim to force students to adopt a specific doctrine. The ECtHR asserted that it was necessary to structure education so as to exclude ideologies, and underlined the necessity for course content to be presented in an objective, critical and pluralistic way. Also, the Court stated that in order to provide full assurance on the issue, people who do not want to take the course have to be exempted in such a way that they do not have to declare their faith and beliefs or they have to be offered other methods as an alternative (European Court of Human Rights, 2007). In the case of summer courses, as a requirement of the principle of laicism, the state should be neutral for all beliefs. Therefore, it is not a duty of the state to sponsor summer courses. The only responsibility of the state is to control these courses.

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REPOSITIONING TECHNICAL EDUCATION A PANACEA TO SOLVING GLOBALIZATION CHALLENGES IN CONSTRUCTION SECTOR

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ABSTRACT

Globalization has created a wind of change that has eroded landscapes of economy of nations of the world. Globalization era has led to emergence of new engineering ideology, concepts, tools, machines as well as systems and procedure. In some places, private economy drive has been left to private sector while government provides policy and ideology formulation interphase. Technical education is one of the areas affected by this phenomenon and in turn, the construction sector, thus the need for its repositioning towards quality delivery. Technology education is at the forefront of providing landscape training towards individuals being produced by the sector having

thorough understanding of their place in contributing to the economic growth of construction sector. Thus, technical education need to be repositioned further to enable more relevance of its products to their environment. Therefore, the study considered repositioning technical education towards solving globalization challenges in building sector.

In order to achieve this, sampling technique was used in this study, 120 structured questionnaire, designed in Likert scale form, on scale 1 to 5, was used for the study. It was discovered that repositioning the technical education in developing economy like Nigeria would involve taking the following position; overviewing of the current curriculum, running technical-based education, introducing cutting edge equipment and tools, technology transfer, technical symbiotic relations among economic drivers, adjustment of government policy, training and retraining issue, preventing discriminatory tendencies between technical based vocations and non-technical based jobs, emphasizing technical competence and partnership between education institutions and industry. The study concluded by recommending the following as a solution: infrastructure, research, adequate funding, technology incubation center and training/retraining for the practitioners.

Key word: Globalization, Technology, Transfer, Panacea, Challenge

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1.INTRODUCTION

Technical education is important in the developmental circle of any country aspiring to have technological advancement. Technological education in this parlance refers to educational knowledge garnered from Polytechnic, University, College of Education and Vocational centers. The aim of technological education is to provide platforms for self empowerment in the quest for environmental development. However, technological education starts from the colleges up to the Tertiary level, the curriculum of various technology programs is often design in line with expectation of the society. The fact that technological education is facing a lot of challenges in developing countries can not be ignored, most of the artisans being turned out are more or less half baked thus the need to revisit the training module of institutional mould that turned them out thus the need for repositioning of the technical institution training pedagogy. NERDC (2004) Rustom, R.N and Amer (2006) and Agunloye (2005), studied problems facing technological education in Nigeria as ranging from faulty academic curriculum, old infrastructure, absence of technical competent instructors, poor rating of graduates among others. It to this end that this paper is about repositioning skill training institution towards quality work delivery in construction works in Nigeria.

1. Understanding Repositioning Concept

Repositioning is a concept that refers to the constant changing of curriculum in order to meet the immediate need of society. The idea is that, program must not only covers an existing field of study, technological innovations but as well be en-compassing, it should be able to accommodate emerging growing fields of knowledge. Repositioning enables programs to be in tune with industry needs. Therefore repositioning process enables vocation industrial education flexible to societal demands. Vocational education is defined as the planned instruction intended for developing basic vocational skill, technical manipulative skill, technical knowledge and relational occupational information for the purpose of training young person for basic entry work exposure to the world of industry Bailyn, and Etzion (2006):

The need for repositioning Technical Skill Education. Technological education is backbone of development of a nation, therefore there must be constant validation and revalidation of concept that set up the running of the program. In Guisaini (1995) in Nigerian National Policy on Education (NPE) the fourth edition view technical education as a body of knowledge that seeks skill acquisition, theoretical skill and knowledge application. Boutzev (1983), describe technical skill education as pedagogical compendium of knowledge that empowers man technical to leave an ecological footprint on landscape of life. Guisaini (1995) approach technical skill education upgrading from the perspective of modifying process that empower society with requisite knowledge of proving solution to seemingly societal unsolvable socio-economic problem. However, in lieu of recent events in Nigerian construction sectors whereby some companies prefer engaging foreigners at vocational work like tilling, plastering painting at expense of local artisan called for concerned. Some of the companies were of the opinion that Nigerian skilled

artisan did not possess an expert knowledge as compared to the Togolese artisans and those from Republic of Benin. Is it that the training module is faulty or defective or need revision?.

2.Methdology

1.1.RESEARCH METHODOLOGY

Population of Study and Area of Study

The population of study is trainers, lecturer, instructors and trainees of technical and vocational institutions. The problem is the remodulation of technical skill acquisition institute in Nigerian construction sector using Lagos State as case study.

1.1.1 Sampling Method Samples are picked at random using Random sampling method with a sample of 100 students. The sampling was done from population frame s trainers, lecturer, instructors and trainees of technical and vocational institutions.

1.1.2 Sample size: Sample size of 100 students s trainers, lecturer, instructors and trainees of technical and vocational institutions of technical based courses and program was adopted in the study

1.1.3 Data Collection Instrument: A structured questionnaire in Likert scale was administered on student of technical based discipline, One hundred (100) questionnaires was administered on the students to harvest their perspective. The responses were further collated, analyzed with SPSS software, processed with Mean Item 4.1.5 Methods of Data Analysis: Mean item scores was used in processing the summarized questionnaire. Simple percentages was used to present percentage composition of respondents on factors responsible for deplorable state of technical and skill training institute, remodulation strategy. Mean score index factor was calculated for the variables. Data were presented in tables and other modes. The questionnaire was calibrated on a scale 1 to 5, with 1 representing "strongly disagree (SD)" 2 – being disagree (D) 3 – being neither agree nor disagree (N), 5- being strongly agree (SA).

Agreement index of the respondents was generated using the relation $M.A.I = 5S.A + 4A + 3S.D + 2D + 1N/5(S.A + A + S.D + D + N)$

$$M.A.I = \frac{1 \left(\sum A_{ij} \right)}{N \sum A_{ij}} \text{ where } M.A.I = \text{Mean Agreement Index} \quad A = \text{Agreement variable} \quad i = \text{Lower boundary, } j$$

= Upper boundary

a. N = Frequency of Variable Σ = Summation Notation.

5.10 SCOPE AND LIMITATION OF THE STUDY.

The study and the data used are limited to the opinion sampling of trainers at technical skill training institute and restricted to Lagos State.

6.0 RESULTS AND DISCUSSION

In this section parameters considered under the re-modulation concept was presented. The parameters revolved around Repositioning strategy, Benchmarking techniques and procedures and Establishing Calibrated Local Program

S/N	Variables	Mean Score	Ranking
1	Poor funding of schools	0.90	1 st
2	Insufficient laboratory for practical works	0.80	3 rd
3	Lack of well-equipped laboratory	0.89	2 nd
4	Youth not interested in vocation education	0.76	4 th
5	Trainers non challant attitude	0.75	5 th
6	Non supervision of trainers by superior officers	0.68	7 th
7	Curricula has no bearing with practical	0.64	8 th
8	Inadequate supervision of students practical work	0.72	6 th
9	Lack of adequate Technical know-how by tutors	0.55	10 th
10	Teachers not motivated to stay long on practical.	0.60	9 th

Table 1 Factor Responsible for Deplorable State of Technical and Skill Training Institution

Source: Amusan et al.,(2016)

In Table 1 above poor funding of that institution by the stakeholder was ranked 1st, with mean index value 0.90 virtually there is no field of science training whereby money is needed, poor funding is the bane of technological development in Nigeria. This is adjudged the strongest of the factors. Followed closely is lack of well equipped laboratory with mean index value 0.89. It huge fund to equip a laboratory, therefore for a well equipped laboratory. Insufficient laboratory for practical works was ranked 3rd with mean index value of 0.80. Also, Youth not interested in vocation education with mean index value of 0.76 was ranked 4th, while non challant attitude of the trainers/trainers was ranked 5th with mean index value 0.76. Against the background of the outcome of the analysis, the problems need to be countered thus the need to redesign the modules of the technical education. To this end therefore, the repositioning strategy was presented in Tables 2,3 and 4.

7.0 Repositioning Strategy.

Strategy to be adopted in repositioning skill acquisition and training institutions is packaged under the following: developing technical skill acquisition education, benchmarking techniques and procedures, establishing calibrated local programs. The detail is presented in Tables 2,3 and 4

Table 2 Developing Technical Skill Acquisition Education

S/N	Variables	Mean Score	Ranking
1	Training to be given by competent individual	0.98	1 st
2	Automatic machine deployment	0.79	5 th
3	The skilled workshop personnel to be given extensive training	0.87	3 rd
4	Provision of preparatory instruction in developing basic manipulative skills.	0.85	4 th
5	Using questionnaire to determine local needs.	0.74	6 th
6	Setting up Special Classes: Evening, Part-time classes and others.	0.97	2 nd

Source: Amusan et al.,(2016)

In Table 2, strategies that could be applied in developing skill acquisition institutions were articulated, this includes but not limited to the following factors (Training to be given by competent individual, Training of students should be given to a qualified individual who has had foremanship or instructor's training courses. The need to train the trainer in industry is increasingly becoming important, most artisans need to be trained and retrained since they handles most artisans work on site, therefore, the skilled artisans' instructor requires extensive knowledge and skill) and Automatic machine deployment.

The factors further includes: The skilled workshop personnel to be given extensive training (Twentieth century technological industrialist often need services of trained skilled worker, semiskilled workers, foremen, engineers, and top level century). Also, Provision of preparatory instruction in developing basic manipulative skills, Provision of preparatory instruction in developing basic manipulative skills, Using questionnaire to determine local needs and Setting up Special Classes: Evening, Part-time classes and others.

Moreover, based on the analysis of the responses; Training to be given by competent individual has mean index of 0.98 and was ranked 1st, Setting up Special Classes: Evening, Part-time classes and others with mean index of 0.97 was ranked 2nd. The skilled workshop personnel to be given extensive training scored mean index of 0.87 and ranked 3rd. Also, Provision of preparatory instruction in developing basic manipulative skills with mean index 0.85 was ranked 4th while Automatic machine deployment with index 0.79 and Using questionnaire to determine local needs with mean index 0.74 were ranked 5th and 6th respectively.

Table 3 Benchmarking Techniques and Procedures

1	VARIABLES	MEAN SCORE	RANKING
	Developing new teaching methods	0.94	2 nd
2	Organizing Instructional Program	0.96	1 st
3	Familiarization of Instructors with Instructional method	0.94	2 nd
4	Testing Student and Evaluating training effectiveness.	0.90	3 rd
5	Testing of Equipment	0.82	5 th
6	Teachers to have well established plan for appraising students.	0.83	4 th
7	Extensive use of teaching materials.	0.80	6 th

Source: Amusan et al.,(2016)

Table 3 above illustrates the techniques and procedure that could be adopted in repositioning the institutions offering technical education who are to train skilled artisans and professionals. Organizing instructional program was ranked first with Index value of 0.96. The reason for this preference lies in the fact that, instruction given in technical

training institute and colleges is given for the purpose of empowering the students in order to develop their skill, knowledge, attitude, perception and emotion required to perform the task required. Therefore, there should be a robust program that should be in place to provide quality to the information being given out to trainees. The program would as well provide means of monitoring performance of students and trainers.

Moreover, familiarization of instructors with instructional method is another technique that could be used as one of the bench marking strategies for repositioning. This factor was ranked 2nd with mean index value of 0.94. Instructors need to be familiar with instruction methods, method varies from one place to another, methods as design by the management should have been designed in such a way that would have include variety and provide rich content, it is the responsibility of trainers to adopted the organized instruction method. One of the reasons behind diverse standards as found in practice in most of the parts of the country is haphazard techniques being used by trainer in the name of innovation which most often don't produce right results in trainee.

Also, testing student and evaluating training effectiveness was ranked 3rd with mean index value 0.90. Test is an education tool that could be used to evaluate the degree of assimilation of subject matter being taught. It evaluate level of understanding of trainee or students and by the way measures the effectiveness of the teaching process and method applied. Therefore, in order to bring out the best in students and improve trainers' performance there should be timely evaluation of training effectiveness at training institutions. (Sheridan, 2004).

