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INTERNATIONAL TEACHER EDUCATION CONFERENCE

AUGUST 7-8, 2019

George Mason University, JOHNSON CENTER, Fairfax, VA, USA
Washington D.C. Area

PROCEEDINGS BOOK

ISSN: 2146-7366

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Dear Guests...

Welcome to IETC & ITEC - 2019 at School of Education, George Mason University, in Fairfax, VA,USA.

IETC & ITEC - 2019 Conferences are now well-known international academic events and the number of paper submissions and attendees are increasing every year. This year we have been organizing 19th IETC Conference. Together with IETC 2019, we are organizing four other conference; these four conferences have received more than 250 applications. The Conference Academic Advisory Board has accepted approximately 200 papers to be presented.

We would like to thank George Mason University for hosting us here during two days. Also, we would like to thank to our distinguished guests, keynote speakers for their collaborations and contributions to the success of these conferences. And we would like to thank all of you for coming, presenting, and joining in these academic activities.

We would like to wish you all a successful conference, pleasant stay in this prestigious university and good time in beautiful city of Washington D.C

Thank you...

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Prof. Dr. Aytekin ISMAN
Prof. Dr. AhmetESKICUMALI

KEYNOTES



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Ohio University, United States

*Speech Title: CHEA/ CIQG International Quality Principles:
Applying technology solutions to complex endeavors*



Prof. Dr. Teresa FRANKLIN

Ohio University, United States

*Speech Title: The Impact of Technology on the Future of
Learning in Higher Education*

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A PILOT STUDY ON THE COMPARISON BETWEEN BLENDED AND F2F LEARNING METHODS IN A SQL COURSE

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ABSTRACT

One of the main outcomes of the current period is to decrease in the cost and energy of accessing the information due to rapid growing of internet and Information Technologies. Therefore, transferring online courses to users via e-learning platforms has become more and more preferred in recent years. This paper aims to investigate the effect of an online course designed in Google Course Builder to teach introductory level SQL (Structured Query Language) on students' knowledge and skills on use of SQL. 61 undergraduate students from a private university in Turkey who were enrolled in "Basic Computer Applications" course participated in this research. To establish an experimental research design, the students were randomly separated into experimental and control groups. Blended learning method was applied to the experimental group whose participants enrolled in the online course (SQL Course) and face-to-face (F2F) method was applied to the control group with the same learning content. While SQL Mid-Test was only conducted to observe the change of experimental group, SQL Final Test was applied to both groups. Since the sample size of the experimental group is under 30 and a normal distribution was not found, Mann-Whitney U Test was performed to compare the means of experimental and control groups. To compare the means of SQL Mid-Test and SQL-Final Test, Wilcoxon Signed-Rank Test was performed. After two weeks of experiment, it was found that there is a significant difference between two groups in favor of participants taught with F2F method. It was also revealed that slightly but significant improvement were found on the academic performance of the experimental group. On one hand, the comparison between two groups demonstrated the constraints for learning a scripting language in a short time, however on the other hand results also showed the positive effect of blended learning environment to students' learning performance towards using introductory level SQL. All findings of the study were discussed in the light of relevant literature.

Key Words: e-learning, blended learning, F2F learning, SQL

INTRODUCTION

In recent years, the advances in information and communication technologies are continuing to change the mentality of education in terms of both academic and institutional. To investigate the relationships and differences between e-learning and traditional methods has always been a significant task for enhancing the quality of education. This study is designed as a pilot study to compare blended and face-to-face (F2F) learning methods and the findings of the experiment were discussed in the light of relevant literature.

E-Learning and Blended Learning Methods

E-learning has emerged with the rapid advance of information technologies and electronic systems in the last 20 years. The widest definition of e-learning is "the use of Internet technologies to deliver a broad array of solutions that enhance knowledge and performance" (Rosenberg, 2001, p.11). Pollard and Hillage (2001) stated that e-learning concept refers to the processes such as providing information via information and communication technologies to enhance learning performance, preparing interactive learning materials to develop personal skills, and creating a multi-dimensional relationship between learner and instructor (monitoring the learning process, feedbacks, peer learning) by transforming the two previous steps into a broader level.

When compared to F2F learning, a number of advantages makes e-learning more preferable. Schweizer (2004) indicated that institutions give priority to e-learning because of the quality of information in e-learning environment, productivity of new technologies in terms of their costs, spreading culture of e-learning and internet based technologies, increase of online courses, reduction of business cycles, and increasing competition in business

market. Ally (2004) also emphasized that online learning platforms are transcending the boundaries of time and space, facilitating to access contemporary learning materials, and providing to communicate directly with the instructor. Additionally, directing students to valid and qualified knowledge in online learning platforms is more effective and easier than in F2F learning environment.

Today, most of the e-learning platforms are in asynchronous model. While asynchronous e-learning model refers to the e-learning environments which are accessible by users anytime and anywhere, synchronous e-learning model requires students to be gathered in e-learning environment at the same time (Rosenberg, 2001). Beyond these models, a model called “blended learning” which combines synchronous and asynchronous models to support learning environments with the benefits of both F2F education and e-learning is also being preferred. Driscoll (2002) defined blended learning as the combination of instructional technologies and web-based technology with a F2F learning environment guided by instructor. Since blended learning model is facilitating the development of open communication, criticism and discussion skills which are seen as significant personal features in higher education, it can usually cause more effective learning experiences in comparison with the other e-learning models (Garrison & Kanuka, 2004).

NIIT (National Institute of Instructional Technologies) proposed a classification for blended learning concerning institutions and organizations (as cited in Valiathan, 2002):

Skill-Driven Model: It is used to learn skills via web-based courses and online learning platforms covering e-mail groups, discussion forums, face-to-face interviews and self-learning methods.

Attitude-Driven Model: It is used to develop behaviors based on peer learning via online meetings and group work.

Competency-Driven Model: It is used to gain implicit knowledge via observing an expert including mentorship and learning management system (LMS) support.

Despite the lucid difference between the blended learning and other online learning models, there is no exact standard for determining the ratio of internet based technologies to traditional methods within an instructional design. In other words, blended learning refers to a process which is designed considering the contextual needs of instruction, learners’ level of development, scope of the subject area, and resources of educational institutions. Thus, it is impossible to come across two identical blended learning designs (Garrison & Kanuka, 2004).

Related Work

Literature review revealed that there are many research made to investigate the role of blended or e-learning in the development of learners’ academic performance. In a research conducted by Zhang, Zhao and Zhou (2004), the effects of e-learning environment and traditional classroom on academic achievement concerning database normalization and search engines subjects were examined. 103 undergraduate students were participated in the study and separated into experimental and control groups which refer to e-learning and traditional classroom environments. The students in traditional classroom were taught by the verbal lecture method and they were able to ask questions to instructor in anytime they want. On the other hand, the students in experimental group were enrolled in an interactive e-learning course. Findings of the study were exposed that test scores of students enrolled in e-learning environment were significantly higher than the scores of students in traditional classroom.

A similar study conducted by Zhang, Zhou and Briggs (2006) investigated the effect of an online course platform including interactive videos about internet search engines on learning outcomes of students. Participants of the study were 138 undergraduate students who divided into four groups. Three of these groups were all accessed in e-learning environments categorized as and with no video, with interactive video, and with non-interactive video. Students in the fourth group were trained with traditional methods in a physical classroom. According to the results, the group enrolled in an e-learning environment with interactive videos performed significantly higher academic achievement than the students in other groups.

In the study conducted by Chen and Jones (2007), blended learning and traditional classroom settings were compared to examine students’ learning performance and perception towards learning. The participants of the experimental group hold four F2F meetings in an academic term and enrolled online meetings in rest of the term. At the end of the study, it was revealed that participants in traditional classroom were more satisfied and identified learning content more lucid when compared to the participants in blended learning environment. On the other

hand, participants in blended learning environment were internalized the value of concepts within the course and their analytic skills were improved more than the students in traditional classroom.

Al-Qahtani and Higgins (2013) carried out a study with the participation of 148 undergraduate students to explore the effect of blended, traditional and e-learning environments on students' academic performance. The findings showed that a significant difference was found between three groups in favor of the students in blended learning environment. In accordance with these findings, authors emphasized that blended learning has more potential to enhance academic success than traditional and e-learning environments because it combines traditional and online methods of instruction.

In the study conducted by Wilkowski, Deutsch and Russel (2014), researchers designed a Massive Open Online Course (MOOC) by using Google's Course Builder for teaching the use of Google Earth tool. At the beginning, participants were asked to share their past experiences and to select learning goals to specify their expectations from the course. These data is used to remind participants their goals during the learning process. Participants' self-reports show the achievement of learning goals were compared at the end of the study. The results showed that participants who completed the course activities were achieved more learning goals than the participants who did not completed all of the activities. Moreover, the participants who completed the course despite of their low-skills were achieved more success than the participants just watched videos and read texts within the course. These results show the importance of activities and feedbacks towards learning achievement in any e-learning platform. Kay and McKlin (2014) also designed a course with Google Course Builder to improve robot programming skills of K-12 teachers. In the study in which 1100 teachers participated, pretest-posttest design were performed and it was revealed that their knowledge, skills and self-confidence were all significantly higher than their initial level.

A research made by Thai, Wever and Valcke (2017) investigated the effect of not just blended and traditional learning environments but also e-learning and flipped classroom environments on students' academic performance. In this study, intrinsic motivation, self-efficacy and perceived flexibility variables of 90 undergraduate students were examined besides their academic performance. Findings of the study revealed that the learning performance of the students in flipped classroom were significantly higher than the students in blended, traditional and e-learning environments. There was also a significant difference between the learning performance of blended learning and e-learning groups in favor of the students in blended learning environment. However, no significant differences were found between the students in blended and traditional learning environments in terms of their learning performance.

As can be seen from the literature, the studies focused on the comparison between blended and F2F learning were conducted with the large amount of sample and long periods of experiment. However, this pilot study was carried on with a small amount of sample and short period of experiment. This study aims to investigate the effect of a blended learning environment on undergraduate students' knowledge and skills towards using introductory level Structured Query Language (SQL).

MATERIAL AND METHODS

Participants of the Study

The participants of this study consists of 61 undergraduate students who enrolled Basic Computer Applications Course during 2017 fall semester at a private university in Turkey. In Table 1, number and percentiles of participants by the program they study is presented.

Table 1. Numbers and Percentiles of Participants by Programs

Program	N	Percentile (%)
Nutrition and Dietetics	22	36%
Guidance and Psychological Counseling	11	18%
Elementary Mathematics Teaching	8	13%
Sociology	8	13%
Psychology	5	8%
Genetics and Bioengineering	2	3%
English Language Teaching	2	3%
Computer Engineering	1	2%
Biomedical Engineering	1	2%
Turkish Language and Literature Teaching	1	2%
Total:	61	100%

It can be seen from Table 1 that the sample of this study has a broad-spectrum and majority of them are from the programs related with social sciences.

Design of the Study

This study is designed as a pilot study. The experimental method was used and the students were randomly separated into experimental and control groups by using MS Excel's randomize function. In Table 2 and Table 3, numbers and percentiles of experimental and control groups by program they study were listed.

Table 2. Numbers and Percentiles of Experimental Group by Programs

Program	N	Percentile (%)
Sociology	7	32%
Elementary Mathematics Teaching	6	27%
Psychology	3	14%
Guidance and Psychological Counseling	2	9%
Nutrition and Dietetics	2	9%
English Language Teaching	1	5%
Genetics and Bioengineering	1	5%
Total:	N_E= 22	100%

Table 2 shows that while Sociology students have the highest population in experimental group, students from English Language Teaching and Genetics and Bioengineering programs have the lowest population.

Table 3. Numbers and Percentiles of Control Group by Programs

Program	N	Percentile (%)
Nutrition and Dietetics	20	51%
Guidance and Psychological Counseling	9	23%
Psychology	2	5%
Elementary Mathematics Teaching	2	5%
Computer Engineering	1	3%
Turkish Language and Literature Teaching	1	3%
Sociology	1	3%
English Language Teaching	1	3%
Biomedical Engineering	1	3%
Genetics and Bioengineering	1	3%
Total:	N_C=39	100%

In Table 3, it can be seen that students from Nutrition and Dietetics represent the vast majority of control group.

Design of the SQL Course

In recent years, world-wide known universities started to transfer some of the course contents into the web and this trend led Massive Open Online Courses (MOOC) to gain a wide currency (Yuan & Powell, 2013; Waldrop, 2014).

Google Course Builders' features towards instructional design, open and free accessibility, possibility to publish and manage more than one course at the same time makes this platform useful and preferable for instructors, educational technologists and learning designers (Marciel, Michelinakis, Fanou & Muñoz-Merino, 2013). Additionally, in some studies, it was revealed that this tool is able to enhance learners' academic performance (Kay & Mcklin, 2014; Wilkowski, Deutsch & Russel, 2014)

In this pilot study, an introductory level SQL Course is designed by using Google Course Builder's infrastructure. At the beginning of the research, learning content was created for both of the groups and separated into three levels. First level of the course covered the database concept, principles of database design, types of databases, database management systems, and an introduction to SQL. In the second and third level of the course, students learn and practice how to write SQL statements from simple to complex.

In the home page of SQL Course, participants were asked to watch an introductory video that explains how to use the platform and how to answer questions within the experiment. After watching the video, students started to read and interact with the learning materials on the SQL Course platform.

At the end of each section in SQL Course, students were asked to write appropriate SQL statement by using "W3 SQL Tryit Editor" which is an online database editor based on SQL.

Table 4. Research Design

Group	Method	Duration	Mid-Test	Final Test
Experimental (n=22)	Blended Learning	2 Weeks	Yes	Yes
Control (n=39)	F2F Learning	2 Weeks	No	Yes

Students in the experimental group enrolled SQL Course which was designed in Google Course Builder and integrated with the learning content via this online platform during the experiment. Blended learning method was applied to experimental group by allocating the last 20 minutes of each lesson for verbal lecturing and discussion. Students were also able to ask questions in class sessions verbally and out of class sessions via discussion forums. The blended learning model used in this pilot study refers to "skill-driven model" according to categorization of NIIT. SQL Course platform was accessible for 2 weeks and participants were free to access the course content and

materials during the experiment process. At the end of first week, experimental group was tested with a mid-test covers the subjects of first level of the course.

The learning content of the three levels were instructed to the control group by verbal lecturing method and PowerPoint slides were used to show how to write SQL Statements. Since both groups were in the computer lab during the experiment, students in the control group were also directed to make practice using “W3 SQL Tryit Editor”.

Instruments

SQL Mid-Test, which consists of 10 multiple-choice questions, was applied to the students from experimental group at the end of the first week. The responses were collected using Google Forms.

SQL Final Test, which measures the knowledge and skills of participants towards database concepts and using SQL was applied to the experimental and control group at the end of the experiment. It consists of 7 multiple-choice questions about the topics of first level and 13 open-ended questions about using SQL on a sample database. Responses of this test were also collected using Google Forms and the responses given to the open-ended questions were evaluated by the second researcher of this study.

Data Analysis

Since the sample size of the experimental group is under 30 and a normal distribution was not found, Mann-Whitney U Test was performed to compare the means of experimental and control groups. To compare the means of SQL Mid-Test and SQL-Final Test, Wilcoxon Signed-Rank Test was performed. While Mann-Whitney U Test is used to compare two independent samples with small size and non-normal distribution, Wilcoxon Signed-Rank Test is used to compare two related samples when the assumption of normality have not met (Kenny, 1987). SPSS (Statistical Package for Social Sciences) v24 software was used to analyze the data.

RESULTS

The means and standard deviations of SQL Final Test scores for experimental and control groups are presented in Table 5.

Table 5. Means and Standard Deviations of SQL Final Test Scores

Group	n	\bar{X}	s	Minimum	Maximum
Experimental	22	43.07	26.23	10.0	92.5
Control	39	63.27	20.34	22.5	100.0
TOTAL	61	55.98	24.46	10.0	100.0

As shown in Table 4, the mean of the control group’s final scores ($\bar{X}=63.27$, $s=20.34$) is higher than the mean of the experimental group’s final scores ($\bar{X}=43.07$, $s=26.23$). To explore the difference between the mean scores of two groups, Mann-Whitney U test was performed and the results of this test were presented in Table 6.

Table 6. Results of Mann-Whitney U Test

Group	n	Md	Mean Rank	Sum of Ranks	Mann-Whitney U	z	p
Experimental	22	30.0	22.5		242.0	-2.813	.005*
Control	39	62.5	35.8	1396.0			

* $p < .05$

It can be seen from Table 6 that a statistically significant difference was found between the mean scores of control ($Md=62.5$, $n=39$) and experimental groups ($Md=30.0$, $n=22$) in favor of the control group ($U=242.0$, $z=-2.813$, $p < .05$, $r=.36$). It can be concluded that students in F2F learning environment performed significantly higher than the students in blended learning environment.

To analyze the SQL Mid-Test and SQL Final Test scores of the experimental group, Wilcoxon Signed-Rank Test was performed and results were presented in Table 7.

Table 7. Means and Standard Deviations of SQL Mid-Test and SQL Final Test Scores of Experimental Group

	n	\bar{X}	s	Minimum	Maximum
SQL Mid-Test	22	29.55	23.19	0	90.0
SQL Final Test	22	43.07	26.23	10.0	92.5

In Table 7, it can be seen that mean of experimental group's SQL Final Test scores ($\bar{X}=43.07, s=23.19$) are higher than the mean of their SQL Mid-Test scores ($\bar{X}=29.55, s=23.19$). On the other hand, it was seen that both scores are below the expected mean.

Table 8. Results of Wilcoxon Signed-Rank Test

SQL Mid-Test /SQL Final Test	n	Mean Rank	Sum of Ranks	Z	p
Negative Ranks	6	10.58	63.50	2.047*	.041**
Positive Ranks	16	11.84	189.50		

*Based on Negative Ranks

** $p < .05$

According to the results shown in Table 8, there was a statistically significant difference between the mean scores of SQL Mid-Test and mean scores of SQL Final Test of the experimental group ($z=2.407, p < .05$). It can be stated that blended learning method provided a slight but significant improve on learning performance of the students.

DISCUSSION

In this pilot study, the effect of a blended learning environment on undergraduate students' knowledge and skills towards use of SQL was investigated. Students were divided into experimental and control groups to compare the blended and F2F learning environments. While the mean SQL Final Test scores of both groups were compared, the difference between the mean SQL Mid-Test scores and the mean SQL Final Test scores of experimental group was also examined.

First result of the study revealed that the students in F2F learning environment performed significantly higher in SQL Final Test than the students in blended learning environment. Although there can be found some early studies in e-learning research which discovered significant difference in favor of traditional learning methods or no significant difference between two settings (e.g. Johnson, Aragon & Shaik, 2000; Ponzurick, France & Logar et al., 2000), these results are not in line with the findings of the studies conducted in last years (Zhang et al., 2004; Zhang et al., 2006; Melton, Graf & Chopak-Foss, 2009; Al-Qahtani & Haggins, 2013; Thai et al., 2017). It can be asserted that since the participants except engineering students are from the departments where generally traditional learning methods are used, they may have had the lack of adaptation to a blended learning environment. Furthermore, there are some constraints for learning a programming language in a short time. Hadjerrouit (2007) emphasized that learning a programming language is related with developing a skill rather than gaining a set of knowledge and even an academic term will not be enough to make unexperienced students to reach the expected level. Despite the fact that the difficulties when learning a programming language can be reduced using online tools, the time of the training should be described and organized well to allow learners to develop such skills. In a study conducted by Gülseçen and others (2013), undergraduate students' programming skills were examined in F2F and online learning environments and compared with pretest-posttest design. They found that while the scores of the students in F2F learning environment were higher in the first week, the students in online learning platform performed better but not significantly higher at the end of second week. Thus, the difference between the learning performances found in our pilot study can be explained by the short experiment time which did not allow participants to acquire knowledge of SQL effectively.

According to another finding of this study, it was revealed that there was a slight but significant increase in mean test scores of students in blended learning environment from first to second week. In other words, students in blended learning environment performed slightly but significantly better in SQL Final test than they did in SQL Mid-Test. These results show the positive effect of blended learning environment to students' learning performance towards using introductory level SQL. When these results considered, students may have just started to become more adapted not only to write SQL statements but also to use of SQL Course platform during the two weeks of experiment. In a series of experiment, a problem-solving based environment, SQL-Tutor, which provides students to write SQL queries with the help of feedbacks has been evaluated concerning several variables (Mitrovic & Ohlsson, 2016). In one of these researches conducted with 68 undergraduate students, it was stated that four weeks of experiment was a restriction of the study even the experimental group solved the problems in a shorter

time than the control group (Mathews & Mitrovic, 2007). Another study made by Gálvez, Guzmán and Conejo (2009) implemented a blended learning setting included a problem solving environment called OOPS (Object Oriented Programming System) and found any significant differences between test scores of experimental and control group. However, an improvement can be seen in the scores of all students involved in blended learning or online environments in both studies. These results suggest that although the time of the experiment can make difficult to observe or conclude the effect of blended learning environments on students' learning performance, an overall progress can be seen. Thus, it can be said that the findings of this study is similar with the study conducted by Gálvez and others (2009).

It is known that learning a programming language is a challenging process. Students can face with difficulties in understanding the concepts of programming or developing strong skills when they learn programming in F2F environments (Lahtinen, Ala-Mutka & Järvinen, 2006). In computing education, developing rich learning environments is important to address students' different learning styles and various sources of motivations (Jenkins, 2002). Therefore, use of blended learning design to teach programming has several advantages in terms of its pedagogical opportunities. It allows users for accessing the exercises, course materials, examples and their solutions any time so that they become able to develop a deep comprehension towards the notions of programming. Blended learning environments are also useful for computing education since they may include activities for operating programming tasks which direct students to improve their skills by repeating difficult tasks. Additionally, students faced with difficulties when trying to solve a task can use both discussion forums and F2F meetings for seeking help (Hadjerrouit, 2008). Considering the emerging technologies and services in e-learning industry, all of these advantages are highlighting the functionality of blended learning design in computing education.

In conclusion, it is expected that the results of this pilot study, which was conducted in a short time with a small sample size will shed light on further studies likely to investigate the effect of blended learning method on students' learning performance. It is also considered that there might be found higher and more significant differences in the further studies likely to be conducted in a longer time and with a larger sample size. Further studies should also consider the reflection of students towards the online course and their experiences within training.

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A POSSIBLE BREAKTHROUGH IN DIGITAL TUTORING

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ABSTRACT

The Defense Advanced Research Projects Agency (DARPA) initiated a program using machine intelligence to design and develop digital tutoring for novice information technology (IT) technicians. Independent assessment of the Tutor's instructional effectiveness was provided by the Institute for Defense Analyses. It performed two separate assessments of the tutor: training for newly recruited Navy sailors and training for military veterans. Participants in both groups had little, if any prior experience with IT maintenance or trouble shooting. Assessments of IT knowledge and troubleshooting found that after 16 weeks of digital tutor training, the Digital Tutor recruits substantially outperformed other recruits who received 35 weeks of classroom IT training and Navy technicians with an average of 9 years IT experience in the Fleet. In both cases, scores of the digital tutor recruits were 3-4 standard deviations above those of the more traditionally trained students and the experienced Navy technicians. Substantial monetary return on investment was found by comparing seven years of on-job-training provided after traditional IT training with the 16 weeks of digital tutoring. In the second assessment, veterans from all Services received 18 weeks of digital tutor training. Upon graduation, the veterans were then hired into civilian IT positions intended for technicians with 3-5 years of experience. Analysis determined that, over a 20-year period, the net revenue returned to the government would substantially exceed that obtained from 4-year college graduates who did not receive VA assistance and more than twice that of 4-year college graduates who did receive VA assistance. Overall, the internal rate of return to the government over 20 years was estimated to be about 35 percent.