Also, teacher should as well have a method of assessing students' performance as training progresses, this factor was rated as 4th with mean index value. Testing of teaching equipment and extensive use of teaching material were ranked 5th and 6th respectively.

Table 4 Establishing Calibrated Local Program 1

Source: Amusan et al., (2016)

Another repositioning strategy is presented in Table 4 above. Planning local program to accommodate artisan, semi-skilled and skilled labor at the grass root was advocated. This was ranked first, followed closely with provision of facilities and equipment for the program which was scored 0.87 and ranked 2nd. Also, in establishing local programme, resources and personnel should be set aside, for the smooth running of the institute. One of the reasons for poor training output sometimes is poor funding. Setting up special skill acquisition plan and program for teachers

S/N	VARIABLES	MEAN SCORE	RANKING
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and trainers for adults artisan can as well help improve output of the institute in term of on job performance. The factor was ranked 4th. Creating area vocational education program was ranked 5th with index value of 0.75 while advocacy in term of supervisor possessing qualification comparable to higher institutional supervisor was ranked 5th with index value 0.75.

Table 5.Roles of stakeholders in meeting the demands of global economy.

S/N	Variables	Mean score	Ranking
1	Lecturers to develop intimate relationship with students and curriculum	0.70	4 th
2	Lecturers should be adequately skilling ICT knowledge and be up-to-date on global economy information	0.85	3 rd
3	New teaching pedagogy should be adopted in line with international global standard.	0.88	1 st
4	Lecturer and policy makers should be involved in curriculum planning.	0.86	2 nd
5	Establishing an inclusive and collaborative feed back mechanism on formulated policies and procedures.	0.85	3 rd

Source: Amusan et al., (2016)

1	Organizing conferences and seminar on enlightenment campaign	0.88	1 st
2	Provision of facilities and equipment for local program	0.87	2 nd
3	Relevant department to be responsible for maintain and repair of institutions' machines	0.75	5 th
4	Improving people perception about technological educations.	0.86	3 rd
5	Granting Institute Credit for trade and Industrial Experience	0.85	4 th
6	Setting up special ICT acquisition plan and program for teachers and trainers for adults artisan	0.85	4 th
7	Prompt provision of consumable materials for practical based on international standards.	0.75	5 th

Strategies that could be adopted is presented in Tables 5 presented, new teaching pedagogy should be adopted in line with international global standard is ranked 1st Lecturer and policy makers should be involved in curriculum planning ranked 2nd, the duo of Establishing an inclusive and collaborative feed back mechanism on formulated policies and procedures and Lecturers should be adequately skilled in ICT knowledge and be up-to-date on global economy information were ranked 3rd respectively. Lecturers to develop intimate relationship with students and curriculum was however ranked 4th.

New technical education paradigms are emerging, some developing construction economies like Malaysia and Singapore, have embraced certain construction and technical education pedagogy and it has transformed their technical sector dramatically. Inclusive and collaborative feedback is necessary on any policy that had been made, this would prevent the gap that usually exist between policy makers and the populace. Also, including the players in the act of policy drafting and implementation would guarantee success in the policy application.

Moreover, lecturer and students should be adequately empowered with new technological education in their knowledge impartation and replication, this is one of the ways to keep in touch with current global practice in technical education.

Table 6: Means of Improving Technological Education

Source: Amusan et al.,(2016)

Means of Improving Technological Education in this study is as presented in Table 6. Organizing conferences and seminar on enlightenment campaign is ranked 1st, followed closely by Provision of facilities and equipment for local program which is ranked 2nd, Improving people perception about technological educations ranked 3rd, Granting Institute Credit for trade and Industrial Experience and Setting up special ICT acquisition plan and program for teachers and trainers for adults artisan were ranked 4th respectively. Relevant department for maintain and repair of institutions' machines and Prompt provision of consumable materials for practical based on international standards.

international standards were also ranked 5th respectively.

8.0 CONCLUSION.

The repositioning strategy is as presented, some of them include: , Establishing local training programs, Developing Technical Skill Acquisition Education Planning of the local program, Planning local program to accommodate artisan, semi-skilled and skilled labor at the grass root Setting up special skill acquisition program for teachers of adult classes, Instruction given in technical training institute and colleges is given for the purpose of empowering the students in order to develop their skill, knowledge, attitude, perception and emotion required to perform the task required. Therefore, there should be a robust program that should be in place to provide quality to the information being given out to trainees. The program would as well provide means of monitoring performance of students and trainers.

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RESEARCH ON THE LIFE EXPERIENCES OF STUDENTS FROM A PUPIL REFERRAL UNIT AT A HOME-BASED WEE-CENTER-FOCUSED ON THE HOME-BASED WEECENTER FOR MIDDLE AND HIGH SCHOOL MALE STUDENTS IN INCHEON CITY-

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ABSTRACT

The purpose of this study is to investigate the specific factors that help students adapt themselves to school lives by making an examination of the life experiences of students referred to the home-based Wee center, a part of Wee project. The causes that motivated students to enter the center was the neglects they experienced after their parents got divorced and domestic violence, which is not different from the results produced by previous studies. Students in the home-based Wee center positively perceived the fact that "food, clothing and shelter are provided" and "self-control is learned through community lives" while they live in the center. Under this affirmative recognition, the specific factors that assist students' school lives are derived as such: 'improve deeper relations, improved relationship with parents', and 'changed perspective of home room teachers'.

Keywords: Home-based Wee-Center, School Maladjustment, Care, Community Life, Self-control, Relationship Improvement, Perspective Change

INTRODUCTION

The various problems and value conflicts occurred in a family environment through the structural family dissolution and weakened family function require a new paradigm about the role of family and school. The weakened caring function of a family as a result of neglects and abuses and the anxiety experienced at home are associated with students' school maladjustment, sometimes resulting in the abandonment of school works (Lee, Soojin 2017). So far, most studies about school maladjustment have been conducted in association with the problematic situations related to school violence (Lee, Kyunghwa and Son 2005; Oh, Seunghwan 2009; Lee, Jihyun 2015). However, recently, the number of studies has increased that stressed out the importance of partnership between family and school in solving the problem under the recognition that the causes of school maladjustment are interwoven with family issues (Yang, Sukja 2015; Park, Suna 2017; Ji, Myungja 2017). These studies suggest that the problem of school maladjustment has to be discussed from an integrated perspective rather than from a view that sees the issue of family and school as independent.

The Korean educational circle has made various efforts to help maladjusted students. The Ministry of Health and Welfare has offered social welfare supports to children requiring protection. The Ministry of Gender Equality and Family have operated youth shelters for homeless and runaway youths. The youth shelter system divides teenagers at risk into a temporary, short-term and mid-term group and helps them live self-sufficient lives. The Wee project¹ refers to the support given by the Ministry of Education. Among the project types mentioned above, the home-based Wee-center in particular conveys a significant meaning in that it provides support for students at risk who have difficulties in being adjusted to school because of family reasons.

¹The Wee project refers to a multiple integrated support service network designed to help students enjoy healthy and delightful school lives in collaboration with schools, the educational offices and local communities. It aims to educate students to find We as well as their own potentials in the Wee project space where the sense of emotion and love is naturally created (Korean Educational Development Institute).

This study is motivated by the interest in the home-based Wee-center, one of the policies to support students with school maladjustment. Since a home-based Wee-center was first opened in Daejeon city in 2010, eight centers have been operated nationwide. The project is reported to be effective in preventing students from giving up schools. 95% of students entrusted to the home-based Wee-center have returned home as well as to their schools and had stable school lives, ended up going to a higher school (2016.8.30, The Ministry of Education Press Release). As of 2017, a total of 15 home-based Wee-centers are operating nationwide.

However, despite the positive effects of the home-based Wee-center, there have been few researches about which specific factors have served to enhance the entrusted students' school adaptation. The purpose of this study is to investigate how their life experiences at the home-based wee-center affects their school adjustment through an interview with the adolescents entrusted to a home-based Wee-center.

School Maladjustment and the Home-Based Wee-Center

1. School Maladjustment

School maladjustment refers to the fact that students have difficulties in adjust themselves to school lives. Their unaccepted or unsatisfied desires at school result in improper behaviors or conflicts. School maladjustment includes both internal, and external or behavioral tendencies: the former involves depressions, excessive anxieties, and unreasonable or bizarre beliefs and values, and the latter entails suicide attempts, violence and rapes. (Park,Suna 2017). The causes of school maladjustment are classified into personal factors and environmental factors: personal factors include psychological and biological characteristics, and environmental factors involve family, school and social environment.

Maladjusted juveniles have low academic achievements and troubles in building interpersonal relations. Considering that Korean students spend most of their time at school, a positive school experience is very important. According to the "Education Statistical Yearbook of 2016," the drop-out rate of primary and secondary school students in Korea was 0.5%, recording the same rate comparing with the previous year, while that of middle and high school students dropped to 0.6% and 1.3% respectively, showing 0.1% decrease comparing with the year before. The drop-out rate of primary and secondary school students have been steadily declining since 2010 thanks to the various efforts made to prevent school abandonments and support students to return to school. A representative example will be the Wee-project backed up by the Ministry of Education.

The Wee project started in 2008 to reduce the number of maladjusted students and prevent drop-out. It is a system designed to establish a multiple safety net that helps adolescents at risk whom each school unit has a trouble guiding into a right path and healing, in collaboration with schools, the Department of Education, and local communities. The Wee project indicates We + education and We + emotion. The first safety net Wee-class, targeting all students, serves to early detection of school maladjustments and well adjustments of students. The second safety net Wee-center, targeting students in crisis, provides treatment services including problem diagnosis and counseling. The third safety net Wee-school, targeting high-risk students, offers intensive counseling and treatment services. Students in crisis subject to giving up studies refer to those in personal crisis, family crisis and educational crisis: personal crisis involves school violence, crimes, runaways and smoking; family crisis includes absolute poverty, parental divorce, and a multicultural family issue; educational crisis entails poor learning, study giving-up and halfway drop-outs. Currently, the Ministry of Education is in charge of managing and supervising the Wee project while the Korean Educational Development Institute directs the overall project operation and makes a research about relevant policies. As of 2017, there are 6286 Wee classes, 196 Wee centers, and 15 Wee schools nationwide (www.wee.go.kr)

2. Home-Based Wee Center²

1) Concept and Characteristics

The home-based Wee-center is a specialized Wee project. In cooperation with the Wee class, Wee center and Wee school, a small-scale educational living community is formed to provide protections, counseling, and education to students in crisis or in potential crises because of the lack of family protections. The home-based Wee-center was initiated to offer necessary cares and alternative education opportunities to those who had difficulties in school adaptations and had low academic achievements due to family environmental crisis. The increase of divorce and neglect causes family crisis, which prompts the need of housing care (shelter) in combination with education, counseling and treatments. (www.wee.go.kr)

The home-based Wee-center aims to improve students' environments for adjustment by alleviating the factors that cause family, school and personal crisis with the expectation to improve students' adaptability and to help them return to their households and schools in healthier and stable conditions. The operational principle of the home type Wee center is based on the relevant laws: All citizens have the right to learn throughout their lifetime and to be educated according to their abilities and aptitudes (Article 3 of the Fundamentals of Education Act), and the state and local governments are obliged to take educational measures for those who have troubles in school lives or stopped studying because of learning underachievement, personalities and disorders (Article 28 of the Elementary and Secondary Education Act). Besides, there are other laws that stipulate the regulations about the rights and protection of children and youth such as the Framework Act on Juveniles, Juvenile Welfare Support Act, Juvenile Protection Act, children and young boys and girls sex protection law, and Juvenile Activity Promotion Act. In particular, the instructions given by the Ministry of Education and law for protection and measure of school violence clarifies the details of the Wee project and the specific role of the superintendent of education.

The home-based Wee center is targeted at the adolescents who experience troubles because of family crises, school crises, and personal crises. The family crisis includes communication problems among family members, violence, sexual issues, abuses, neglects, economic difficulties, family dissolution, and the issues of mixed family. Students are at risk because of the dysfunctional family. Students in crisis at school are in the danger of giving up studies because of school maladjustments including school violence and related attackers and victims, refusal to go to school, communication problems with teachers and peers, violation of school rules, etc. Personal crisis refers to the emotional disturbance that students experience due to lazy lifestyle, juvenile delinquency, and mental and psychological problems (except high risk group).

However, the factors that cause family, school, and personal crises appear to be organic all yand complexly intertwined with one another in the form of a cog, rather than works independently. Adolescents who experienced abuses from parents are more likely to be exposed to school violence, and children who experienced domestic violence are prone to juvenile delinquency when they become adolescents. It is warned that the domestic violence leads to school violence and school maladjustments, which will lead to social loss in the long term (Kim, Sujung, and Chung 2013; Jang, Chorok 2016). In addition, students who are not satisfied with their school lives are highly likely to experience school maladjustments. Those who do not adapt themselves well to school easily recognize themselves as losers, lose hope, possess a sense of failures and have troubles in peer relations, which ultimately lead to the loss of self-esteem. The research results suggest that the problem of maladjustment at home and school should be discussed not as an independent issue, but as an integrated matter.

² The explanation about the home-based Wee-center refers to the Home-based Wee center manual (the Korean Educational Development Institute, 2015).

The role of home-based Wee-center consists of protection, counseling and education: The protection aspect is about protecting target adolescents from harmful environments and the counseling aspect is about establishing a solid foundation on which students develop sound value systems, build right characters and grow in a harmonious way. Especially, the education aspect helps students return to school and go to advanced level of school through an alternative education program suitable for target students. The home-based Wee-center is divided into three categories: a commuting type, boarding type, and mixed type. With the commuting type, students commute to school while living in the center. With the boarding type, they live and study in the center by receiving the assistance by teachers. The mixed type is a combination of the two types where entrusted students can decide which type they will choose.

The home-based Wee-center is established by the city or provincial office of education, and operated by private experts in the form of contract-out. The place is composed of an office, classrooms, counseling room, kitchen, bedrooms and a space for duty. 7 ~ 8 people operate the center, including the center head, manager (team leader), counselor, teacher (teacher certificate holder), social worker, cook and life instructor.

2) Facility Status

First established in 2010 in Daejeon city, 15 home-based Wee-center are operating as of 2017. Below lists up the home-based Wee center nationwide.

Table1. Home Based Wee-center Locations

Item No	Name	Location	Established Year	Target	Type
1	Listening and Hospitality	Daejeon	2010	Middle & High (Male)	Contracting-out
2	Incheon Happy Home Wee Center	Incheon	2011	Middle & High (Female)	Contracting-out
3	School of Listening and Hospitality	Daejeon	2012	Middle & High (Female)	Contracting-out
4	Flower Blossom	Ulsan	2015	Middle & High (Female)	Contracting-out
5	The Sound of Happiness	Jeonnam	2015	Middle & High (Male)	Contracting-out
6	Hidden Treasures	Gyeonggi	2015	Middle & High (Male)	Contracting-out
7	Happiness Building Wee	Gyeonggi	2015	Middle & High (Female)	Contracting-out
8	Grass Flower Village School	Gangwon	2016	Middle & High (Male)	Contracting-out
9	Sumgil	Gangwon	2016	Middle & High (Female)	Contracting-out
10	H2O	Incheon	2016	Middle & High (Male)	Contracting-out
11	Loving Tree	Incheon	2016	Primary (Male, Female)	Contracting-out

12	Sunlight Camping Yard	Gwangju	2017	Primary (Male, Female)	Contracting-out
13	Dream	Daegu	2017	Middle & High (Female)	Contracting-out
14	Happiness Connection	Saejong	2017	Middle & High (Male)	Contracting-out
15	-	Chungbuk	2017		Contracting-out

Source: The Korean Education Development Institute

METHOD

1. In-depth Interview

1) Select participants

In this study, we selected one home-type Wee center operated in Incheon city and interviewed three male students who were recommended by the center head and a counselor. The researcher explained the center head and the counselor about the purpose and method of the study and research ethics (IRB) to receive permission for an interview. Three students were recommended and interviewed. As the students entered the home-based Wee-center because of family crisis, we received an agreement for an interview by the center head on behalf of their parents. Prior to the interview, we explained them the purpose and method of this research and research ethics using easy terms for their understanding and they all agreed to be interviewed.

2) Complete questionnaires

The questionnaires consist of semi-structured questions about which the researcher wanted to know. They are basically about the students' life experiences at the home-based Wee-center: what motivated them to enter the center, how their family experiences were, what kind of changes they have after participating in the center life, and how their center experiences affect their school lives, etc. The appropriateness of the questionnaire was verified by the counseling teacher of the center to be suitable for the under aged research participants. They have seen the questions in advance before they have an interview and were sufficiently explained that they did not have to answer any questions that were difficult to answer or they did not want to answer.

3) Interview Method

The interview was carried out at the center to which the research participants were entrusted. They were informed about the researcher and fully explained about the purpose of this study before the interview, and agreed to being interviewed. The interview was conducted for a day on the June 14th of 2017. The students were interviewed from 7:50 to 9 pm after returning from school and finished dinner. Before the interview, the researcher and participants had a time to build cordiality through a simple greeting and daily conversations, and then exchanged free conversations using the questions presented beforehand. The three participants wanted a small group interview rather than an individual one, and the researcher was able to draw more contents from this process.

2. Research participants

The three research participants who voluntarily joined the interview after being recommended by the center counselor have following characteristics:

Table2. General characteristics of research participants

Classification	Age/Grade	Referral Period	Note
Student A Kim 00 (male)	15/second year of middle school	6 months	Parent divorce
Student B Kim, Yooshin(male)	16/third year of middle school	3 months	Incest (older sister)
Student C Kim, Janggoon(male)	18/second year of high school	3 months	Parent divorce and remarriage, runaway

Student A is a 15-year-old boy currently at the 2nd grade of middle school. He lived with his father and younger brother because his parents had gone through divorce when he had been in elementary school. Due to the absence of mother and father's neglect, he had a trouble in forming a basic life habit, and as a result, he experienced bullying and maladjustment in school. Currently, he commutes the furthest among the students in foster care.

Student B is a 16-year-old boy at his 3rd year of middle school. He was involved in an incestuous relationship with his sister, which she revealed to her community. He had a hard time in adjusting himself to both home and school.

Student C is an 18-year-old boy at his second year of a specialized high school. His parents got divorced and remarried. He has experienced a depression and attempted suicide due to the abuses and violence of his father who was alcoholic. He has one sister from his biological father and two sisters from his stepfather.

Data Collection and Analysis

The recorded data has been transcribed within three days after the interview with the consent of the center head, counselor, and research participants. The data were coded and categorized using a continuous comparison method. The categorized data were classified into big and small themes according to the purpose of this study. In the process of transcribing the contents of the interview, the onomatopoeic words and common language habits of the participants were excluded, while the conversation contents were copied in its original status as much as possible. Considering the credibility of researched data and the characteristics of each individual, the transcribed contents were confirmed of their matches by the center counselor, which ensured the reliability and validity of this study.

Research Results

1. Motivations

Family dissolution and mixed family environment take significant part of the reasons that have motivated them to come to the center. In Korea, the average age of first marriage is 32 for men and 30 for women, while the average age of divorce is 47 and 43 respectively (NSO 2016). For most divorced marriages, the average duration of marriage is 12 to 15 years, and if the parents have children, the children experienced a parental divorce while they were studying at school. Two students who were interviewed experienced the problem of parental divorces and remarriages, and the other one experienced domestic violence and family dysfunction due to the incest with his sister. Previous studies also revealed the same results with this research. Problematic students had the problem of family dysfunction including communication issues, violence, sexual problems, abuses and neglects (Jung, Jaehee 2003; Cho, Youngmi 2011; Ji, Myungja 2017).

"Because I was living with my father, I couldn't eat a proper meal and didn't wash. School friends said I smelled. When I was a primary student, my father and mother got divorced, so I have lived with my father and younger sibling. School friends did not like me because they thought I smelled and was dirty. I was bullied in the middle school because I did not wash myself. I used to go to Blue Pine (a local children center) where I was recommended to take a foster care and my father also said the same." (A, 20170617).

"I was in bad with my older sister. That's why I came here... I have a sister who is six years older than me. She posted what happened between us on her cell phone community (local classmate community site) where the third grade students exchange communications. Everybody knew what happened because of her. That's why I came here. A local welfare center introduced me this center" (B, 20170617)

"My father used to hit me since I was a primary school student. He beat me a lot. One time he beat me until the baseball bat was broken. He even locked me in to hit me up. I got depression and wanted to die. So I tried counseling at a counseling center in Gansuk-dong. My biological father used to hit me everyday after drinking alcohol. He was an alcoholic. It was hard because he beat me everyday. I felt like just dying... I have a sister from my biological father and two sisters from my stepfather" (C, 20170617)

2. Changes they experience from center lives

1) Positive experience of having food, clothing and shelter: "It was better than my house!"

"At first, I was alone. I came here with my younger sibling but he was sent to a center for primary kids. There were only two of us. We were bored and dull, but not anymore. There are many brothers at our center. I like Janggoon the most. I gained some weight. I like everything here" (A)

"I have grown up a lot and gained weight. I eat well and have a different eating habit. I eat what I did not eat. Most of all, I wash myself well. These days I do not smell any more. I go to school well." (A)

"I have gained some weight here. I like everything here. This place is better than my house. I like having my own room." (B)

"I have to eat even when I do not want to... I have to get up and go to bed at a designated time... We also do our own laundry. It was annoying at first, but I do well now. It became my habit. We do cleaning together if we have to... I didn't do cleaning at home because I did not want to be bothered..." (C)

Students regarded it positive to have food, clothes and shelter after they came to center. Forming a right eating attitude through balanced diets and regular eating habit is a part of protective functions that a center provides. Through the provision of a clean and comfortable residential space, students felt the warmth of a home environment and being respected. Their satisfaction with the provision of daily food, clothes and a shelter led them to have an affirmative life experience in the center. They moved out of the idle life and became self-disciplined as shown in the case of student A.

2) Self-discipline acquired through community lives: "From now on, I am going to keep the rules!"

"I am pretty connected with some guys here, especially with A... We do get along well. I used to beat up some fell as when I got angry, but not anymore. We are not allowed to fight or do bad things at center." (C)

"I am okay. But there are too many rules. We have a SookSook meeting³ today but I like being here to talk." (A)

"We have lots of rules at center. Well, it is okay now... Some guys are really annoying. I wanted to beat them up but didn't do so... we have cctv here. I have to be patient... Well, I have no choice... In the mid and long-term center where I used to live, there were big brothers who were really older than me. One of them was 24 years old. Being with big brothers wasn't that good. They had lots of problems... and often ran away... In the shelter, we have fought every day and often ran away, but here we get along well. My friends are jealous of me..."(C)

"Here I do laundry and cleaning. Although I do not want to do it, I still do. It became my habit. Tomorrow we will have a big event. We will do some errands for teachers and carry some heavy stuff... I didn't do this at home when someone commanded me to do so. Here we live together, so we have no choice" (B)

"I don't need to get up early because my school is located nearby. But, I still get up early with others as we are living together... Teachers wake us up so it is not so hard for me to get up..." (B)

The students recognized that they acquired self-control in the course of observing the rules set in the center. They still observe the rules even though they think there are too much rules to keep in the center. They learn self-control by cleaning the areas allocated to each individual and playing their own roles in occasional activities. While, with the system of Wee-class, Wee center and Wee school, students return to their own households after participating in the program, the home-based Wee center let them experience the community life where they share their whole day except school lives. It is revealed that students control themselves by observing the promises and rules in the community life.

3. Changes they experience at school (improved peer relations): "I have better relationships!"

1) Improved peer relations

Peer relations are very important in adolescence. The support and the sense of security formed among the peer group have a positive effect on a student's mental health and promote the ability to cope with the role required by the school (Lee, Kyungwha 2005). The students who were interviewed recognized that the relationships with their friends were improved because of their current lives in the center rather than at home. Considering that they were entrusted to the center due to the lack of care and violence, the center life where the negative factors were removed enabled them to make positive interactions with school friends.

"Everybody at school knows that I am living in the center... Some are envious of me... I wash myself well now... and they do not tease me anymore..." (A)

"My friends know that I am living here. Some say that they envy me and want to live in the center... I don't know why... My relationship with friends got better. We talk quite well. Things got better than before" (B)

"They are all envious of me. We do sports together... we get along well." (C)

2. Improved relationship with parents

³In the Sooksook meeting, students discuss how to practice the ten virtues that can be carried out in their daily lives.