A STUDY ON THE INFLUENCE OF NEWS CREDIBILITY AND FALSE CONSENSUS EFFECT BY USER'S ALGORITHM-BASED DIGITAL NEWS SERVICE EXPERIENCE, PERCEIVED USEFULNESS, PERCEIVED RISKS AND PERCEIVED BIAS

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ABSTRACT

This study focused on how algorithmically generated digital news service influence the user's credibility of digital news and false consensus effect in algorithm age. Specifically, how the variables of the user's interaction with the content, the perceived usefulness, perceived general risk and the perceived bias effect the user's credibility of news and the user's false consensus of public opinion. Firstly, the factor analysis of the effects resulting from user's experience is separated into three categories: the users as 'spectator (passively interacting with content)', the users as a 'communicator (actively interacting with content)' and the users as 'producers (creators of content)'. Secondly, the regression analysis shows the users who have experience of 'a communicator' and 'a producers' have a positive effect on news reliability. Additionally the user's perceived risk and perceived bias of digital algorithm news have a positive effect to news credibility. Thirdly, user's experience of digital algorithm news service as 'a spectator', 'a communicator' and 'a producer' have a positive effect on false consensus of public opinion. In addition, the user's perceived usefulness and perceived bias have positive effects on false consensus. These findings suggest that the more users feel knowledgeable about the digital platforms and interactive with digital news and the more they actually have the experience of creating an agenda, the more they trust digital news. Therefore, it is necessary to promote an active user experience of digital news, that is, news literacy of producing news. Also, these findings suggest that the more users perceive risk of digital algorithm news and the more users perceive bias of news, the more users are reliable to digital news. Recognizing the risk of digital algorithm news is also important in shaping news credibility. Recognizing bias also has an important effect on the formation of news credibility. In addition, third finding suggests that all three user's experiences of digital news as 'a spectator', 'a communicator' and 'a producer' have effect on false consensus which is tendency to believe that his thoughts, attitudes, and actions were universal, not unlike others. Also it indicates that the more users perceive usefulness and bias of digital news, the more users overestimate the extent to which one's own thoughts and others' thought agree. The more users perceive digital news as useful and biased, the more people tend to believe it will be the same as their attitudes and beliefs.

Keywords: Algorithm based Digital News Service, Perceived Usefulness, Perceived Risk, Perceived Bias, News Credibility, False Consensus Effect

INTRODUCTION

The 50% of South Koreans consume news on their digital platforms, 77 % of whom consume news from digital brokerage services such as Naver, Daum and Google. (Korean press foundation, Digital News Report, 2017). The way users view news on the portal is by recommendation and search. For news recommendations, 'Daum' is recommended with an algorithm system called 'Lubics'. The system recommends news in a way that is customized based on the user's consumption way, users' gender and age groups. 'Naver' aims to eventually auto-deploy 100 percent by algorithm without being edited by humans. It has also introduced personalized news recommendation services to some of its mobile news. For searches, both 'Naver' and 'Daum' are placed by algorithms. Google is also being done by algorithms for both news recommendation and search. Facebook is selected by its algorithm to prioritize posts and to reflect the length of time it stays, 'reply' and 'like'.

Users' experience in algorithmic news consumption has an important effect on the formation of public opinion as well as their attitude to news. Many researchers argue that algorithmic editing and recommending are affecting news consumption attitudes and behavior. (Park·Oh, 2017; Oh, 2016; Choi, 2017).

According to the results of an online survey released by the Korea Press Foundation on September 17, 2018, 61% of the users believe that an artificial intelligence algorithm is fairer than editing a person does. This fairness allows users

to recognize that algorithm news is useful. In addition, 75% of digital algorithms news users are concerned about the dangers of algorithm news. Editing the way algorithm arranges articles, users' preferred consumption of certain news is accelerating, and contact with essential news is becoming difficult. Users are also concerned that the algorithms cause the news to be consumed by biasedly and cause users to come to false consensus.

This study examines how user experience of algorithm-based digital news service affects false consensus effects and news service credibility. It also wants to review how perceived usefulness, perceived risk and perceived bias of algorithm-based digital news affect false consensus effects and news service credibility.

LITERATURE REVIEW

The Digital Algorithm News Service and Evolution of User's Experience

The reason why algorithms are drawing attention in journalism is because the value of news depends on one's involvement in news preparation, editing, distribution, and use. The practical reason why we can provide good news by minimizing the controversy over subjective evaluation of the value of news and minimizing human involvement in the news process is to raise the usefulness of algorithms. Algorithms consist of two components: logic and control, which refer to knowledge used to solve problems, and control refers to a problem-solving strategy using knowledge (Robert, 1979). Journalism-related algorithms have a basic premise that minimizes human involvement. It also aims at "how can we make news easier" in terms of news production, "how can we show good news well" in terms of news editing and "how can we make news read more" in terms of news usage.

Table 1 Digital News Algorithm

	Algorithm type	Characteristics	Case
News Production	News writing algorithm	Generate articles with a natural language generation algorithm based on structured data	EQBOT, Stats Monkey, Aotomated Insights 'Quartz'
	News prediction algorithm	Predict future news based on articles and online data	Recorded future
	News summary algorithm	Calculate word and sentence similarity, extract key words from overlapping articles using algorithm, and present words in sentence form according to natural language processing method	NAVER summary bot DAUM news automatic summary
News Editing	News clustering algorithm	Clustering encompasses both finding common themes (keywords) from the collected news and grouping similar news according to the topic.	NAVER, DAUM
	Automatic classification algorithm	Algorithm classification is made through similarity analysis of title and content, but a 'classifier' is applied to be placed in a given classification.	Ziny news
	Algorithm to exclude duplicate news	Exclude overlapping articles within the media, exclude overlapping articles outside the media, and Google excludes overlapping articles within the media	K-Nearest Neighbor Classifier
News Usage	Recommended Algorithm	Content-based recommendations based on the nature of news/cooperative filtering recommendation based on similarities measured between users and news	Buzz feed
	News ranking algorithm	News ranking system	Google

Digital algorithm news provides news in a way that is different from that of traditional legacy media. Digital algorithm news shows a pattern that is determined by the user's usage pattern and the interaction pattern between the users. Symbolic reality from the interactive behaviors that users provide, exchange and utilize on their own is becoming the standard for news editing. Therefore, this study of the user's experience of digital algorithm news services should be

concerned with the current state that not only the service provider but also the entire user population will interact and organize together. Because the digital algorithm news service's news message system has the characteristics of messages being selected and determined by the user's use behavior, it will be necessary to consider user's voluntary and participatory activities other than involuntary and unintentional actions. User's Algorithm-based digital news experience consists of a variety of motivations.

Until now, user's experiences have mostly focused on the aspects of an individual's behavior in accepting a given information. However, individuals not only acquire information to solve the problem at hand or to reduce uncertainty, but also provide their own information to others to influence their attitude and decision making. As the media environment changes, the social and collective importance of user behavior to share and deliver information is growing.

Table 2 The Dimensions of User Experience

The dimensions of user experience	The user experience	Active use experience	Passive use experience
Feature		Planned and intentional behavior	Unplanned and unintentional behavior
Individual dimension	Information acquiring	Information seeking	Information processing
Social dimension	Information provision	Information production	Information sharing

Source: Kim, J-N., & Grunig, J. E. (2011). Problem solving and communicative action: A situational theory of problem solving. *Journal of Communication*. Re-composition

The above user experience dimensions and user experiences are to be applied and constructed in this paper. As a starting point for changing news, the digital news experience has a new aspect. Since the digital news innovation took place, users' experience in news use has been transformed into a highly involved "communicator" as they comment and share with friends. Moreover, when there is a high level of behavioral involvement, there is also an 'experience as a producer' that produces news directly. The majority, however, remain "experienced as spectator." In other words, they look at the news from personal curiosity or interest, get information from the news, or use it as a certain distance from news.

Acceptance and Resistance of Digital Algorithm News Service Innovation

Perceived Usefulness

In Technology Acceptance Model (TAM), Perceived usefulness is defined as "the degree to which one believes that one's work performance will be improved by using digital technology." Another concept, perceived ease, is defined as "the degree to which we believe that using digital technology does not require much effort." The TAM focused on the cognitive parameters of the user that appeared in the adoption of the new technology (Lee Jong-yeon, Choi Young, 2012).

As with rational behavioral theory, a technology acceptance model that pays attention to human behavior is very useful in explaining the advent of new technologies and the actions of users who use and adopt them, and it is highly descriptive. It is assessed that a concise model can be presented and is used in various areas (Chung & Nam, 2007; Zhou, 2008; Venkatesh & Davis, 2000).

The perceived usefulness of digital algorithm news services arises from the expectation that algorithm will be able to maintain more objectivity and fairness than when people are involved by editing news.

Perceived Risk

Perceived risks are often regarded as factors that increase users' resistance to reform and impede diffusion and adoption of new things (Bredahl, 2001; Ram & Sheth, 1989; Kleijnen, Lee, & Wetzels, 2009) on how individuals accept and perceive information given, unlike conventional technical or environmental or health risks. Thus, the risks from digital use are individually perceived and interpreted differently in the magnitude and extent of the risks. Therefore, it is very The risk of digital algorithm news in this study is about risks arising from news brokerage services such as portals,

search engines and social media. These intermediary news services are operated by algorithm editing techniques and set up important news based on the results of user interaction. This has caused users to develop biased news consumption habits, unable to accommodate a variety of information and being trapped in a filter bubble. Digital algorithm technology uses personal media usage data to recommend news, perform as directed input programs, and recommend certain things, but not explain the context. Therefore, news consumers' rigid exposure to news could lead to misconception and misinterpretation.

Perceived Bias

Media bias refers to media reporting in favor of a particular political party, candidate, or political and social position. These characteristics are factors that undermine the value of news, hindering the media's direction of accuracy, objectivity, fairness and unbiasedness. The perceived bias is the recognition of this media bias. The perceived bias, whether or not news reports are actually biased, refers to the perception of news consumers who consider news media biased in political and social issue reporting (Ho, Binder, Becker, Moy, Scheuffle, Brosard, & Günther, 2011). The perceived bias occurs as the perspective of the actual media itself is biased and it expands into the user's bias (deVreese & Elenbass, 2008).

News Service Credibility and False Consensus

News service credibility

News credibility consists of trust in news platforms, trust in news producers and trust in news messages (Metzger, Flanagin, Eyal, Lemus & McCann, 2003). News credibility is an assessment of whether news platform or news producer such as editor and reporter report the news messages in an objective and balanced view (Gunther & Liebhard, 2006; Gunther & Schmitt, 2004; Arpan & Raney, 2003; Giner-Sorola & Chaiken, 1994).

News users who trust news platforms, news producers, and news messages can change positively their attitude and behaviors (Wathen & Burkel, 2002).

False Consensus Effect

False consensus effect refers to a cognitive error overestimating the favorable public opinion environment by projecting one's opinion to others (Wojcieszak & Price, 2009). It is a tendency for people to believe that their own choices and judgments are relatively more common and appropriate for the present situation. Motivation of false consensus is due to the operation of psychology to maintain cognitive balance. The psychological balance that results from believing that many people will agree with your opinion strengthens your bias. It matures and stabilizes in the filter bubble. Therefore, it results in errors in situational judgment and decision making.

In the digital algorithm news service environment, false consensus is relevant to how much users are actively involved in news services. Wojcieszak (2008) explored the false consensus effect among ideologically homogeneous online discussion groups. He found that false consensus is influenced by how strong people's ideological orientation is and how enthusiastic people are in the debate.

RESEARCH QUESTIONS

This study looks at how user's experience in using digital algorithm news services, perceived usefulness, perceived risk and perceived bias affect news service credibility and false consensus.

Research Question 1: What is the user experience of digital algorithm news service?

Research Question 2: How does the user experience of digital algorithm news service such as spectator, communicator and producer, perceived usefulness, perceived risk and perceived bias affect false consensus?

Research Question 3: How does the user experience of digital algorithm news service such as spectator, communicator and producer, perceived usefulness, perceived risk and perceived bias affect news service credibility?