"I used to destroy stuff at home. My sister and I were on really bad terms... Now my parents like me. They treat me well when I go home..."(B)

"I get on with my father now when I go home." (A)

The home-based Wee-center let the students return to their own family to stay with them on Fridays and come back to center on Sundays at their own discretion. This system is designed to help the children practice affirmative interactions with their parents through periodic encounters rather than make them be separated from their parents. Parents regularly receive training and counseling to be ensured that the foster care period of three months at least or nine months at large is not for them to avoid or give up their roles and responsibilities as parents to take care of their children, but for them to know that they should take part in the process. For students, life experiences that have been acquired as part of their habits and kept in the form of promises through center lives are practiced when they go back home where there are no rules by exercising their voluntary will, which enables the students to experience changes and growth as well as makes positive impacts on the improvement of their relationship with parents.

3) Changes of home room teacher's perspectives

"I don't want to do homework. At center, teachers ask me if I have a school assignment and to do it... It helps me. I have received an award point at school. I think my learning attitude got better." (A)

"I can be a little more attentive during class. Center teachers request me to study when the test period is coming near. During the test period, volunteer teachers from university help me study. Some school teachers ask me how I am doing at center.... They never did that before. They didn't even talk to me. These days, they ask me questions time to time and talk with me." (B)

"I don't like studying... I don't think study is for me... But I can do sports well. So, I want to have a career in sports field.... I try to do more exercise than study.... I am going to a specialized school. When teachers ask me, I tell them I would do sports rather than study." (C)

"I commute the farthest here (t middle school is located in Gyeyang-gu)... There is a change in lifestyle. When I was at home, I did not wake up to go to school if I did not want to. I don't have mom at home. But here I wake up early... my school is very far away from the center. I come out of bet at six in the morning because I have to eat also and it takes me so long time to get to school. Teachers compliment me that I come from a far away place. I guess they think well of me."(A)

"I do not like doing laundry or cleaning, but I still do. At first, I did because I had to... Teachers nagged us a lot, so I did... but now it became my habit." (C)

As teachers show concerns toward and nag at them, it appears to have a positive effect on their school lives. Teachers came to have a changed viewpoint because of the improved relationship between teachers and students at school. According to the National Youth Policy Institute (2012), the most prominent reason why students do not want to go to school is not because they are not interested in class teachings (16.81% for middle school students, 16.53% for high school students), or they do not want to study (19.13% for middle school students, 18.20% for high school students). Rather, it is because it is hard for them to wake up early (24.61% for middle school students, 28.04% for high school students). In the home-based Wee-center, the youths live together with a lifestyle instructor and commute to school. This kind of environment has an advantage of giving

lots of chances to interact one another. Students are controlled, observed and encouraged to have a better lifestyle even at night. As seen in the interview results, they have formed an organized lifestyle through the cares and encouragements of teachers, which also led them to be more attentive in the class and be motivated to study. Students recognized the changes of teachers' attitude toward them from negative to positive while they concentrated on class teachings and were motivated to learn.

CONCLUSION AND SUGGESTION

Motivated by the interest in the home-based Wee-center designed to support maladjusted adolescents, the purpose of this study was to investigate the specific factors that help the students in foster care adapt themselves to school life through the life experience of the center. The following conclusions were derived from the interview conducted to three students.

First, students in foster care accepted the fact that the problem of food, clothes and shelter is solved as positive. They had experienced that even basic foods, clothes and shelter were not safely provided at home where the care function of a family was deteriorated. Having food, clothes and shelter means more than a mere satisfaction of survival needs. Those provisions containing love and care imply the sense of solitude for students. Through this experience, they were building new trust that would help them overcome the anxiety and violence experienced at home. Trust leads community members to cooperate with one another in the community based on the bonds secured among members whether they are controlled or not (Kim, Taesun & Kim 2008).

The home-based Wee-center uses a villa located in the community as a place for stay in an attempt to get out of the structure of existing Wee center and Wee school where the concept of school and class is adopted. Currently, all three centers located in Incheon city are using the whole unit of a villa by receiving supports from the Department of Education. The villa was built by the Housing Corporation. Inside the facility, offices, kitchens and classrooms are arranged, and the rest of the space is made up of double occupancy rooms. It appears to be an ordinary house hold where residents feel comfortable like being at home. Restricting the number of operators around fifteen conveys a special meaning in that the students are offered with food, clothes and shelter in a home-like environment.

Second, their learning of self-control through community lives improves students' adaptability to school. In the home type Wee-center, various life guidance is being given. The purpose of offering life guidance is to help them form a right habit in home, school, and society and practice it until it is internalized through trainings. Life guidance should have been offered continuously from the time when they started to recognize rules and other people. Habits of greetings, keeping promises, manners and orders, saving, cleaning and volunteering are formed through interactions made in one's personal life, family life, school life and social life. However, the students who entered the center were not able to receive appropriate life guidance in their childhood and adolescence. They are learning self-control through the 24 hour community lives, and acquired self-control has a positive effect on their school live

Third, the life experiences in the home-based Wee-center affect the formation of affirmative relations and enhance students' school adaptability. By being offered with adequate food, clothes and shelter, and learning self-control through the community lives in the home-based Wee-center, students experienced positive improvements in relationship with friends, parents, and teachers. It is revealed that peer relations at school and parental relations at home have been positively affected by their center experiences. In particular, because of their improved attentiveness during class and learning abilities, teachers' perspective changed in a positive way.

The existing solution to problems occurred in a school environment was to impose punishment or sanctions. In recent years, however, the approach to school problems is shifting from punishment and sanction to communication and adjustment, aimed at restoring relationships through a restorative life education. (Lee, Haekyung 2017). Building a sense of responsibility through a practical education is one of the principles of practicing a restorative life education. From the perspective that relationship is in the center of building a community, it encourages student to have an enhanced sense of belongings through a community spirit and participation. The home-based Wee-center plays a role in this regard.

If a youth shelter or other type of Wee-center is targeted at students who have come out of school or home, the home-based Wee-center gives a focus on students inside home and school who have not left their home or school yet. The existing support system has a solution and therapy driven viewpoint on problems that have already occurred. However, the home-based Wee-center provides a special educational environment where a preventative measure is taken to help students adapt themselves to school and return home. There is a further need for students, parents, and schools to actively collaborate because the factors provoking a family crisis are intertwined with school and social maladjustments.

This study was conducted by making an interview of three students in foster care at one center operated in Incheon, which make it hard to be generalized. Nevertheless, positive factors were derived from the center. Although the home type Wee-center has been constantly established and operated since its opening in 2010, no evaluation and research result have been collected and disclosed yet. There is a need to introduce the positive functions of the home-based Wee-center and let programs be actively shared among centers and in different regions.

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RESİM-YAZI İLİŞKİSİNDE RESİMSSEL İMGENİN SOYUTLANMIŞ BİR BİÇİMİ OLARAK YAZI FORMU VE DİLİN OLUŞUMUNDA GÖSTERGE- ANLAM İŞLEVLERİ

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Özet

Çağlar boyu iletişim ve kültürün en başat ögesi olan dilin oluşumu uzun aşamalarla gerçekleşmiştir. Bu sürecin insanın kendisini ifade etmesi ve dili kullanması bağlamında resimsel imge ile anlatımla başlayıp, ilerleyen aşamalarda resimsel imgenin soyutlanması ile yazıya dönüştürüldüğünü görmekteyiz. Bu çalışmada, imgenin yazıya dönüşümü, resimsel imgenin soyutlanarak harf ve rakam oluşumları; imge ve yazının birlikte kullanımları ve dil- kültür bağlamında gösterge, sembol ve anlam işlevleri ve ilişkileri incelenecektir. Anahtar sözcükler: Dilde Resim- Yazı ilişkisi, İmge- Gösterge- Sembol işlevleri, Soyutlanmış biçim olarak yazı.

INDICATOR-MEANING FUNCTIONS ON FORMATION OF SCRIPT FORM AND LANGUAGE AS AN ABSTRACTED FORM OF PICTORIAL IMAGE ABOUT PICTURE-SCRIPT RELATION

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Abstract

The formation of language, which is the most dominant element of communication and culture in the ages, has occurred at long stages. We see that this process begins with expression by the pictorial image in the context of expressing itself and the use of the language, and is transformed into script with abstracting of the pictorial image in the progressive stages. On this study, the transformation of image to script, the formation of letters and numbers by abstracting the pictorial image; co-use of image and script as well as indicator, symbol and meaning functions and relations in language-culture context will be examined. Key Words: Picture-Script Relation on Language, Image-Indicator-Symbol Functions, Script as an Abstracted Form.

ROLE OF FATHER IN VIEW OF THE MALES IN TODAY'S TURKISH SOCIETY

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In contemporary societies, the traditional family structure has evolved into a nuclear family structure followed by the change of roles and responsibilities of individuals within the nuclear family structure. Regarding to this, women's education status has increased and consequently women's status in the society has been raised and women have become independent from being economically dependent upon men. After women's increased involvement in the workforce and consequent gains in economic power, important changes in traditional parental roles occurred. Men have started to share housework and child care responsibilities; hence, the nature of fatherhood and parenting attitudes have been altered and the concept of fatherhood and parenting has gained a new meaning. Elimination of the sharp social gender boundaries has changed traditional mother and father roles, in this fashion, the concept of fatherhood is also affected through these alteration. The fathers spend more time with their children and take more responsibility for child care compared to past.

This research aims to determine the fatherhood role perceptions of fathers by examining which factors are effective in the process of the attitudes and behaviors of men's concept of fatherhood in the cultural structure of Turkish society today becoming different.

The study group of the research conducted with the descriptive scanning model; It is the father of the children aged between 3 and 6 living in Antalya city center. The volunteer working group included parents of 422 children attending private and state kindergartens. During the collection of data, general information form, and fatherhood role perception scale have been used. Statistical methods, which are suitable for the features and structures of variables as parametric and non-parametric, have been used for statistical analysis of the research. The findings of the study revealed that the aspects affecting the perception of the role of fatherhood are fathers' educational level, family type and the number of children.

ROLE OF TABLET TECHNOLOGY TOWARDS CHILDREN WITH AUTISM LEARNING DEVELOPMENT: A STUDY ON THE ACCEPTANCE OF SPECIAL EDUCATION TEACHERS

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ABSTRACT

Tablet technology is an eminent handheld interactive program device that has been trendy used these days among teachers, instructors and children. The state of the art indicates that tablet technology is competent in supporting learning and sustaining educational knowledge. Nevertheless, tablet technology centred learning are still limited in Malaysia. In this study, we investigate the acceptance of special education teachers towards the use of tablet technology in teaching and learning for children with autism. Besides that, we also analyse the instructional benefits of using the tablet technology in special educational school and autism centre especially in the classrooms. Five special education teachers and four autism experts from Klang Valley, Selangor, Malaysia participated in this research study. A tablet technology with a pre-installation of basic numeracy learning apps has been used as a medium to transport the education knowledge towards children with autism. Based on the interview and discussion with the special education teachers as well as autism experts, they believed that with the used of tablet technology the ability to assist not only children with autism, but to the teachers as well as instructors will meet the new expectations regarding the academic achievement and educational outcomes. Therefore, it is hoped with the used of tablet technology it will be able to nurture the learning development among children with autism and to improve their quality of life in future.

INTRODUCTION

Learning style or learning process refers to learning latest information, including plans and approaches that have been used in teaching and learning as preferred by children. Children with autism learn in different ways although there are many theories about cognitive learning and theory of mind (Hasnah Toran, 2013). According to Macizo, Soriano, and Paredes (2016) in their study stated that special need children would swiftly learn if they can use their preferred technique. Even though learning approach is vital, Nugrahani (2007) and Ungang (2008) stated the use of appropriate teaching and learning aids in educating are also essential. Hence, Hayes et al. (2010) and M. F. Kamaruzaman, Rahman, S.H.A., Abdullah, K.Z., Anwar, R. (2013) confer the significant of technology reform that may perhaps assist the teachers and instructors to deliver a modernistic teaching and learning approach for children with autism.

The use of technology for assisting children with autism is a comparatively new and emerging field, especially in Malaysia. The Ministry of Education (MOE), Malaysia is working closely with the Ministry of Communications and Multimedia, Malaysia to equip every school setting with technology know-how, internet access and virtual learning environment via 1BestariNet. It is the Malaysia Government wish to provide all children including children with special disability with equal access to quality education that form skilful, knowledgeable and united Malaysian as one. Every child will learn how to continue acquiring knowledge throughout their lives and to be able to connect different pieces of knowledge. It is a hope that every child will gain control of essential cognitive skills by the aid of technology regardless of skill level. This is an area where the approach has historically fallen short, with children being less able than they should be in applying the academic knowledge.

Technology proficiency creates a predictable environment with consistency where every child may and can interact without worrying about the unpredictability of other individual interactions. It is extensively agreed that children with autism have a high interest in technology devices and an affinity for using them (Hourcade,

Williams, Miller, Huebner, & Liang, 2013; M. F. Kamaruzaman, Nor, H.M., Azahari, M.H.H., 2016; Porayska-Pomsta et al., 2012; Wass & Porayska-Pomsta, 2013). They offer multisensory stimulation through touch and movement. According to M. F. Kamaruzaman, Nor, and Azahari (2016), N. M. Rani, Yusoff, and Kamaruzaman (2015) most children with autism who use technologies may influence them, and they find easy to use, enhance concentrate and sustain their attention in the educational activity.

Dealing with children with autism pose enormous challenges to both families and professionals at homes and also in schools. According to Bryant, Bryant, and Smith (2016), in challenge to unravel the answers to these enigma in this present world, the main concern bordering the teachers and other professionals in encounter the children with autism are behaviour, cognitive thinking, perceptive, sensitive and psychomotor necessitates in the classrooms is the use of assistive learning technology, the correct way to use it, where to get the content application and how to utilise the devices. Assistive learning technology is a derived from Information and Communication Technology (ICT) with the history linked to a computer technology reform.

ROLE OF TABLE TECHNOLOGY ON CHILDREN WITH AUTISM IN LEARNING DEVELOPMENT

Technology these days plays an essential part of peoples' lives, be it at home or work. It is the key to success in industries such as arts, education, trading, transportation and so forth. Since human beings carry on to become increasingly reliant on technology devices and gadgets, academic sectors are also fortunate to have teaching and learning mechanisms to enhance students' inclusive experience. Ever since there is an increasing interest in the academic research area particularly in designing interactive technologies based interventions for children with autism. This technology could be unique gallows for assisting and inspiring the special need education environment.

Advance in ICT has led to several innovative applications with various visual supports integrated and the design modelling on technology-based intervention for children with autism. It includes tablet technology which has been extensively described as an effective approach for nurturing children with autism abilities (M. F. Kamaruzaman, Nor, et al., 2016; Moore, Cheng, McGrath, & Powell, 2005). The crucial feature to build, design and practically plan an effective tablet technology intervention program is a thoroughly customise a solution that is strictly fit for the target users. At the most basic level, every child needs to be entirely literate and numerate. Understanding basic numeracy is essential for every children with autism. This will furnish them with fundamental life skills and enables them to perform well in society so that they can form value for themselves, their community, and the nation (M. F. Kamaruzaman, Azahari, M.H.H., 2014; M. F. Kamaruzaman, Noor, Hanapiah, & Azahari, 2016). According to Kulik (2003) and M. F. Kamaruzaman, Nor, et al. (2016), the usage of assistive learning technology has been found to be beneficial in the instruction of children with autism. Assistive learning technology can highlight essential matter, divide content into minor subjects' components and provide immediate feedback regarding response accuracy (DuPaul & Eckert, 1998; N. M. Rani, Rahman, & Kamaruzaman, 2015). In term of the technologies used for joint attention purposes, tablets and mobile applications are the most prevalent (Aresti-Bartolome & Garcia-Zapirain, 2014). It is the reasonably priced that makes the tablets and mobile applications auspicious compared to others joint attention technologies such as virtual reality and robot. The tablet and mobile applications can be used equivalence with other tools in the classroom such as visual cards, books and board games. However, the use of tablet technology as a learning aid in accelerating the special education sector here in Malaysia is still at the provisional stage.

Assistive learning technology refers to any mechanism devices whether it has been modified or customised that is used to increase and improve the cognitive learning capabilities of a child with a disability (Turnbull, Huerta, Stowe, Weldon, & Schrandt, 2009). It includes tablet devices, smartphone, and PDAs. This is because tablet, smartphone, and PDAs are flexible and portable. A handheld device is easily carried for on the go, and there is peer acceptance. Due to its reasonably priced that makes the tablets and mobile applications auspicious compared to others joint attention technologies such as virtual reality and robot. The tablet and mobile applications can be used equivalence with other tools in the classroom such as visual cards, books and board games. The touchscreen and layout are more accessible for children with autism; the sliding and tapping are easier than typing. Assistive learning technology allows for adaptability and motivation. Hence, it composes the visual images comprehensible and user-friendly by using computer graphic which captures and maintain children with autism attention.

Excessive research has been done on the use of tablet technology for children with autism. However it is beyond the state-of-the-art scope to determine the variable children with autism in Malaysia especially on its wisdom, diversity culture, religion and civilisation (Cheung & Slavin, 2013; Kulik, 2003; Toran, 2011). Many types of

research have suggested that there may be differential effects for the effectiveness of the tablet technology based on the skill targeted and the age of the population (Murphy et al., 2002). Although there are more than 40 years of research on the use of technology and special education, access to technologies that are used to support children learning outcome changed remarkably with the 1997 re-authorisation of the Individuals with Disabilities in Education Act (IDEA). The amendment of IDEA 1997 (and subsequent re-authorisations of IDEA in 2004) required that all children with disabilities be considered for assistive learning technology to support their progress and participation in the general education curriculum. A. Blackhurst and Edyburn (2000) have described this as a defining moment for special education technology in the modern era.

Instructional technologies, in particular, a computer-based instruction have the ability to help children with autism, teachers and instructors meet the new expectations regarding the academic achievement and educational outcomes. Part of the optimism about tablet technology transformative role in special education has focused on its potential to provide flexibility in the materials and practices surrounding academic curriculum for special learning disabilities. The use of tablet technology to enhance learning is an effective approach for children with learning disability. A. E. Blackhurst (2005) and M. F. Kamaruzaman, Noor, and Azahari (2016) indicates that tablet technology can make learning environments more accessible, besides it can enhance self-reliance among individual with learning disabilities especially children with autism. Tablet technology can also help children with autism to accomplish educational goals, and when used strategically, technology know-how can help bypass conditions that once prevented these children to achieve self-reliance as well as humanising their quality of life. Figure 1 display a sample of tablet technology.



Figure 1: Sample of Tablet Technology which has been used in this research study

The use of tablet technology may provide a compensatory alternative and when embedded with quality visual images instruction, improve achievement may ensue (MacArthur, Ferretti, Okolo, & Cavalier, 2001). According to Fasting and Halaas Lyster (2005), N. M. Rani, Ramli, Legino, Azahari, and Kamaruzaman (2016), when teachers utilised the tablet technology, it may assist children with autism in understanding facts, and when embedded within the effective instruction, tablet technology could provide the means for children with autism to planned which reflective of their knowledge, experience and skills. The use of tablet devices within the school setting provides numerous benefits, including greater flexibility in location of the intervention, easy access to cost efficient application and lower cost when compared to laptop or desktop computer (Ayres, Mechling, & Sansosti, 2013; Bouck & Flanagan, 2016; Sansosti, Doolan, Remaklus, Krupko, & Sansosti, 2015). However, few studies have yet examined the efficacy of the tablet-based intervention for children with autism. Additionally, given the wide variety of application used on tablet devices, most studies do not use the same application for intervention. Therefore it creates a gap of knowledge to grasp on the efficacy of using touch

screen learning technology. Additionally, Khan (2010) and Konstantinidis, Hitoglou-Antoniadou, Luneski, Bamidis, and Nikolaidou (2009), N. Rani, Legino, Mudzafar, and Kamaruzaman (2014), believed that all children including the children with autism learn better with the interactive program materials and with the assistive learning technology that engages learners for better cognitive intensity. The tablet technology objectives are to assist children with autism to remain concentrate, in a bid to facilitate learning within the school setting. Despite this, children with learning disabilities often experience better achievement when they been allowed to use their capabilities to work around with their disabilities. Tablet technology instruments combine the best of both of these practices (Adebisi, Liman, & Longpoe, 2015; Higgins & Raskind, 1999; M. F. Kamaruzaman, Rani, N.M., Nor,H.M., Azahari, M.H.H., 2016).

TABLET TECHNOLOGY REFLEXION TOWARDS CHILDREN WITH AUTISM LEARNING DEVELOPMENT

The performance treatment comprehended a qualitative approach by using the data collected from the field notes and video recording supported by structured execution checklists. From the study conducted, we pointed out that the special education school and autism lab programs did not emphasise on the use of tablet technology as a teaching aids in the local classroom learning environment. Due to this factor, most of the teaching and learning ecosystem for children with autism are still using the conventional method that are the cue cards, static images as well as first and then visual approach. Even though the conventional method is still appropriate to use at this point, the advancement and the aid of technology in assisting teaching and learning in the open era of educational must not be overlooked. It is relevant to note that children with autism spend nearly all their time in special education classrooms. It is better to blend the conventional method of teaching and learning together with the technology know-how.

According to Aliza Alias (2013), it is now that this access to education system needs to enhance and improvise in order to produce a self-reliance children and schools that are comparable to the best nationally. She also stated that all education system must be attached to a set of aspirations that are thoroughly attached to its particular national context. Although there are many diverse perspectives on what would make Malaysia's education system incredible, almost all stakeholders agree that Malaysia's education system should do much better if it is to live up to the spirits of all Malaysians.

One of the special need teacher in Sekolah Kebangsaan Raja Muda (Intergrasi), Shah Alam, Selangor, Malaysia point out, the use of technology know-how such as tablets and smartphone in assisting teaching and learning for children with autism is still at the infant age here in Malaysia. He also mentioned that, even though Malaysia vision to developed as a fully developed country by the year of 2020. It need a fully support from top down organisation. It includes the challenge of establishing a progressive people. This also include the population of individual with special need. The populace that is innovative, critical mind and always looking forwards to achieved a holistic growth for all. At the same time, Malaysia National Philosophy of Education call for a developing the potential of individuals in a holistic and integrated manner in order to produce individuals who knowledgeable, physically balance and harmoniously. In order to support the country's ICT plan as well as to associate with the country vision of 2020, the education system has to be transformed. He also stated that the Western countries have championing the use of tablet technology in assisting children with autism and learning disability for ages and he is aware the significance and the outcome of using these approaches for teaching and learning are quite remarkable. It is a hope and a matter of time, MOE, Malaysia will implement the use of tablet technology in a local school here in Malaysia.

During the preliminary investigation and interview on the usage of tablet technology as a teaching aid for children with autism. We have introduced a tablet based numeracy learning application (TaLNA) which has been formed and designed carefully for children with autism learning development. The content of the apps was adapted and align with the Integrated Curriculum for Learning Disabilities issued by MOE Malaysia. During the experimentation in the Autism Lab, UKM, Bangi Selangor, Sekolah Kebangsaan Raja Muda (Intergrasi), Shah Alam and Sekolah Kebangsaan Puncak Alam, Selangor, they found up that most children with autism who been given a try to use the TaLNA apps really enjoy, enthuse, and motivate. In reference to Figure 2, its shows how comfortable children with autism in handling and operating the tablet technology.

Despite the fact of tablet technology is not the primary mechanism in teaching and learning for children with autism here in Malaysia. It is found that, the tablet technology give an impetus to attract children with autism to continue as well as maintaining their level of attention in learning environment. It is a new dimension of learning to children with autism not only to enhance their cognitive, affective and psychmotor domain but also to complement the present teaching and learning educational system in Malaysia.

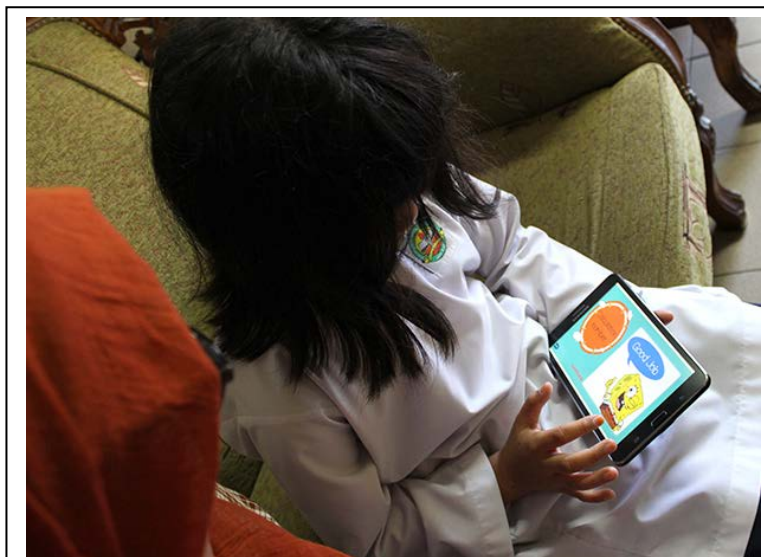


Figure 2: Children with autism show how comfortable there are while using the assistive learning technology device

DATA ANALYSIS TO DETERMINE THE INFLUENCE AND IMPLICATION OF TABLET TECHNOLOGY TOWARDS CHILDREN WITH AUTISM LEARNING DEVELOPMENT

Based on the analysis from the special education teachers and panel of autism experts, all of them without a doubt indicate that the tablet technology is the modern approach in teaching and learning for children with autism. They also decided that the usage of flash card, cue card was outmoded even though the approach is still relevant but the emergence of technology know how provides a significant impact towards teaching and learning particularly for children with autism.