RESEARCH METHOD

Data Collection

The study was conducted on people from 20s to 60s who use digital algorithm news services a lot. The study was conducted online from Sept. 10-20, 2018, via Marketlink, a professional research firm. For this study, 1,000 randomly selected panels from the Marketlink were sent out. 584 of them completed the survey responses. A total of 530 people were selected for the survey, excluding 54 people who did not meet their gender, age or region allocation. According to the survey, 266 men (50.2 percent) and 264 women (49.8 percent). 106 people were distributed by age from 20s to 60s, and the average age was 44.35 years old (SD=12.48).

Operational Definition and Measurement Variables

- **User's Digital Algorithm News Experience:** User's digital algorithm news experience refers to the user's motivations that arise from algorithm-based news making, news editing and news-recommendations in news brokerage services such as Naver, Daum, and Google. This study has been applied by transforming the use motivation used in Kim Kyung-hee (2012) paper into the use experience. It was measured by the motivation of curiosity, interest, information search, communication materials use, time-spending, relaxation, self-efficiency, immersion, value judgment, communication with other users, empathy, agenda setting, advertisement and sensational content avoidance.
- **Perceived Usefulness:** This study defines perceived usefulness as the extent to which one believes that using digital algorithm news services will improve one's performance. Perceived usefulness has a positive effect on the intention of using digital news services. In this study, questions about perceived usefulness were measured by organizing four questions based on studies by Davis (1989) and Bae Jae-kwon (2016). It includes: 'I can get the information I want through digital news services', digital news services provide me with useful information, digital news services can easily find the information I want, and I think digital news services are generally useful to me.
- **Perceived Risk:** The perceived risks in this study are defined as recognition of uncertainties that may result from the use of digital algorithm news services. In this study, questions concerning perceived risks of Bauer (1960) and Kim et al. (2003) were modified to suit the study. The survey items consisted of four questions: 'When searching for digital algorithm news, I am worried that my data was recorded when I read related search words', 'I am concerned that when an ad related to news search is recommended, my purchase information was recorded', 'I am concerned that my viewing information was exposed when my cultural tasted news was recommended while searching for news', 'I am concerned that I am being monitored when political biased news was recommended while searching for news'.
- **Perceived Bias:** In this study perceived bias is defined as the perception of news consumers who consider news media to be politically and socially biased in reporting issues. As the perspective of the actual media itself is biased, it expands into the receptor bias. In this study, the survey was constructed based on the study of the Stroud (2010): 'Recommendation of digital algorithm news strengthens existing political stance,' 'Recommendation of digital news strengthens existing brand loyalty,' and 'Recommendation of digital algorithm news strengthens existing cultural tastes.'
- **News Service Credibility:** Credibility is the subjective expectation that news services will act to meet the expectations or interests of digital news users despite the risks. The reliability measures of Hovland & Weiss (1963) were modified to fit the study: 'The news services I use are reliable', 'The news services I use are fair', 'The news services I use are valuable', 'The news services I use are in-depth', 'The news services I use provide various information' and 'The news services I use represent the interests of the news readers.'
- **False Consensus:** False consensus is a cognitive bias that overestimates the proportion of others agreeing with me. This refers to the mistaken perception of an agreement that does not really exist as it exists. This study was conducted after correcting the question of measuring false consensus presented by Na Eun-young (2012). I set up four questions to measure false consensus: 'users of digital algorithm news service will have similar opinions as mine.', 'users of digital algorithm news service will have a similar perspective to mine.', 'users of digital algorithm news service will evaluate the value of news in a similar way to mine.', and 'users of digital algorithm news service will recommend and share news in a similar way to mine.'

Analysis method

The data collected for this study were analyzed using the statistical program, SPSS 21.0. For the basic analysis of data, descriptive statistics and frequency analysis were conducted and the validity of the scales were measured through factor analysis on the variables of the digital algorithm news service experience. The reliability analysis of the measurement scale was then performed.

RESEARCH RESULT

User's Experience Digital Algorithm News Service

A factor analysis was conducted on variables of user's experience of digital algorithm news. Each factor analysis was conducted with a principal component analysis and varimax rotation. Factor analysis of 18 items was performed on the user's experience of digital algorithm news service. As a result, three factors were derived: 'Experience as a spectator', 'Experience as a communicator' and 'Experience as a producer'.

Table 3 A factor analysis of user's experience of digital algorithm news

	Spectator	Communicator	Producer
Digital news makes us know what's going on in the world.	0.79		
Digital news delivers socially important news	0.73		
I can understand digital news and get the subject of conversation	0.66		
Digital news makes it easy to get the information you want.	0.64		
Digital news makes it possible to get a variety of information.	0.59		
Digital news arouses curiosity	0.51		
I can see people's reactions through digital news comments.		0.80	
Digital news is good for the public and for individuals.		0.60	
Digital news allows me to express my opinion.		0.58	
I can communicate with digital news producers.		0.56	
Digital news has a high sense of immersion.		0.56	
Digital news let me create a news agenda.			0.81
Digital news let me get other's opinion on my agenda.			0.70
I can be news producer			0.68
Digital news ads are indispensable.			
I can evade the sensationalism of digital news.			

Eigen Value	3.01	2.26	2.19
Explained Variance(%)	18.81	14.14	13.72
Cronbach's α	.810	.709	.718
Note) The result is no indication of values with a factor load rating of 0.4 or lower.			

The reliability of each variable was measured through the Cronbach's (α), which evaluates the internal consistency of the measurement scale. The reliability of the measurement scale is identified between .690 and .898, so it was judged to be at a level that could be used in this study.

Table 4 Descriptive Statistics and Reliability of Key Variables

Measurement Variables	Mean (Standard deviation)	Reliability (α)
News Service Reliability	3.21(0.64)	.843
False Consensus	2.98(0.68)	.731
Perceived Usefulness	3.43(0.61)	.779
Perceived Risk	3.10(0.78)	.782
Perceived Bias	3.15(0.58)	.694

Assessing the false consensus according to user's experience of digital algorithm news services, perceived usefulness, perceived risk, and perceived bias

After looking at the factors that affect *the false consensus*, the use's experience as a communicator ($\beta=0.09$, $p<.05$), and as a producer ($\beta=0.15$, $p<.001$), perceived risk ($\beta=0.13$; $p<.01$), and perceived bias ($\beta=0.46$, $p<.001$) have positive effects on false consensus.

Table 5 The factors that affect the reliability of the news service

	The false consensus					
	1		2		3	
	β	t	β	t	β	t
Spectator	.08	1.64	.05	.82	-.02	-.45
communicator	.14	3.09**	.14	2.97**	.09	2.23*
Producer	.27	5.91***	.27	5.86***	.15	3.58***
Perceived Usefulness			.05	.98	-.06	-1.21
Perceived Risk					.13	3.49**
Perceived Bias					.46	10.74***
R²	.244		.245		.445	
adjusted R²	.238		.238		.437	
ΔR^2	-		.001		.200	
F	42.25***		33.99***		59.74***	

* $p<.05$, ** $p<.01$, *** $p<.001$

Assessing the credibility of news services according to user's experience of digital algorithm news services, perceived usefulness, perceived risk, and perceived bias

After looking at the factors that affect the *credibility of news services*, the user experience as spectator ($\beta=0.17$,

$p < .001$), the user experience as a producer ($\beta = 0.24$, $p < .001$), perceived usefulness ($\beta = 0.13$, $p < .05$), and perceived bias ($\beta = 0.18$, $p < .001$) have a positive effect on the credibility of news services

Table 6. The factors that affect *the credibility of news services*

	the credibility of news services					
	1		2		3	
	β	t	β	t	β	t
Spectator	.29	6.72***	.20	3.76***	.17	3.37**
Communicator	.10	2.29*	.08	1.95	.07	1.56
Producer	.29	6.84***	.28	6.74***	.24	5.69***
Perceived Usefulness			.17	3.35**	.13	2.49*
Perceived Risk					.01	.34
Perceived Bias					.18	3.99***
R²	.375		.389		.412	
adjusted R²	.372		.384		.404	
ΔR^2	-		.013		.023	
F	79.17***		66.82***		53.33***	

* $p < .05$, ** $p < .01$, *** $p < .001$

CONCLUSION

In summing up the research results, the experience as a communicator and the experience as a producer affected the false consensus. In the effect of perceived usefulness, perceived risk and perceived bias on false consensus effects, perceived risk and perceived bias affected the false consensus. It means that due to perceived risk and bias of the algorithm news service, I mistake that my opinion will be consented by more people than it really is.

First, these findings have been demonstrated in this study, as shown by previous research that false consensus effects are significant to heavy users rather than light user in social media or digital news services (Na, Eun-young, 2012). The more voluntary and participatory use of digital algorithm news services means that they are active in acquiring information, sharing information and providing information, and they ensure high network homogeneity. And they connect a lot with people who are similar to themselves. Thus, the assumed similarity and probability of false consensus may be increased. This is a result of showing that voluntary and participatory users are highly likely to reach the false consensus.

Second, users avoid innovation by being aware of the risks of algorithm news, but they also embrace innovation when they perceive greater usefulness. When accepting algorithm news, a consensus group can be created by building networked homogeneity. You may mistake your opinion for being supported by the sympathetic group.

Third, the bias has been shown to strengthen the sense of agreement. This can lead to a tendency to believe that others will sympathize with their opinions, which can lead to the stuck-up of the bias. People who use biased news from algorithm news services are at greater risk of being trapped filter bubble forming echo chambers among them.

In summing up the research results, the experience as a spectator and the experience as a producer affected the news service credibility. In the effect of perceived usefulness, perceived risk and perceived bias on the news service credibility, perceived usefulness and perceived risk affected the news service credibility.

First, the user experience as spectator and as producers have affected the credibility of digital algorithm news services. It is understood that the credibility of digital algorithm news is high for universal users. It can be said that the user spectrum for news service credibility is wide, closely related to the perceived usefulness of users.

Second, the perceived usefulness and perceived bias in the effects of perceived usefulness, perceived risk and perceived bias on the credibility of news service affected news service credibility. The findings are consistent with previous research that found perceived usefulness raises users' expectations and enables them to embrace innovation.

Third, the perceived bias may be perception of media bias, but it is also a concept of user's bias created by exposure to media bias. The perceived bias means that you may have extreme trust in exposed news services because you are biased in accepting news. This is a consequence of enhancing cognitive bias in combination with false consensus effects. With credibility of news services and the false consensus effect is activating each other, users can be trapped in a filter bubble.

The significance of this study has demonstrated empirically that perceived bias and perceived risk of digital algorithm news are creating biased false consensus, demonstrating the problem that digital algorithm news can cause confirmation bias and filter bubble phenomena. It is also an important finding that the planned and intentional active users rather than the simple users of information processing have influenced the false consensus and the credibility of news services. The fact that active users have false consensus and credibility of news service rather than passive users provides important implications for setting targets for news literacy.

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AN ANALYSIS OF EFL STUDENTS' PERCEPTIONS OF SUSTAINED SILENT READING (SSR)

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ABSTRACT

In the era of smartphones, students are spending far more time using social media than reading for pleasure or educational purposes. Youngsters these days are easily-bored and lack the attention span to read for a long period of time. As a result, although having proven itself as an effective implementation in ELT classes, Sustained Silent Reading (SSR), which requires students to read silently in the class without interruption for a certain amount of time, has become a less popular part of EFL teaching programs. In an attempt to investigate the new generation's approach to SSR, this study examined EFL students' perceptions on a five-week practice of SSR, which was conducted among 18 participants at an English preparatory school in a public university in Turkey. Two types of data collection instruments were employed in this study. First, the students were given questionnaires. Second, interviews with three randomly chosen students were carried out. The study showed that the students found the practice of SSR enjoyable, motivating and helpful in terms of improving their language proficiency. The positive implications of the study suggest that SSR practices should be incorporated into ELT programs to help improve both the students' attitude towards reading and their proficiency in the target language.

AN EYE TRACKING STUDY OF VISUAL EXPLORATION PATTERNS IN INFORMATION VISUALIZATION

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ABSTRACT

This study intended to analyze students' eye behavior while viewing and observing complex instructional visuals. Therefore, complex information visualization was presented to approximately 40 undergraduate students to collect and investigate eye movement patterns using eye tracking technology. Eye movement data such as scan path were collected. Then, a qualitative content analysis approach was utilized. Next, thematic data analysis was conducted. Three theme patterns emerged. Findings were presented and discussed. Also, limitations of the study and recommendations for future research were presented. Findings will contribute to the knowledge of instructional design and will benefit instructional designers in various ways. For example, they will benefit instructional designers to best display and present information when designing complex information visualization.