The intelligence and penetration of tablet technology offers induction or stimulation encouragement towards these children to arouse with the application content. With the advancement of computer graphics, audio video, visual brightness, and colourful layout allowed the tablet technology to engage naturally with the children. Based on Table 1, it is relevant to note that all teacher consented that the tablet technology is very influence and user-friendly in complementing the conventional teaching approach. This information also has been agreed by all the autism experts whereby the tablet technology will boost the recent teaching pedagogy, please refer to Table 2. The tablet technology has given a new dimension and revolution in education world especially for children with autism.

It can be concluded that the tablet technology does influence on teaching and learning for children with autism. This is due to its mechanism which is very portable, easily carried, user-friendly and can promote peer acceptance. Besides, the touch screen and layout are more accessible for children with autism because the devices offer sliding and tapping function, which is easier than typing and scrolling a mouse (M. F. Kamaruzaman, Nor, et al., 2016). All of this feature will naturally boost the children with autism enthusiasm and motivation to discover and learn new thing.

Table 1. Special School Teachers reaction on the influence and significance of tablet technology for children with autism learning environment

No	Name	Institutional	Complement Conventional approach		User-Friendliness		Influence	
			Yes	No	Yes	No	Yes	No
1	Special Education Teacher 1	SK Raja Muda Shah Alam, Selangor	√		√		√	
2	Special Education Teacher 2	SK Raja Muda Shah Alam, Selangor	√		√		√	
3	Special Education Teacher 3	SK Bandar Puncak Alam, Selangor	√		√		√	
4	Special Education Teacher 4	SK Bandar Puncak Alam, Selangor	√		√		√	
5	Special Education Teacher 5	Autism Lab, UKM Bangi, Selangor	√		√		√	
6	Special Education Teacher 6	Autism Lab, UKM Bangi, Selangor	√		√		√	

Note: All special education teachers has agreed on the influence and practicality that has been created by tablet technology towards teaching and learning

Table 2. Autism expert reaction on the influence and significance of assistive learning technology for children with autism learning environment

No	Name	Institutional	Complement Conventional approach		User-Friendliness		Autism experts' reaction on tablet technology	
			Yes	No	Yes	No	Useful	Not Useful
1	Expert 1	Faculty of Education, UKM, Selangor	√		√		√	
2	Expert 2	SK Raja Muda Integrasi, Shah Alam, Selangor	√		√		√	
3	Expert 3	IDEAS Autism Centre, Rawang, Selangor	√		√		√	
4	Expert 4	SK Bandar Puncak Alam, Selangor	√		√		√	

Note: All autism experts agreed that tablet technology complements the traditional method of teaching and learning. It also creates a new diversity in education for children with autism.

FINDING

Most of the special education teachers agreed that the tablet technology inspired and enhanced the mind, visual and psychomotor of children with autism. Autism experts also reckoned with the new dimension of learning intervention, to reduce the duration of time to learn the basic numeracy and calculation skill is possible. Hence, it provides more flexibility and convenience way to study and acknowledge the conventional learning approach. Perhaps these children will survive the challenging adulthood, to be independent, and successfully achieve a better quality of life.

CONCLUSION

Children with autism have a variety of challenges, and they need an impressive frame up of support that should begin in their formative years. With early intervention, outcomes are better. Challenges attending to one aspect of a situation, cognitive inflexibility and over selectivity require additional support. Learning environments can be difficult due to this challenge. Structuring the instructional environment with predictable schedules, having knowledgeable teachers who are well versed with autism as well as having experience with a different kind of learner in the Autism Spectrum are critical elements that foster children success. A variety of forms of technology can be used to assist, foster learning, practice and support visual curriculum. Tablet technology and its tools can inspire enthusiasm and provide options for children with autism instructional content. Data analysis and finding have been one of the most important phases in this research study. The finding demonstrates that the special education teachers and autism experts believed there are a strong connection and interest in the use of tablet technology towards children with autism learning development. Tablet technology will probably never replace efficacious treatment in Autism Spectrum Disorder, just like it will probably never replace the special education teachers. However, the state-of-the-art in educational technology strongly suggests that by using tablet technology, it possible to support both structured and open-ended models for learning.

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ROMA IN THE CZECH AND SLOVAK REPUBLIC IN THE SPECTRUM OF NATIONAL DIVERSITY

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ABSTRACT

Roma in the Czech and Slovak Republic are the most significant national minority. Not only numerically but also in social, cultural, linguistic, and educational character of problems. The aim of the paper is to analyse selected aspects of diversity in the relationship between Roma communities and the majority society. Especially in the field of education, cultural and historical.

INTRODUCTION

In former Czechoslovakia, split in 2003 to the Czech Republic and the Slovak Republic, there is together nearly 1 million Roma nationals living there. Of which 300 thousand individuals in the Czech Republic and 500 thousand in the Slovak Republic. This number and the living standards of the Romany communities create a number of complex situations in social, political and educational spheres. Both the Czech and the Slovak governments pay a lot of attention to these issues. As a consequence of the considerable diversity between the Roma and the majority populations as well as other national minorities living in these countries there is tension within the societies often manifested by hateful interventions of ultra-right-wing parties against the Roma population, concentrated in certain specific localities (like for example in the years 2011-2012 in the north of Bohemia near the German border in the towns of Rumburk, Šluknov and Warnsdorf). (More about Roma: Lázníčková, Davidová, Horváthová, Kumanová, Raichlová, Hübschmannová, Nečas, 1999, Kwadrans, 2011, Lacková, 1996).

For all these reasons Roma issues have been studied by a number of authors. I would like to mention a couple of recent ones whose work gave rise to this essay. Major works have been written in the area of multicultural education. Jakub Hladík, expert in multicultural competences, focuses on this area and defines the role of multicultural competences also in relation to the Roma national minority. In his opinion, multicultural competences are also relevant in preparation of teachers-to-be for work with Roma pupils at schools (Hladík, 2016). Examination of the relationship between Roma and majority population is an important aspect of analysis of the position of the Roma communities. These relations have been studied by the pair of authors Jana Smílková and Jaroslav Balvín, who accentuate dangers of the discriminatory practices existing in the relationship of part of the majority population to the Roma community and vice versa - directed from the Roma side towards the majority population (Smílková, Balvín, 2017). Slovak authors dealing with this theme include for example Ms. Lenka Haburajova-Ilavská, focusing on the relationship of the Slovak government and Slovak institutions to Roma communities. Haburajová - Ilavská also analyses the needs and the reality of the Roma national minority giving rise to a number of often irresolvable problems in the society (Haburajová - Ilavská, 2013). Questions of education of adult Roma individuals with regard to andragogy are studies in the most recent publications by Ivana Pirohová, Marek Lukáč and Silvia Lukáčová. This publication summarises experience in education of Roma pupils in the Slovak Republic and defines perspectives related to the asserted inclusion in majority education (Pirohová, Lukáč, Lukáčová, 2016).

Looking for innovative methods of work with Roma pupils is a major part of the idea. This is also what an article by Jaroslav Balvín and Lenka Haburajova - Ilavská is about. These authors deal with the option of application of play methods in teaching Roma pupils (Balvín, Haburajová - Ilavská, 2014). The author of the present article focuses on education of Roma pupils, both children and adults, and on major personalities of Roma culture (Balvín, 1999, 2004, 2007, 2008, 2011, 2013, 2016).

The following text analyses some of the issues the author considers relevant for national diversity and the relationship of the Roma minority to the majority population and options of their national and cultural identity.

THE STUDY

ROMA IN THE SPECTRUM OF NATIONAL DIVERSITY IN THE CZECH AND SLOVAK REPUBLIC

Roma community is a national minority *sui juris* in both the Czech and the Slovak Republic. To be a national minority and not a foreigner to the Czech Republic entails several legislative rules allowing members of national minorities to maintain their language, culture and identity in the society. These include four conditions: 1) To be a citizen, 2) To contribute to the national economy, 3) To declare the status of national minority by establishment of active national associations, 4) To stay long-term in the territory of the Czech Republic as national minority. These conditions are met, *inter alia*, by the Roma national minority, whose members are historically the earliest members of the society, living in the territory of the Czech and the Slovak Republics since 13th - 14th century. Thus, the Roma population is a full-fledged member of the national minorities in the country (although they were often deprived of this right by the past regime on the grounds of declaring them just a social group and not a national minority). There are currently fourteen national minorities in the Czech Republic. They include Belarussian, Bulgarian, Croatian, Hungarian, German, Polish, Roma, Ruthenian, Russian, Greek, Slovak, Serbian, Ukrainian and Vietnamese minorities.

There is a certain tension between the minorities and the majority population following from cultural diversity. The reason is different understanding of values, share in economy, social security etc. There are sociological probes studying relations between the majority and the minorities which reveal the bottom position of the Roma minority in the hierarchy of qualitative relations between the minorities and the majority. Roma female writer Elena Lacková named one of the deep causes of this condition as follows: *"Slovaks and Czechs hardly know us (Roma), looking at us with blatant prejudice..."* (Lacková, 1997, in Manuš, 1998, p. 190).

On the other hand, there is the fact that there is diversity even within every national minority and there is some tension among its own members. Elene Lacková showed this on the example of the very Roma minority: *"To tell the truth, Roma people themselves can discriminate. Roma people are humans and suffer from prejudices in relation to the unknown. Hardly any Czech or Slovak knows, though, that not every Roma individual is the same, that our nation is split to various groups like Czechs, Poles, Bulgarians, Serbians and Croats, each group is group per se, with its own habits and rites, its dialect, its professions, in short its way of life"* (Lacková, 1997, in Manuš, 1998, p. 190).

ROMA ENTRY TO THE SCENE OF CZECH AND SLOVAK HISTORY

Roma population entered the Bohemian and Slovak territory in 13th and 14th centuries. In Bohemia an exact date is known from Dalimil chronicle mentioning presence of Roma nationals in 1242. They were called Kartas, for when they met local people they said: *"kartas boh"*, which is translated by philosophers as *"big hunger"*. These people were often considered to be Tartar spies preceding Mongolian raids against Bohemia and Slovakia. (Málek, 1998, p. 167)

This race, coming to Bohemia and spreading across Europe, is also mentioned by the Czech writer Vladislav Vančura in his artistic rendering of Czech history called *Obrazy z dějin národa českého*. (Vančura, 1940, in Manuš, 1998, pp. 164-166).

The first written mention about Roma presence in Slovakia dates from 1322. In that year the mayor of Spišská Nová Ves wrote that migrant Gypsies were settling in the surrounding forests. A major act was the provision of the protective safe-conduct for the Roma leader Ladislav at Spiš castle by Emperor Sigismund of Luxembourg. This event is dated 17 April 1423 and the Emperor thus permitted free Roma wandering across the country and their camping near towns and cities. The Roma communities also presented this safe-conduct when arriving at France. And as this document came from Slovakia and Bohemia, Roma communities began to be called Bohemians. (On Roma history in Bohemian and Slovak territory see also Horváthová, 1999, p. 15-23, Lhotka, 1999, p. 25-27, Nečas, 1999, p. 29-31, Davidová, 1999, p. 33-37)

ROMA JOURNEY THROUGH CENTURIES IN BOHEMIA AND SLOVAKIA

Since their arrival in Europe, including Bohemia and Slovakia, the relationship between Roma and majority populations has undergone complex development. From the original interest and enchantment by the new, unknown ethnic from far east to chases and liquidation in 16th and 17th centuries. This was followed by assimilation in 18th and 19th centuries. Humanisation of the relationship was disturbed by various discriminatory and coercive legislative acts. The most violent attack against the Roma population as a non-adaptable community came in the form of the genocide in the context of 20th century holocaust.