ARQUITECTURA Y APRENDIZAJE ARCHITECTURE & LEARNING

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RESUMEN

Hace algunos años, el autor de este artículo proyectó en la parcela del CEIP (Centro de Educación Infantil y Primaria) Gonzalo de Berceo de Valladolid un espacio-jardín de vocación pedagógica al aire libre. La alternativa formal era también un pequeño homenaje a D. Joaquín Muro, arquitecto de Construcciones Escolares que también diseñó juegos para los niños en espacios abiertos y que trabajó durante la etapa de Primo de Rivera, de la República y de la postguerra, siempre con notable acierto. Merece, pues la pena, investigar y aportar esta experiencia, que se considera con un interés muy vigente y actual. La arquitectura vino así en auxilio del aprendizaje, que se apoyaba en el cambio del marco de relación. Del frío y aburrido pupitre se pasó a un escenario que no se domina a la primera, el jardín, pero que, sobre todo, es arquitectura y espacialidad. La aparentemente rígida geometría de las trazas no es tal, debido a la presencia de los arbustos y de los volúmenes de ladrillo coronados por una piedra de caliza blanca.

ABSTRACT

Some years ago, the author of this abstract projected on the plot of the CEIP (Centre for pre-school and primary education) Gonzalo de Berceo Valladolid a pedagogical vocation garden in the open air. The alternative shape was also a tribute to D. Joaquín Muro, architect of School buildings who also designed games for children in open spaces and who worked during the Primo de Rivera dictatorship, the Spanish Republic and Franco dictatorship stage, always with remarkable success. It deserves, because it worth, investigate and bring this experience, which is considered very interesting and current issues. Architecture came thus in aid of learning. Cold and boring desk moved to a scenario that is not dominated at first, the garden, but, above all, is architecture and spatiality. The apparently rigid geometry of the trace is not such, due to the presence of bushes and brick volumes topped by white limestone.

INTRODUCCIÓN

Cuando se proyectó en la parcela del CEIP (Centro de Educación Infantil y Primaria) Gonzalo de Berceo de Valladolid, el objetivo arquitectónico era conseguir un espacio-jardín de vocación pedagógica al aire libre, para promover una mayor facilidad y fijación en varios tipos de aprendizaje: desde el convencional de profesor proactivo y alumno receptivo hasta el aporte colectivista de las llamadas ahora “tormentas de ideas”. El resultado de aquel proyecto fue criticado, en un principio, por los adultos no educadores, porque algunos materiales parecían duros (bancos de piedra y ladrillo). Sin embargo, fue un éxito posterior, tanto por la ocupación como por la querencia y uso que tanto alumnos como profesores y padres hicieron del mismo. (Fig. 1).

La razón de aportar materiales muy sólidos, aunque algo ásperos (sólo en las primeras impresiones) desde la sensación psicológica, era obvia en cuanto a conseguir su durabilidad; y el hecho del éxito en el uso, cuestión que no era nueva y que se había ensayado ya en las escuelas de la etapa de la República española (1931-1939) e incluso con posterioridad, se debe a varias razones: al reconocimiento fácil de la traza geométrica y de los volúmenes, a la evidencia de que estos mismos volúmenes ofrecen, por su contigüidad, relaciones antropomorfas, a la inmersión de los asientos en la floresta del jardín, a la existencia de un banco y espacio comunal central y unificador, para poder relacionarse mejor, al diseño de un elemento a modo de pedestal para alojar una meseta-atrill que sirva al profesor o a algún orador para las clases, las explicaciones colectivas o, simplemente, para jugar a representar todo esto.

EL PROYECTO

Analizaremos el proyecto de este espacio desde varios puntos de vista, para saber cómo se va generando el mundo forma, el de los recorridos y remansos y también qué significaciones se quieren transmitir y qué correlaciones internas se establecen o cuánto influye el entorno.

El espacio y el entorno.- Se trata de proyectar un jardín para el aprendizaje en un pequeño espacio residual en el patio del colegio, junto a los edificios, en una zona donde no se puede practicar deporte, por su falta de espacio y su proximidad a los ventanales de las aulas y tampoco se pueden habilitar otros usos de ocupación dado el carácter de espacio de paso, aunque ello se realice con circulaciones esporádicas. El entorno es anodino, pues se ha formado por suma de actuaciones que no siempre han sido unitarias ni planificadas.



Fig.1



Fig.2

El conjunto proyectado.- El conjunto se articula, entonces, como un espacio recreativo que también puede utilizarse como espacio de paso. (Fig. 2 y Fig. 3)

Como espacio recreativo, hacen falta espacios de remanso, jardinería con la suficiente altura como para conformar recintos caracterizados, asientos donde descansar, lugares para relacionarse, temas donde curiosear y empujar la imaginación hacia ensoñaciones inéditas; además la jardinería puede retomarse de muchas maneras y conformar paredes y techos o ubicar elementos virtuales e intuitivos: todo aquello que está “detrás de”. En definitiva, exaltar lo que se ve, lo que se imagina y también lo que no se ve, allí donde un niño puede reescribir el espacio con su propia inventiva e interactuar de forma totalmente lógica, como ocurre con otros elementos: los juguetes, los cuentos, las canciones, etc.

Como espacio de paso, había que liberar las circulaciones de la condición de barreras, impidiendo que las personas puedan ver vallas o temas de cierre y de obstáculo en las fábricas construidas. El análisis de un espacio pequeño, rectangular, de proporción aproximadamente sexquiátera o algo mayor, daba fe de la dificultad de materializar recorridos o calles con la suficiente entidad. Por eso se procedió, a la hora del proyecto como si fuera un espacio mucho más extenso para luego ver cómo caracterizar e individualizar esos recorridos. Así, parecía evidente, que en una planta rectangular, si quiero liberalizar todos los recorridos posibles, dando la máxima libertad al viandante y consiguiendo, a la par, una geometría poderosa, de fácil fijación y recuerdo, era necesario recurrir a las diagonales y los ejes que nos marca la figura: con las dos diagonales hacemos accesibles los puntos más extremos y con los ejes volvemos a la idea de un camino estable y del posible recorrido más corto. De esta forma nos aseguramos la continuidad de los ejes y la sensación de accesibilidad muy directa a los puntos más lejanos.

El siguiente paso en la percepción del conjunto es el hecho de conseguir individualizar los recorridos cuando los espacios residuales entre ellos (que son susceptibles de incorporar la vegetación, por desgracia no existente en el momento de realizar las fotografías) son minúsculos. Al ocurrir esto, había que intentar no visualizar estos espacios para jardín en su verdadera dimensión y para ello lo mejor era cambiar de plano los puntos singulares o, lo que es lo mismo, singularizar los puntos clave que identifican una figura. Así, si los espacios residuales son todos triángulos, la solución es que los vértices de los mismos, que señalan bien la figura general, estén a diferentes alturas y la percepción no pueda asociar un vértice a otro, puesto que no se ven a la vez o no hay relación geométrica claramente visible; y no sólo hay que enmascarar la figura de cada triángulo residual, sino que también conviene relacionar sus vértices con elementos externos a cada parterre. Y, en consecuencia, potenciar así las circulaciones, es decir, todo lo que se apoya en una relación de puntos homólogos mediante simetría y mediante consecutividad. Resultan, entonces, enormemente potenciados los pasos, con muchos elementos de correspondencia simétrica y las perspectivas, que se configuran como conjunto de simetrías seriadas a lo largo del recorrido y que se perciben según se avanza.

Por tanto, la traza geométrica tenía ya, según estos argumentos, una traza sólida, bien definida, contundente y de muy fácil fijación en el imaginario colectivo- Pero también se vislumbraba que el hecho de levantar a diferentes alturas los puntos de los parterres iba a provocar una vibración permanente o una volumetría muy movida o ambas cosas a la vez, en función también de los materiales elegidos y de la forma de construcción.

Llegados a este punto, en el seguimiento racional de las directrices de traza que el proyectista quiere mantener y proteger, aparecen determinadas ideas de apoyo. Así la que procede de la memoria de los jardines del siglo XIX y de los elementos puerta, donde a veces se elevan puertas con dintel configuradas como tal y otras veces, en los jardines más modestos, simples hitos laterales a modo de postes o pilastras truncadas a determinada altura. Incluso, con esta segunda solución, los hitos se sustituían muchas veces por figuras o representaciones de los cuentos infantiles (Pipo y Pipa, Balcanieves, etc). Ante la imposibilidad económica y la inconveniencia imaginativa de plantear figuras de los cuentos convencionales era preciso dotar a los hitos de cierto recordatorio de las formas antropomórficas. En auxilio de este criterio acude inmediatamente la idea de que todas las formas clásicas tienen su sentido originario o evolucionado en multitudes de morfologías figurativas y, por tanto, nada mejor que las clásicas pilastras, de manera que todos los recorridos se abren y cierran con los elementos citados que, según su jerarquía se elevan a unas u otras alturas o participan de escalas también distintas.

Pero esta misma intencionalidad se retoma con éxito a la hora de situar en cada recorrido un escaño o banco corrido para poder sentarse. Además, se muestra con anticipación la existencia del elemento de asiento, puesto que su principio y final están perfectamente marcados con la técnica de las pilastras, también de tamaño menor, es decir, de jerarquía muy secundaria y de entidad acorde con las piezas que se quiere enfatizar.

También se utilizan como pequeños escaños las continuidades del murete bajo entre las pilastras de las entradas y el comienzo de los bancos arropados por la fábrica con su respaldo. Se hace la geometría y la jerarquía más compleja cada vez, sobre todo al decidir contrastar en color y material la fábrica de la pilastra o los muretes que son de ladrillo de sus coronaciones, con mesetas horizontales de piedra caliza blanca a modo también de vierteaguas. La idea de matizar las cabezas de las pilastras antropomórficas acude a la evocación –nuevamente- de la arquitectura del siglo XIX, que tanto cuidó la pedagogía y el aprendizaje, para utilizar el ladrillo de la fábrica en esquinita y en sentido vertical, de manera que con muy pocos elementos y muy baratos se pudiera evocar un mundo muy rico en sensaciones y evocaciones arquitectónicas. (todas las Figuras, desde las 2 hasta la 5).



Fig.3



Fig.4

La idea de programa.- En esta idea debía estar incluida la idea de caminos de paso, obligados como se ha explicado, y capaces de dotar al conjunto de una traza geométrica comprensible y potente. Pero también debía haber en el programa elementos de descanso, es decir, allí donde la gente se para y conversa cómodamente. Incluso, en la propuesta se debía lograr que esta forma de convivencia y de relación no fuera convencional para no caer en el aburrimiento o en la inercia cotidiana, sino por el contrario, exaltar la imaginación y las ganas de descubrir el espacio y cómo comportarse dentro del mismo. La respuesta a estas condiciones no era dudosa: sólo podría hacerse mediante un elemento central de mucha fuerza que condicionase una tensión de reposo contraria a la de circulación, sin molestar a la misma o, por así decir, con tensiones compatibles. Pero ese elemento central debía estar polarizado ya que las fronteras por uno y otro lado eran muy diferentes y en el espacio abierto el espacio debía extenderse por curiosidad natural, pero en el espacio cerrado por la fachada del edificio, la relación debía focalizarse y el programa no sufriría merma. En auxilio de tales pensamientos volvieron las costumbres del ya manido siglo XIX, incorporando una fuente especial, que a la vez de fuente por una cara podía ser podio de oradores por la otra, con un elemento fuente a modo de atril elevado y fuertemente concentrado en su atención, mientras por el otro lado del espacio los espectadores se verían frozados a compartir el discurso y a entablarlo entre ellos con un banco circular de fábrica.

Así todo el programa se veía completo: jardín, bancos, fuente, asiento comunal, circulaciones amables, vibración y falta de reconocimiento de las dimensiones reales, además de una reconocible carga simbólica.

Circulaciones.- Sólo se había sacrificado una de las circulaciones transversales para ubicar el banco semicircular comunal y la fuente-podio, lo que daba al conjunto un aspecto más diversificado y, a la vez, menos aprehensible. Por otra parte, la circulación que se había eliminado era la menos importante, la que resultaba matada por la pared; al mismo tiempo esta pared hacía las veces de elemento entre-bastidores o de trastienda o de bambalinas, etc, pero, en todo caso, de elemento secundario al servicio de la dirección del espectáculo, es decir del podio de oradores, que era lo más activo del programa de remanso.

Los antepechos como escaño.- Esta idea había venido también de la conciencia de la pequeñez de los espacios, pues no se podía mezclar demasiadas formas o demasiados materiales allí donde su percepción hubiera chocado o competido consigo misma. De ahí a tener claro que los antepechos, como elementos de fábrica que debían ser, informaran la construcción de pilastras y bancos, de la propia fuente y el banco semicircular, había poco trecho y el problema de diseño se reducía a controlar un “paquete” de soluciones con los mismos materiales y una sintaxis que participaría de piezas de idéntica morfología: los ladrillos.

El asiento circular.(Figura 7)- Ya se ha mencionado su génesis. Baste decir que se reforzó la geometría introduciendo la misma forma circular en el pavimento y logrando hacer más real el espacio de este banco a la hora de que su centro fuera un foco para participar de conversaciones entre diversas personas, cuando la proximidad es importante y hay que estar cómodo y con control del dominio del espacio de cada una.

La fuente con podium.- De la idea de foro, tan antigua como el mundo griego y de la idea de mitin, más propia de la revolución industrial y de los movimientos obreros, emerge esta modesta fuente de caño único cuyo frente (Figura 8) está definido por el espacio destinado a bebedero y cuya espalda (Figura 9) no es sino una escalera a un pedestal que permite dar lectura a cualquier escrito gracias a un atril de fábrica. La fuente es casi sólo un muro, muy barato y fuertemente especializado, pero muy denso de contenidos arquitectónicos, tanto de programa como de caracterización y emblematismo, suponiendo, además, un dominio del espacio poco usual y convirtiendo, por añadidura, un pequeño jardín de un colegio en elemento de significación y referencia de todo el patio y el entorno. La geometría y la perspectiva.- Geometría que engloba la simetría, la repetición, la consecutividad y que duplica como un espejo lo que se ve, potenciando cada uno de los elementos y haciendo que el conjunto parezca mucho más extenso.

La percepción. Vibraciones y planos horizontales.- Este tipo de volumetría, vibrante y contrastada era fundamental para conseguir los objetivos perseguidos.

El uso y la significación de la arquitectura. Es un jardín donde en todo momento parece que una sólo persona está acompañada por otras muchas, puesto que el movimiento que se produce en los paseos y los recorridos fragmenta y virtualiza mucho un espacio que parece estar concebido para que alguien descansa en su interior o se mueva en el mismo.



Fig.5



Fig. 6

INDAGACIONES, DISCUSIÓN Y CONCLUSIONES

Cómo se conforman múltiples subespacios. La discusión sería si es mejor subdividir espacios o no y quizá mejor ver si no se funciona mejor con espacios subdivididos que son dependientes de un espacio general al que pueden controlar o tener un dominio general de sus límites.

¿Puede la arquitectura cambiar la psicología?. Esto parece ya muy probado y se trae aquí como aserto, pues muchas arquitecturas han conseguido y mostrado tales funciones a través del uso.

El intercambio en un espacio de fragmentos y escalas es fundamental para no encontrar el agobio del espacio convencional.

Los mecanismos del aprendizaje se hallan en la arquitectura en un paralelo subliminal.

La arquitectura como marco inevitable tiene muchas posibilidades de funciones simbólicas y psicológicas que casi nunca se explotan.

La importancia de la arquitectura en el aprendizaje es más intensa todavía que en lo mostrado.

Sería preciso desvelar en los espacios de aprendizaje las características arquitectónicas a cumplir, que no son estrictamente funcionales.

Remarcar aquí que puede ser muy necesario el uso de las variables antropomórficas, aunque sean formas en principio abstractas o ligadas al lenguaje de la construcción.

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Fig. 7



Fig. 8



Fig. 9

CASE STUDY: BEING AN ARAB UNIVERSITY STUDENT IN THE CZECH REPUBLIC

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ABSTRACT

This study provides an investigation into a range of activities of the Information and Counselling Centre of the University of West Bohemia in Pilsen, Czech Republic and in particular its Special International Counselling Centre. This special centre was opened in September 2018 as a reaction to the increasing number of foreign students coming to study in the Czech Republic. Its main aim is to provide members of foreign countries (i.e. those who do not have Czech nationality and did not study secondary school in the Czech Republic) with counselling services as well as to help them with cultural integration. Within the first phase of this project, the centre dealt with Arab students only. Arab students have dealt with many various barriers during their studies at the University of West Bohemia, the most challenging of which is the obligation to study in Czech. Moreover, the student online database for exam registrations and class evaluations is also only available in the Czech language. Formally, the system considers such students to be Czech students. Despite the language barrier, it has been assumed that the operation of such a support system will help the students through the Czech educational process and will also spread awareness in relation to the country's traditional cultural beliefs and practices. The other group of students becoming part of this counselling project in May 2019 are coming from Turkey and Iran. The study presents the vision and mission of the centre alongside implemented tools and activities. Most importantly, however, it also provides concrete figures on the results of the Counselling Centre's year-long operation. Evaluation of this ongoing project has also highlighted the fact that support must be available for tackling more everyday problems affecting individuals' personal and social lives. A number of recommendations on ways in which the services should develop, and arising from the evaluation, are put forward.

INTRODUCTION

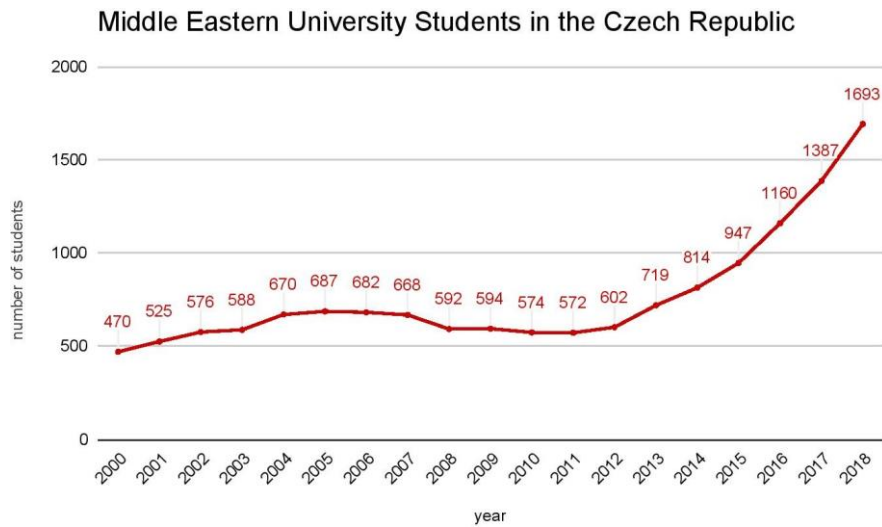
Activities of the Information and Counselling Centre of the University of Pilsen

The Information and Counselling Centre of the University of West Bohemia in Pilsen (hereinafter as ICC) provides a complete system of services in regard to studies, social conditions, psychology and law to thousands of university students. The Centre also offers assistance and consultancy to students with special needs (including students from ethnic minorities and those with socioeconomic disadvantages) and fully supports the idea of equal opportunities and an open-minded environment for everyone within and beyond the field of education.

The ICC takes part in the realization of the European project "ESF Project of the University of West Bohemia" (European Social Fund funded by the European Union). The entire university participates in its key activities. The ICC is concerned with two particular program units, which cover the following target groups: consultants, academic workers, students with special needs and applicants for study. The project's activities are especially related to the development and innovation of consultancy services, improvement of consultants' competencies and, furthermore, the establishment of a system of support and motivation for students with special needs (including applicants for study) to decrease their rate of failure in study. Within the frame of each program unit, many activities are implemented, such as: educational programs for university employees, short-term internships and consultants' mobility, and motivating activities for students with special needs. Furthermore, a network of experts with work experience and from different organizations (educational institutions, elementary schools, high schools, NGOs) has been established. Recently, a counselling office for students who are non-native speakers of the Czech language has been opened, and much more.

This article deals particularly with the above-mentioned counselling office for non-native speakers of the Czech language, which we call the "Special International Counselling Centre". It has been established in the context of the increasing number of foreign students coming to the Czech Republic, including the University of West Bohemia in Pilsen (UWB). One of the long-term university strategic goals is internationalization in the field of education. Like many other Czech public universities, the UWB is also dealing with an increasing number of foreign students coming to complete their studies in full degree programs (Bc., Mgr., PhD degree program or MBA).

In 2017, from a total number of 300,000 university students, there were 43,831 foreign students studying at higher education institutions in the Czech Republic, mainly from Slovakia, Russia, Ukraine, and Vietnam. The number has been increasing also in the case of students from Middle-Eastern countries.



Countries:
Bahrain,
Israel,

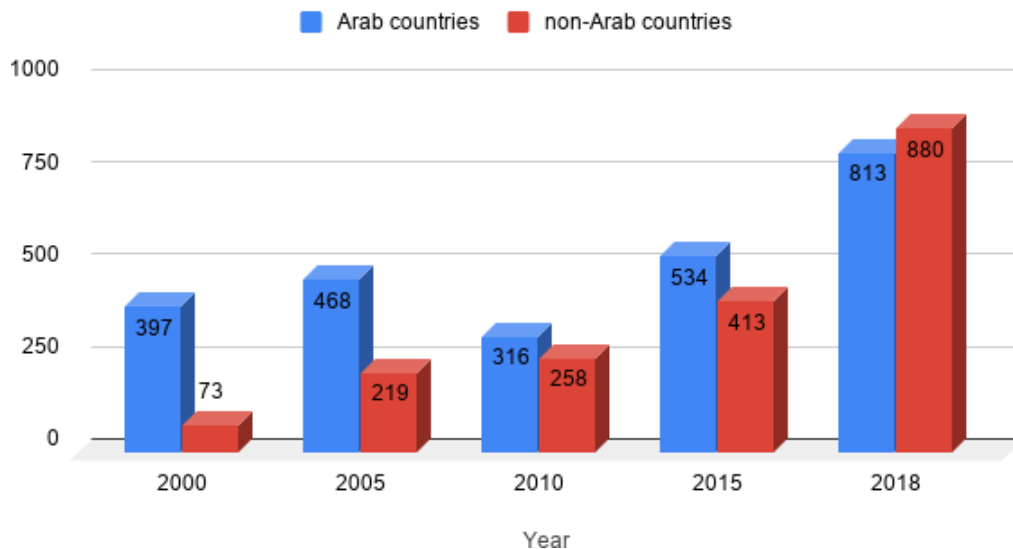
Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Qatar, Saudi Arabia, South Sudan, Sudan, Syria,
United Arab Emirates, Tunisia, Turkey, Egypt, Yemen.

Algeria,
Palestine,
Iraq, Iran,

(data taken from Ministry of Education, Youth and Sports, Czech Republic – SIMS)

As this study deals primarily with Arab students, the following chart gives us precise number

Middle Eastern students in the Czech Republic - Arab vs. non-Arab countries



* non-Arab countries: Israel, Iran, Turkey

(data taken from Ministry of Education, Youth and Sports, Czech Republic – SIMS)

We can expect the number to continue to increase in the following years. The Czech Republic is also one of the countries to have signed the Bologna Declaration. Therefore, the ECTS credit system has been instated, with courses very often offered in the English language. However, there are often some study fees involved. Despite this fact, studying programs in the Czech language at public and state universities is free.

Special International Counselling Centre

Mobility is one of the key activities in terms of internationalization. It is no wonder then that there are offices for international students at all Czech public universities. However, specific counselling and continuing help for long-term mobility students has not yet been offered. Most public universities' offices focus on Erasmus+ program students, internships, and bilateral cooperation with foreign universities.