At present the Czech and Slovak Republics strive at creation of mutually correct relationships between the Roma minority and the majority populations although on the other hand there are still parties and movement

trying to discredit the Roma position in the society. The history of Roma existence in our territory is marked by a couple of important milestones:

Three hundred years ago ancestors of the present Roma community began to settle at the outskirts of Slovak villages where they established cooperation with local farmers: they made their baskets and forged products for them. And Roma music bands played at the farmers' weddings and dances. A similar symbiosis developed in Bohemia where Roma groups mainly settled in South Moravia. A different way to earn their living was developed by the **Olach Roma group**. They migrated across the country and lived on small thefts in addition to performing certain professions. That threw a shadow on the settled Roma communities and so neither them nor the majority population liked Olachs. (See Lacková, 1997, in Manuš, 1998, p. 190). The Olach Roma migration was only stopped in 1959 by issue of the state ban of migration.

Roma in the First Czechoslovak Republic (1918-1938) were under strict control of the government and, on the other hand, the first **positive projects** for development of their nationality became to develop, including for example the Roma school in Užhorod founded in 1926.

In the period of World War 2 the genocide programme and the consequences of holocaust nearly eliminated the Roma nation in Bohemia and Moravia (with 7 to 15 thousand Roma victims). In Slovakia, a thousand Roma people died in work camps or in war purges.

The fate of the Roma nation in the years 1945-1989 was marked by the paternalist approach of the society based on the communist ideology. The Roma population was to be "re-educated" in the Czechoslovakia of the time. That was done not only through special schools but also through their work liability.

Roma condition after the Velvet Revolution in 1989 has been both positively and negatively affected by the new market mechanisms. The positive role is performed by the Roma representation in the government in the form of the *Government Council for Roma Community Affairs*, by their own civic associations, their *Museum of Roma Culture in Brno*, or their own theatre called *Romathan* in Košice, Slovakia. Another major positive fact is the establishment of professional academic institutes for studies of cultural and social matters of Roma communities. (They include for example the Department of Roma Studies at the Faculty of Arts, Charles University in Prague, Czech Republic, or the Institute of Roma Studies at Constantine the Philosopher University in Nitra, Slovak Republic). Cultural activities introducing to the general public qualities of Roma music, singing and dance are no less important. One of the popular events held in the capital city of Prague in May already for nineteen years is the Roma World Festival Khamoro (Khamoro = Little Sun).

ROMA PERSONALITIES IN CZECH AND SLOVAK REPUBLICS

Unlike majority cultures, Roma written culture only began to develop in 1920s. It was developed by Roma personalities who, with the help of non-Roma experts knowledgeable of Roma languages (in Czechoslovakia represented by Milena Hübschmannová and Eva Davidová), began to write in Roma language. Every nation has its outstanding personalities. The Roma nation has them too, despite the doubts of the majority. The following chapters will introduce some of them in our opinion most significantly contributing or having contributed to development of Roma culture. The author of this text had the chance to be in close contact with most of them for twenty years since 1993 and therefore his information about them comes from his personal experience in their personalities and work developed in the context of the struggle for Roma identity and national emancipation.

THREE MAJOR ROMA PERSONALITIES IN THE CZECH REPUBLIC

ROMA POET PHDR. VLADO OLÁH, 1947- 2012

This poet was the first Roma writer accepted as member of the Czech Community of Writers and granted the Literary Prize of Milena Hübschmannová in 2006. He also founded and for many years presided the civic association Roma Publishing and Cultural Society with registered seat in Prague based on Christian principles. His work is an artist's confession of affection for the mankind in general and the Roma nation in particular. His most popular collections of poems include: *Khamori lulud'i* (Sunflower), *Le khamereske čhave* (Children of the Sun), *Khamutno kamiben* (Glow of Love), *Amaro drom pal o Udut* (Our Way to the Light). His Christian faith was expressed by Vlado Oláh by his translation of biblical texts to the Roma language under the title *Apostolic Deeds*.

ROMA POLITICIAN ING. KAREL HOLOMEK, BORN 1937

Ing. Karel Holomek comes from a mixed marriage. He is offspring of Moravian Roma group and son to Tomáš Holomek, the first university-educated Roma in the Czech Republic. He has been Roma politician, president of the Moravian Roma Community, member of the Council of the Government of the Czech Republic for Roma Community Matters for many years. He is also known to the European political scene as a supporter for Roma integration in the majority societies. He is also father to PhDr. Jana Horváthová, for years successful director of the Museum of Roma Culture in Brno. His creed, expressing the efforts of many Roma and Czech activists to eliminate frictions between Roma and non-Roma groups, is embodied in the following statement: *“I want to build bridges between Roma and Gadjo... I want to contribute to formation of Roma representation expressing interests of all Roma people in the country... Success is still hard to achieve...”*

At present he is president of the Roma Community in Moravia, honorary president of the Society of Experts and Friends of the Museum of Roma Culture in Brno, director of the International Roma Centre of the Helsinki Civic Assembly, member of the Government Council for Human Rights and editor-in-chief of the Roma journal *Romano hangos* (Romany Voice).

POLITICIAN AND LAWYER JUDR. EMIL ŠČUKA, BORN 1957

JUDR. Emil Ščuka is a former attorney, later politician representing Roma interests in the Czech Republic and worldwide. In 1990 he was elected Secretary General of the International Romany Union (IRU) and between 2000 and 2004 its president. His major merits on the international scene include the Declaration of Roma Nation of 2000 and his representative role in the United Nations Organisation. On the domestic scene, he founded the Romany Civic Initiative (RCI) political party in the still undivided Czechoslovakia after the Velvet Revolution in 1989. Thanks to its success in elections eight Roma deputies became members of the Czech and Slovak Parliaments. Emil Ščuka initiated and organised several major Roma Art Festivals called ROMFEST. In the area of education of Roma students, he established the Secondary Roma School of Law and Sociology. At present JUDr. Emil Ščuka holds the post of headmaster of the International Conservatory Prague.

THREE MAJOR ROMA PERSONALITIES IN THE SLOVAK REPUBLIC

ROMA FEMALE WRITER ELENA LACKOVÁ, 1921-2003

Mgr. Elena Lacková, born Doktorová, was born in Velký Šariš, Slovakia, in 1921 and died in Košice, Slovakia, in 2003. She was the first Roma female in Czechoslovakia who graduated in Adult Education. She became a widely renowned female writer for children and youth. In addition, she worked in many cultural centres as an expert in education. She wrote poems, fairy-tales, short stories and stage plays in the Roma language. In 2000 the President of Slovakia granted her a state award. Her major works using art language to express identity of the Roma nation and its struggle for emancipation include the stage play *Burning Gypsy Camp* and the radio play *Zhuzhika*. Further major achievements include Roma fairy tales and her autobiography called *I Was Born Under Lucky Star*. Her three short stories about Roma holocaust warn against holocaust which also negatively affected Roma nation in Czechoslovakia: *The Dead Do Not Return*, *Life in the Wind* and *White Ravens*.

ROMA POET DEZIDER BANGA, BORN 1939

Dezider Banga is Slovak poet, translator and TV dramaturge. Dezider Banga comes from a Romany family. He graduated from Faculty of Arts, Comenius University in Bratislava, majoring in Slovak language and literature and History. After graduation, he worked as secondary school teacher, translator, TV dramaturge and editor-in-chief of the Roma journal called *Romana*. His literary achievement is based on poetry. The first collections of Dezider Banga are based on Gypsy folk art which he translated to Slovak. Banga's poems spring from authentic love experience. His major works include the anthology of Romany poetry called *Song over the Wind* and the anthology of Roma fairy-tales entitled *Black Hair* and *Paramisa* (fairy-tales). His contribution to education of Roma children is represented by the Roma spelling book called *Romano hangos* (Roma Voice) of 1993.

ROMA PHYSICIAN AND POLITICIAN JÁN CIBULA, 1939-2013

Ján Cibula was born in poverty in the family of a Roma musician in Slovakia. As doctor of medicine he became a respected specialist in Bern, Switzerland. He worked there in his profession till 2002. In addition to his job of general practitioner he devoted his time and money to the struggle for the rights of the Roma nation. He was one of the founders of the International Romany Union - IRU - in 1971 at its first congress in Oprington near London. That congress elected him representative of IRU in the Commission for Human Rights of UNO in Geneva. In 1978 he was elected president of the International Romany Union. He received a number of international awards for his activity. Including one from the Slovak Government. In 2008 he received the "Prize for Humanness" recognizing his long-term efforts in dissemination of information about Roma holocaust and request for compensation for its victims.

INTERNATIONAL ROMA PERSONALITIES CONNECTED WITH CZECH AND SLOVAK HISTORY

IAN HANCOCK (in Romany language Yanko le Redzhosko)

Ian Hancock is a Roma historian and philologist of U.S.A., university professor. He was born in 1942 and became Roma teacher and advocate. He comes from England. He is one of the major authors in the area of Roma studies. The Slovak University of Constantine the Philosopher in Nitra, the Institute of Romany Studies granted him Doctor Honoris Causa in 2008. His main literary achievement dealing with history and culture of Roma nation in global relations is called *We, the Roma Nation* (in Roma language *Ame sam e Rromane dzhene*).

HRISTO SLAVOV KYUCHUKOV

Hristo Kyuchukov is a Roma psycholinguist coming from Bulgaria, university professor. He was born in 1962 in the community of Bulgarian Moslem Roma. He is a leading specialist in Roma language and Roma children education in Europe. He obtained his academic title of professor of general linguistics with a focus on Roma and Turkish languages at Matej Bel University in Banská Bystrica, Slovakia, in 2015. In the years 2007-2012 he taught at the Department of Roma Studies at University of Constantine the Philosopher in Nitra, where his professional knowledge greatly contributed to development of his department. At present he lives in Berlin, contributing to development of Romany nation and language studies. In 2017 he became professor at Silesian University in Czesin, Poland.

ROMANI OSCAR ROSE

Romani Rose is a Roma activist, born in Germany in 1946. He lost 13 relatives in holocaust. He is president of the Central Committee of German Sinti and Roma.

ROMA EDUCATION

Education of Roma children was introduced in Czechoslovakia after World War 2 with difficulties. The situation was further complicated by the arrival of Slovak Roma groups to Bohemia. Most of the present Roma people in the Czech Republic come from Slovakia for Bohemian Roma nation was nearly completely eliminated in concentration camps in the course of World War 2.

The system of special schools developed in Czechoslovakia in 1960s and 1970s respected the specifics of the Roma social situation. But there was a major pitfall in this system too. The special schools were designed for children with mental handicaps. But problems with education of Roma children were certainly not due to such handicaps. Czech Republic was sharply criticised for this method of Roma children education from abroad.

After 1989 change was sought in this system through finding and introducing special methods of education respecting the specific situation of Roma children. The criticism also reflected in introduction of inclusive education across the Czech system of education. Despite the number of critics inclusive education of Roma children and youth has been firmly established. And the conference on inclusive education in Roma schools in 2017 held in the context of the *International Roma Festival Khamoro* in Prague revealed not only good chances of the elementary education to include Roma children but also the possibility of preparation of these pupils for university studies and successful inclusion in the job market and in the society generally. (Trmice elementary school).

Slovaks are rather sceptical about inclusive education of Roma children. As mentioned by the Slovak expert Ivana Pirohová together with Marek Lukáč and Silvia Lukáčová, with reference to other experts (Kusá, Kostlán, Rusnáková, 2010) *“school as operated today on the basis of “state commission” and parent commission is not able to balance the disadvantage of children coming from families with the lowest socio-economic status and motivate their interest in further education”* (Pirohová, Lukáč, Lukáčová, 2016, p. 109)

Acceptance of the model of inclusive education in Slovakia is a long-term process requiring support on all levels and mainly from the teachers themselves who should be systematically prepared for application of inclusion... (Pirohová, Lukáč, Lukáčová, 2016, p. 132)

RESEARCH ON ATTITUDES AND RELATIONS OF STUDENTS OF SOCIAL PEDAGOGY AND ANDRAGOGY AT ZLÍN UNIVERSITY TO ROMA EDUCATION

METHODS

The **subjects** of the quantitative research included 255 extra-mural students of social pedagogy and andragogy at Tomáš Bata University in Zlín in combined course. The **purpose** of the research, partly published herein, is to

analyse student attitudes to Roma children as the subject of frequent solutions of complex social, cultural and educational issues in professional practice of social pedagogues and andragogists.