In reaction to this situation – i.e. the increasing number of foreign students in the Czech Republic – a team from the Information and Counselling Centre of UWB (ICC) has decided to establish a special office for foreign students in regular Czech study programs. When using the term “foreign students”, we mean those who do not have Czech citizenship and did not study at secondary school in the Czech Republic. We opened the centre in September 2018 with the following vision:

- providing members of foreign countries with counselling services and helping them with cultural integration;
- adaptation and orientation within the Czech educational system and university norms.

There are about 450 foreign students at UWB (449 foreign students from 10,273 in total in 2017). We can divide these students into three main target groups according to their numbers. Most of them come from post-Soviet countries, then from Vietnam and Middle-Eastern countries.

We have decided to divide our project into several phases as there were several complaints from the study offices of individual faculties regarding communication with Arab students at the university. This was an important element in the decision making process on how we should approach these students and what groups of students need our services the most. Therefore, we decided on the following project phases:

- from October 2018: Arab students
- from May 2019: Turkish and Iranian students
- from September 2020: Vietnamese students
- from September 2021: post-Soviet countries
- from September 2022: all countries

Arab University Students at UWB

There are up to 20 (the numbers for 2019 are not included) students at the UWB that come from Arab countries. They have chosen to study technical fields either at the Faculty of Applied Sciences, the Faculty of Electrical Engineering or at the Faculty of Mechanical Engineering. Most of them study on a scholarship basis. These UWB students are often here thanks to a bilateral agreement and they receive regular monthly scholarships (around 14,000 CZK). Within those agreements, students are obliged to participate at an 8-month-long Czech language course just one year before enrollment. At UWB, the course takes place at the university twice a week. At the end of the course, students should be able not only to communicate in Czech (spoken, written), but also get their specialization at the university. The Czech educational system treats them as Czech students. They attend courses together with (mainly) Czech students, and classes are in Czech. Moreover, the online system for exam registrations or lecture evaluation are also only in the Czech language.

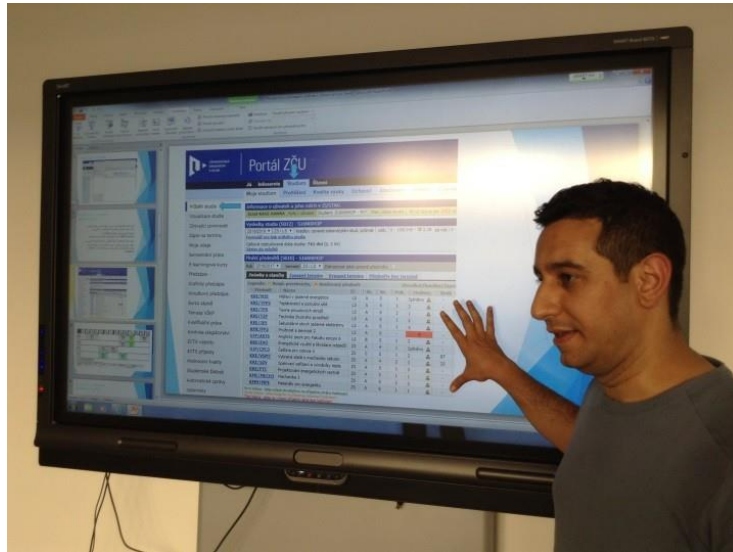
These students come mainly from Syria, Morocco, Yemen, Palestine, Saudi Arabia and Iraq.

In addition to the aforementioned issue of language, a lack of contact between Arab students and their Czech counterparts emerged as a problem. In cases where there is contact, Czech students welcome every opportunity to practice their English and therefore do not have enough patience for “Czech language beginners”. Also, the whole educational system differs greatly from the one in their native countries, including specific university rules.

Mission and Activities of the Special International Counselling Centre in 2018

The centre has also offered formal meetings and regular cultural activities within the first year of its operation (September 2018 – August 2019). There were individual consultations taking place twice a week in the ICC in the city centre, eight hours in total per week. The most common topics being discussed and dealt with there were health insurance, study consultations, part-time job seeking, then accommodation seeking and scholarship applications.

In October there was an introductory meeting for Arab students at UWB where the centre's staff members explained how to work within the university system and what the credit system rules are, and also prepared a presentation and a sample of traditional Czech cuisine.



Centre staff member Izzat Kass Hanna (at the time still a student) explains how not to get lost in the online university system.

As this type of event was quite successful, we have decided to offer such events regularly – we have called them “regular cultural events”. Such an event always consists of the presentation of an important topic (on study or life in the Czech Republic) and some fun activities or eating together afterwards. During the academic year, we have presented activities of UWB student organizations, examination rules, part-time job and volunteering offers in addition to popular tourist destinations in the Pilsen region, sport options and infrastructure in the city or guided culinary Middle-Eastern tours in the city. At the end of the summer semester, students themselves proposed topics for meetings and invited their Czech friends to take part as well. This has also surprisingly become a platform for talking about their everyday problems and experiences with Czech society. Together with students, we organized a special Ramadan dinner and a Moroccan breakfast for the public. There are already several Turkish and Iranian students involved in the event’s organization, as students from these countries will also be the main target group in the second project phase. There is also a strong connection with the Department of Middle-Eastern Studies of the Faculty of Arts as students of the Arabic language welcome the opportunity to practice their language skills with native speakers.

The coordinators of the centre are able to communicate in Arabic; however, there is always an emphasis to present all of the information in Czech first, then in Arabic and English. The most popular and widely-used communication tool has been a private Facebook page group (in operation since October 2018). Its content consists of various cultural event tips connected to UWB (e.g. the YEAR ONE festival for freshmen, Festival of Arab Culture) and important university deadlines and study information. Also, the terms of upcoming meetings have been negotiated there more effectively than via e-mail.

EVALUATION AND SUGGESTIONS

In June 2019, we distributed a questionnaire to Arab students to find out what difficulties they continue to face and learn how we can improve our services. To summarize, the greatest challenges are the language, the negative or reluctant attitude of the Czech community, and cultural differences and misunderstandings. These results were not surprising. Nevertheless, the students evaluated the activities and services of the centre as being highly useful and they even asked for more events to be organized (ideally connected to food so they can present their national cuisine to others).

In reaction to the language barrier, we have decided to implement a regular Czech language course in the winter semester for new students. It will be for free and one lesson (90 minutes) should be offered weekly.

For the future functioning of the centre, we would like to continue with organization of the same kind of events (individual consultation, introductory meeting for the new academic year and informal regular meetings). At the beginning of the project, we were met with silence on the part of students – many of them did not reply to our e-mail invitation at all. During the academic year more students got to know about our services and began using them more often – the principle of “getting to know something through a friend” has worked the best. Also, using social networks (especially the Facebook page) was a good decision, and we are planning to continue to publish important documents there such as online presentations or video manuals connected to university life and cultural tips as well. Thanks to the Facebook page, group students are in touch with the centre’s staff members immediately and they can ask about anything without going through formalities.

We are also planning to strengthen cooperation with Erasmus students – in terms of inviting them to our cultural events and to involve our target group in their organized activities like trips to Prague or other Czech cities.

Finally, the most crucial point according to our ICC team is the need for the active participation of students to create the content of meetings. In regard to the group of Arab students, we have offered a job to a Syrian student and this move has proved to be a brilliant one; we are now thinking about offering a part-time job to one of the Turkish or Iranian students as well. The services offered might be great and meaningful, but help “from student to student” has added value – this involves more than just a centre staff member, and there is room for creating new social ties and friendships.

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CLOUD COMPUTING ARCHITECTURAL DESIGN MODEL FOR SCIENTIFIC RESEARCH AND UNIFIED EDUCATION SYSTEM

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ABSTRACT

Cloud computing is becoming an adoptable technology for many of the organizations including academic institutions with its dynamic scalability and usage of virtualized resources as a service through the Internet. Cloud computing is an excellent alternative for educational institutions technology in order to operate their information systems effectively.

Academic organizations take advantage of cloud based applications offered by service providers and enable their own staff/students to perform business and academic tasks. In this paper, we will review what the cloud computing infrastructure services and deployment models in general and will provide the benefits of cloud computing in the educational field, especially in the universities where the use of computers are more intensive and what can be done to increase the benefits of common applications for students and teachers. The main important part of this research is the proposed solution based on cloud computing with all suggested services and deployments model with highlighting the main features and characteristics of the model to be a unified since research and educational model.

Suggested application, payment, security and privacy model will be discussed at the last part, and ended this research by reasonable conclusion

CO-DESIGNING OF A MOBILE EDUCATIONAL TOOL FOR INNOVATIVE TEACHING AND LEARNING AT THE COLLEGE OF BUSINESS EDUCATION, TANZANIA

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ABSTRACT

Mobile technologies are increasingly becoming tools for enhancing access and smooth sharing of information, products, and services. In this realization, this study used a design science research users' participatory approach to co-design a mobile application prototype known as CBE Mobile Educational Tool (CBEMET) to enable lecturers of the College of Business Education (CBE) in Tanzania to share educational materials. The co-design of the prototype involved 3 researchers, one application developer and 25 lecturers of CBE. The testing of the CBEMET prototype shows that downloading and uploading of education resources to the system is adequate. The results also indicate that the prototype enables the access of uniform departmental-related materials by lecturers of the same department at different locations and, in so doing, it increases the quality of teaching and learning at the college. Furthermore, the testing of the prototype revealed that the design meets the requirements of the lecturers and has brought a significant change in their teaching and learning practices. The impact of the study is that it sets a groundwork for future studies involving lecturers in higher education and developers in co-designing and co-developing mobile education tools for innovative teaching and learning in Tanzania and in other emerging economies.

Keywords: innovative teaching and learning in higher education institutions; educational technology; co-design and development of mobile educational tools; mobile education tool usage; DSR; CBE, Tanzania;

INTRODUCTION

Mobile education tools are regarded as one of the means to enhance innovative teaching and learning. It simplifies, adds value to the way education is delivered, enhances collaboration in learning and is a source of innovative teaching and learning process (Filippo, Barreto, Fuks, & Pereira de Lucena, 2006). With mobile education technologies, teaching and learning can contemporarily be done anywhere, anytime ubiquitously (Virvou & Alepis, 2005; Quinn, 2001; Sharples, 2000; Patten, Arnedillo, & Tangney, 2006; Ryu & Parsons, 2009; Porter, et al., 2016). In other words, technologies have got rid of the need for fixed classrooms and lecture rooms (Lee & Salman, 2012) which were the prerequisite in the past. ICTs technologies, in particular, have improved information accessibility; electronic file exchange; and most importantly enhanced the exchange of information between learner-tutor or learner-learner (Sife, Lwoga, & Sanga, 2007; Abouelenein, 2017) extended learning beyond the classroom (Fullan, 2011). A study by (Heath, Herman, Reeves, Vetter, & Ward, 2005) provide a highlight on how mobile learning application can be used to solve problems of retention of science and mathematics students in universities. Moreover, the new pedagogical method of learning through mobile devices has prominent benefits that other educational media cannot present, such as personal engagement, satisfaction, and high motivation regarding the learning process (Ryu & Parsons, 2009).