The basic questions summarised in an electronic questionnaire to be filled out by the students included:

- 1) What in your opinion is the public opinion on the Roma communities?
- 2) What is the professional attitude to the Roma nation of social pedagogues, andragogists, teachers and other specialists dealing with Roma community related issues?
- 3) What is your personal attitude of a citizen and professional?
- 4) What is your opinion on the ability of multicultural policy and education to harmonise the relation between the Roma minority and the majority society?
- 5) What in your opinion is the attitude of the Roma nation to the majority?
- 6) Do you think that there is specific Roma culture?
- 7) Do you think that Roma culture is able to bring values to the majority?
- 8) Do you think that Roma culture is able to positively affect philosophical and ethical aspects of relations in the present globalised world?

The first questions (1-4) concerned attitudes and relations between the Roma minority and the majority society. The next section of the questionnaire focused on finding out opinions of the students on the existence of Roma culture and its potential to influence the cultural value system in the society (questions 5-8).

FINDINGS

The research started with finding out the number of students studying social pedagogy and andragogy. As shown by the below diagram, over 50% of the students were students of the first year of master course in social pedagogy, and 20% were students in their first year of bachelor course in social pedagogy. The rest of the students were students of andragogy.

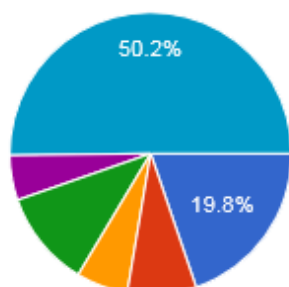


Figure 1: What subject do you study?

1. Year Bachelor's Studies – Social Pedagogy, Combined Studies	50	19.7%
1. Year Bachelor's Studies – Andragogy, Combined Studies	20	7.9%
2. Year Bachelor's Studies – Social Pedagogy, Combined Studies	15	5.9%
2. Year Bachelor's Studies – Social Pedagogy, Combined Studies	28	11%
3. Year Bachelor's Studies – Andragogy, Combined Studies	13	5.1%
1. Year Master Studies – Social Pedagogy	127	50%

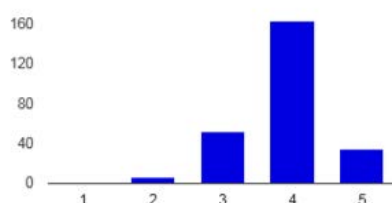


Figure 2: In your own opinion what attitude has the public about the Roma?

Very good: 1 0 0%

	2	7	2.8%
	3	51	20.1%
	4	162	63.8%
<i>Very bad, negative:</i>	5	34	13.4%

The next question concerned the students' opinion on the general attitude of the public to the Roma minority. The results were very expressive. Excellent attitude to the Roma minority was in the opinion of the students excluded from the range of attitudes of the majority population. The second rank of positive attitude was only represented by less than 3%. The fourth and the fifth rank were represented by worst relations to the Roma minority, allowing to conclude that 76 of the majority population represent negative attitudes to Roma people, in the students' opinion.

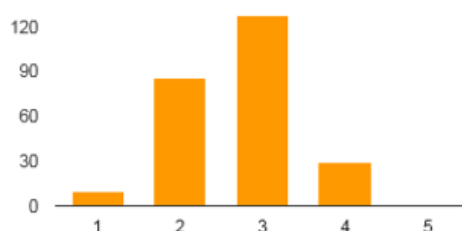


Figure 3: In your opinion what attitude to the Roma (Roma pupils, parents and other members of Roma community) has the professional sphere (teacher, Andragogues, social workers etc.)?

<i>Very good:</i>	1	10	3.9%
	2	86	33.9%
	3	128	50.4%
	4	29	11.4%
<i>Very bad, negative:</i>	5	1	0.4%

In connection with this question we were interested in the students' opinion as current or future professionals in support professions on the attitude of professionals of the support professions to the Roma subjects of their work. A positive result was that the students assessed excellent relation to Roma minority in 4% of their answers and the second best in 34% of answers. Most students reported the attitude to Roma population in the middle of the scale in 50% and the worst relation was reported by 0.4 % (just one of the 255 students). This result reflects the fact that professional recognise the necessity of a positive attitude to the Roma subjects of their work and consider it also an important basis for successful or at least optimum work among representatives of Roma communities.

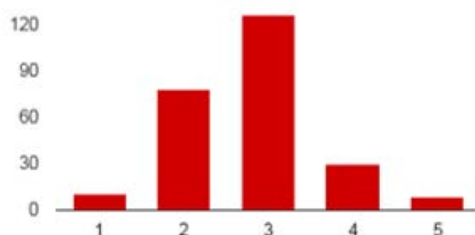
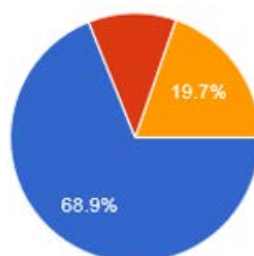


Figure 4: Your personal opinion to the Roma communities:

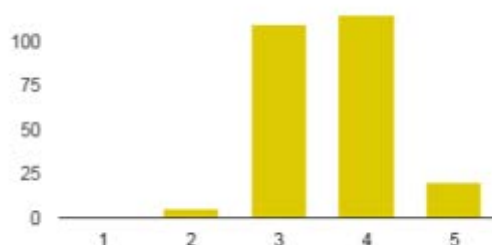
<i>Very good:</i>	1	10	4%
	2	78	30.8%
	3	127	50.2%
	4	30	11.9%
<i>Very bad, negative:</i>	5	8	3.2%

A similar result was discovered in the answers to the question about personal attitude of the students to the Roma children. Excellent relation was reported by ten students (4 %), but the worst, negative attitude was reported by a higher number than in the case of the previous question: 8 students (3 %) expressed a very negative personal attitude to Roma minority. This shows that the relationships of professionals to the Roma subjects are very differentiated and cannot be simply ordered by an ethical code.

**Figure 5:** Do you think, multiculturalism can achieve better coherence between Roma and Non-Roma people and their better integration into civil and professional society?

<i>Yes, it can</i>	175	68.9%
<i>No, it cannot</i>	29	11.4%
<i>I do not know, I cannot judge</i>	50	19.7%

In the context of the current sceptical opinions on the role of multicultural education in the society we were interested in the students' opinions on potential positive effect of the multicultural scene on better inclusion of the Roma minority in the society. The opinion of 175 students of the 255 (68.9%) that this effect is possible may be considered positive. Negative answers were given by 11.4 % of the respondents and 50 students said they are not able to judge that. These results may be considered a positive starting point for further development of multicultural scene and education as a society-wide matter in relation to the Roma minority and the majority alike.

**Figure 6:** In your own opinion, what attitude have Roma about to the major society?

<i>Very good:</i>	1	0	0%
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	2	6	2.4%
	3	109	43.4%
	4	115	45.8%
<i>Very bad:</i>	5	21	8.4%

We also asked about the relation of the Roma minority to the majority society. The students considered excellent relation of the Roma people to the majority society absent. Only 6 students mentioned the second-best attitude as possible. The 88% together occupying the third and the fourth rank is seen positive. Despite that the students thought that the worst attitude to the Roma minority was held by 8.4 % of the majority population. The fact that our research also considered the attitude of the Roma minority to us as the majority is a significant asset of the research. This question represented reciprocity in our mutual relationship.

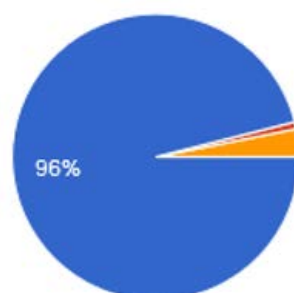


Figure 7: Do you think, Roma people have their own culture?

<i>Yes, they have</i>	243	96%
<i>No, they have not</i>	2	0.8%
<i>I do not know</i>	8	3.2%

The question was asked on purpose for the author of the present text, making use of his long-term experience, was aware that most students as well as the general public refuse to accept existence of Romany culture beyond some “violin playing and singing”.

A positive finding concerned acknowledgement of Roma culture as a system of material and spiritual manifestations of Roma life by most of the respondents, i.e. 243 students (96 %). Only two respondents refused to admit existence of Roma culture as a special entity and eight students could not judge that.

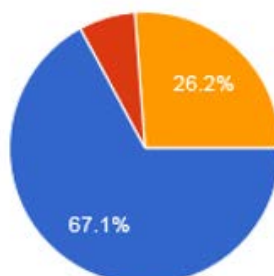


Figure 8: Do you think, that we can draw from Roma culture inspiration for life's Value enrichment of the major society?

<i>Yes, we can</i>	169	67.1%
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<i>No, we cannot</i>	17	6.7%
<i>I do not know</i>	66	26.2%

Another important finding was the 67 % of the students gave a positive answer to the question of the possibility to use Roma culture in the sense of value enrichment of the life of the majority society. 66 % did not know or could not judge that. This also creates space for deeper and improved preparation of the students of the support professions, social pedagogy and social work so that future professionals can make use of knowledge of Roma culture for instilment of better understanding between the Roma and non-Roma populations.

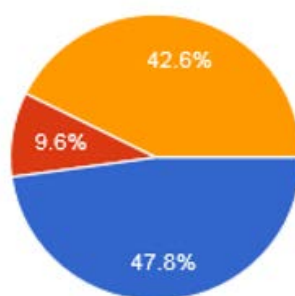


Figure 9: Do you think, that Roma culture could enrich the philosophical and ethical view to resolve relationships in the society and in our global world?

<i>Yes, it could</i>	120	47.8%
<i>No, it could not</i>	24	9.6%
<i>I do not know</i>	107	42.6%

120 students of 255 answered Yes to the question whether Roma culture might enrich the philosophical and ethical approach to the current globalised works. On the other hand, these attitudes show that there is a broad range of opportunities for improvement of awareness on the quality of the philosophical and ethical basis of Roma culture with the aim to improve the general knowledge of Roma culture and its values as adequate to the values of any other culture in the current globalised world.

CONCLUSION

The present text is divided into three parts. The first provides the basic classification of national minorities in the Czech and the Slovak Republics. We have mentioned the major position of the Roma minority among the 14 national minorities living in the country, albeit considered since 2000 as a nation without any territorial anchoring.

The second part points out some of the main milestones of development of the relationship between the Roma communities and the majority society. This account only outlines the complexity and the dramatic context of the development. The period of Romany holocaust was pointed out as the most critical milestone in Roma history.

The third part characterises some major Romany personalities coming from the Czech and the Slovak Republics. They are paired by major international representatives of the global Roma community. The purpose of this was to show that Roma nation has its outstanding personalities respected as its leaders struggling for preservation of the Roma national identity, culture and emancipation.

The theoretical part was concluded by an image of the current situation in the system of education in the Czech and Slovak Republics based on inclusion of Roma pupils in the mainstream education of the country population. This trend strives to give birth to new representatives of the Roma nation that might be placed next to those from the past introduced above.

This theoretical part is followed by a practical part. The practical part presents results of a quantitative research among students of social pedagogy and andragogy. The following conclusions follow from our research on the

situation of Roma communities in the Czech and Slovak Republic implemented among extra-mural students of social pedagogy and andragogy at Tomáš Bata University in Zlín:

- 1) There is a major difference in attitudes of professionals assisting Roma community by their professional work and the general public to the Roma minority. The attitude of the professionals is more positive than the attitude of the general public. This represents a great potential of development of correct relationships between the Roma and the majority population.
- 2) Positive answers prevailed in connection with questions about quality of Roma culture and its potential for involvement in positive processes of development of the global culture.
- 3) Our students showed a strongly positive approach to multicultural aspects of the present world in contrast to the generally sceptic attitude: the future and present professional strongly positively assessed the options of development of multicultural relations between Roma and non-Roma communities in the society.

We will conclude by the opinion of the former director of the Museum of Roma Culture in Brno: The resources about the Roma nation are very unilateral, for as mentioned by the former director of the Museum of Roma Culture in Brno, Mrs. Ilona Lázníčková, *“they mainly grasp the sides of Roma life in conflict with the majority society, or the state. This unilateral approach is further supported by the long-term lack of interest of many fields of study in Roma studies, their non-recognition of the Roma minority as a full-fledged national minority with all rights and development options and the tabooisation of a number of related facts by the past political regime”* (Lázníčková, 1999, pp. 5-6).

Our paper, presented at the conference, in contrast to this statement, tried to objectivise the view of the Roma national minority and the Roma nation. The history of the Roma nation is very dramatic and represents a good lesson even for the majority societies within which the Roma people ended their long journey from their original country - India.

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