Increased application of mobile tools in education in HEIs relates to a concept of innovative teaching, learning, and assessment using social media technologies (Kivunja, 2015). Several studies (Mtega W. P., Bernard, Msungu, & Sanare, 2012; Mtebe J. S., Kondoro, Kisaka, & Kibga, 2015) show that the mobile phone is a useful tool for teaching in higher education solves many previous challenges. Mtebe and Kandoro (2016), specifically write that the Moodle learning management system (LMS) via mobile phones enables instructors and students to view courses, view grades, view notes and be able to hold discussions very efficiently than ever before. Research, therefore, point out that the use of innovative educational technology in teaching should be one of the requirements for accrediting a higher education institution (Borisova, Vasbieva, Malykh, Vasnev, & Bírová, 2016)

In Tanzania, the growth and advancement of Information and Communication Technologies (ICTs) are changing the mode of teaching and learning (see, Lee & Salman, 2012; Ryu & Parsons, 2009). According to Kazoka (2017) ICTs has enabled 300 teachers from primary schools to higher education institutions in Tanzania to attend teleconference seminars that improve their teaching of science in public schools. Further, the technology has enabled lecturers to teach in more than one school at the same time

Despite this development in using ICTs in Tanzania, many higher learning institutions have not taken the full advantage of the possibilities offered by the information and computer technologies in improving teaching and learning processes. Mwandosya and Suero Montero (2017), for instance, investigated the usage pattern of mobile devices for teaching and learning among teachers and students at the College of Business Education in 2017. They reported that the usage of such gadgets for education was stubbornly low among the participants of the study. It was also found that a substantial number of CBE lecturers only knew WhatsApp, electronic mails (e-mails), and normal text messages. As a result, CBE administration would fail to acquire uniform coverage of syllabi for the same subjects in their dispersed campuses of Dar es Salaam, Dodoma, Mwanza, and Mbeya¹. This is because WhatsApp, which was the most preferred application, failed to cater for the idiosyncratic communication needs of CBE teachers and students. According to Mwandosya and Suero Montero's study (ibid), CBE lecturers and students needed a mobile device to enable them to share educational resources and discuss the same issues across the campuses. CBE lecturers supposed that such mobile educational tool would enable lecturers and students to share ideas, and educational resources among themselves, and in so doing, facilitating innovative teaching and learning process.

Building on the findings of Mwandosya and Suero Montero in 2017, this study set to co-designed and develop CBEMET prototype by involving stakeholders through interviews, focus group discussions, and participation in design workshops conducted with lecturers of CBE.

The study set to fulfill the following objectives:

1. to identify the mobile education tool's design features and functionalities for innovative teaching and learning at CBE.
2. to co-design design and co-develop a mobile education tool prototype incorporating CBE lecturers' requirements
3. to demonstrate and use the CBE mobile education tool prototype to the CBE lecturers after its development.

The study intended to lay a groundwork for future co-designing and co-developing mobile software for contextualized innovative teaching and learning in higher education institutions in Tanzania and elsewhere.

MOBILE LEARNING THEORIES AND RELATED WORKS

Mobile learning theories

Mobile technologies contributions to the education sector have yielded a number of theories. In their Theory of Mobile Learning, (Sharples, Taylor, & Vavoula, 2005; Pea & Maldonado, 2006) consider a technology-mediated mobile learning as a personal and situated activity mediated by technology. The theory clearly explains the convergence between learning and technology, where learning is conducted in a mobile situation away from traditional classrooms and lecture halls through the use of mobile education tools. One of the aims of the Theory of Mobile Learning is to inform the design of new environments and technologies to support mobile learning. The theory is important in this study and has been applied in the sense that the co-designing and co-development of this mobile devices for CBE will enable teachers to share educational experiences and materials for the innovative teaching and learning irrespective of their location and time.

Further, the study applied the Activity Theory. This is a theory which gives insights on how designers can develop mobile tools using mobile technologies to better understand the social and material relations that affect complex human learning and the learners' interaction with others as mediated by mobile education tools (Uden, 2007). The Activity Theory emphasizes the involvement of users in the development of an application, in this case, the CBE teachers. It moves away from teacher-centered or student-centered learning approaches. In line with the theory, the participants move through the activities and progress from being partial participants who are heavily dependent on the material mediation of tools, to full participants, who are able to more flexibly use the cultural tools of the narrative practice (Gifford & Enyed, 1999). That is, a mobile technology in this perspective is not perceived as the object of learning, but as a tool to support students' learning activities which are applied

¹ Distance in kilometers from Dar es Salaam to Dodoma is 584 km, Dar es Salaam – Mwanza is 1145.58 km, and Dar es Salaam – Mbeya is 829.53 km.

in the study involving teachers' aspects in own teaching and learning activities using a mobile technology. Instead of designing mobile learning applications in isolation, the Activity Theory suggests the consideration of important features of human endeavor at large through the participation of the concerned users. This allows us to focus on the context of use. It maintains that mobile technology artifacts can only be understood in their context of use, as embedded in meaningful activity.

These two theories (the Theory of Mobile Learning and the Activity Theory) offered this study an initial framework for theorizing about mobile learning. Similarly, they highlighted and put forward the ground for carrying out further studies about the use of mobile technologies in higher educational environment for sharing teaching and learning activities, among other functions. They rationalized the need to grab opportunities offered by mobile learning to promote innovative teaching and learning. The following sections extend the base obtained from the mentioned theories by looking at multiple studies relating to innovative teaching and learning, collaborative learning, design, and development of mobile applications, and the user experience in the co-design and development of mobile education tools.

Innovative teaching and learning

Teaching innovation is when the appropriate strategies and skills are applied to technology use, making it a favorable tool for teaching, fostering effective learning (Bruce, 1989). Innovative teaching is both the practice of teaching for creativity and of applying innovation to teaching (Ferrari, Cachia, & Punie, 2009; Mtega W. P., Bernard, Msungu, & Sanare, 2012). Fullan, (2011) identified three innovative teaching practices namely: 1. Students' centered pedagogies including knowledge building, self-regulation assessment, collaboration, and skilled communication; 2. Extending learning beyond the classroom including problem-solving and real-world innovation; 3. The ICT use in the service of specific and concrete learning goals.

Research point out that innovations enhance competitiveness in a wide variety of sectors including the education sector. Khurshid and Ansari (2012), for example, separated two groups of students of grade I. One of these groups was the control group and was taught using conventional teaching methods, while the other group was the experimental group and was taught using innovative methods. The innovative methods applied were team projects, individual projects, field trips, flash cards, real objects, audio-visual aids, internet access, computer- assisted instructions, role play, worksheets, smart boards, group discussions, quizzes, and mind maps. A test was administered after one month of the teaching and the result showed that students taught using innovative means scored significantly higher than those taught using conventional methods did.

This confirms that innovative teaching improves learner's capability and that teaching has to be innovative (Lee, 2011; Borisova, Vasbieva, Malykh, Vasnev, & Bírová, 2016).

With regard to mobile education, technologies now make innovative teaching and learning easy and real. According to (Kaliisa & Picard, 2017), mobile technologies make it possible for someone to learn efficiently in anytime and almost anywhere. This study is therefore informed by the key role of technologies in the innovative teaching and the need to encourage the design and development of innovative curriculums, and mobile education applications designed in a collaborative way to involve the learners, lecturers, and experts in curriculum and application developers (Naismith, Lonsdale, Vavoula, & Sharples, 2004).

Co-designing and co-developing mobile applications

Co-designing and co-development of a mobile application refers to focusing on the users of the system rather than the developers of the system in order to obtain features and functionalities which will be compatible to the users' needs and in so doing to obtain maximum benefits of learning innovatively. Though the users of the mobile tool might not be technically oriented in designs of the mobile technologies, their contribution to the design is very important as they may observe out the functionalities of the application. Involvement of the users may lead to an application tool with ideal features for users. Co-designing and co-development of mobile applications ensure the success of the application in question at the implementation stage. This is because all problems with the application are early noticed by users of the application and are thus corrected during the design stage. A study by (Nielsen, 2017) elaborates ten usability heuristics for user interface design. Similarly, (Millard, Howard, Gilbert, & Wills, 2009), showed steps involved in co-designing and co-deployment of an innovative mobile learning system as: *scoping; sharing understanding; brainstorming; refining; and implementing* in this study, each of the five stages of Millard, Howard, Gilbert, & Wills' were followed through workshops and meetings with technical and domain experts in the design team.

Mobile educational tools – features and functionalities

A study by Filippo et al., (2006) described a mobile device as a tool for coordinating ‘conferences’ or ‘forums’ where learners and mediators’ messages could smoothly avail collaborative learning. The usefulness of any mobile application is associated with factors such as the quickness in searching and accessing the mobile learning materials and smooth coordination of contents shared by learners and mediators – lecturers at case study of CBE (Filippo, Barreto, Fuks, & Pereira de Lucena, 2006). A number of research have been done on how mobile learning tools can be developed and be applied in different teaching and learning environments.

A four-year project in three European countries to research and develop a practical, easy to use mobile learning toolkit specifically for lecturers, by (Attewell, 2005) produced three toolkits: the first one was a short messaging system (SMS, text message) known as quiz authoring tool, the second one was media board authoring tool, and the third one was pocket PC authoring tool useful for lecturers. The three toolkits suggested by the project study provide an insight on how to design and incorporate a bundle of tools in a mobile application to be used by teachers for effective and innovative teaching. A study by (Li, 2010) worked on a search tool for users to quickly access mobile phone data such as applications and contacts, by drawing gestures. The search tool was found to be useful in searching contents. A study by (Alzahrani, 2017), which was intended to enable students learn through discussion forums reveals the effects of using online discussion forums on students' learning indicating a positive result for enhanced innovative teaching and learning at one of the leading University in Saudi Arabia. It established that many users of mobile applications face slowness in sending requests and receiving feedback. They thus marked this factor as an important aspect to be looked at in the design of any mobile application. A study by (Foti & Mendez, 2014) focused on how students use education-related applications such as Quizlet by LLC a company which creates study tools enabling students to join through their website. The students were able to log in to the app where they found easy to collaboratively learn, do quizzes and some exercises in preparations for examinations. In a study by (Virvou & Alepis, 2005) features of a mobile education tool known as “The Mobile Author” made learning interesting and useful to students and their instructors.

Xie & Parsons (2009) found that functionalities of mobile tools depended on the available portion of the total bandwidth that a user is using. The bandwidth challenge can be solved by developing an application using, for example, the asynchronous JavaScript and XML (Ajax) which is an approach to Web application development that uses client-side scripting to reduce traffic between client and server and provides seamless user application experience (Xie & Parsons, 2009). A study by Ahmad et al., (2004) suggested the importance of learning users’ requirements of the interface. Furthermore, according to (Ahmad, Basir, & Hassanein, 2004), the interface of the tool should be easily adapted for different types of users with differing intelligence capabilities.

Gathering from the aforesaid studies, the need to engage users in the design of the mobile applications as a way of motivating them to collaborate is emphasized. In designing CBEMET prototype for the College of Business Education, therefore, lecturers were involved to come up with a system with features and functionalities that meet their requirements.

METHODOLOGY

In order to define the interface design requirements and contents specifically for the CBEMET prototype about how it will look and work, four workshops involving one application developer, 25 CBE lecturers, and three researchers (one based in Finland at the University of Eastern Finland, and two based in Dar es Salaam at CBE), were conducted at Dar es Salaam Campus of CBE. The workshops followed the design science research (DSR) framework which emphasizes the involvement of users (lecturers) from the onset in the design process of an artifact (the CBEMET prototype). By involving the lecturers, and the designers learnt about what to incorporate in the design.

Design Science Research

The DSR users’ participatory approach in designing the CBEMET prototype have been pivotal in this study. A participatory design approach is an approach that attempts to bridge a gap between researchers and designers and users by organizing co-operation between them (Muller, 2002). The DSR method is a methodological approach concerned with devising artifacts that serve human purposes (Dresch, Pacheco, & Antunes, 2015). DSR entails a systematic approach to studying a practical problem in order to develop a practical solution for an environment in a real world (Hevner, March, Park, & Ram, 2004; Hevner, 2007; Peffers, Tuunanen, Rothenberger, & Chatterjee, 2007). An important outcome of this type of research is an artifact that solves a domain problem, also known as a solution concept, which must be assessed against the criterion of value or utility. In the present study, DSR Framework by (Johannesson & Perjons, 2014) were adopted and modified (see Figure 1).

In applying the DSR at CBE, the task involved lecturers (ultimate users of the application), the developer (a former student, an ICT diploma graduate at CBE and a member ICT innovation group), and 3 researchers (2 based in Dar es Salaam and 1 in Finland).

In the CBEMET prototype co-designing phase, the prototype features and functionalities were designed through iterative discussions, interviews, observations. After the prototype demonstration and agreement on the proper interface design of the MET. Finally, after the demonstration phase, the MET prototype was presented to users to test its features and its effectiveness for sharing different contents. Figure 1 illustrates the co-designing and co-development process applied in this study.

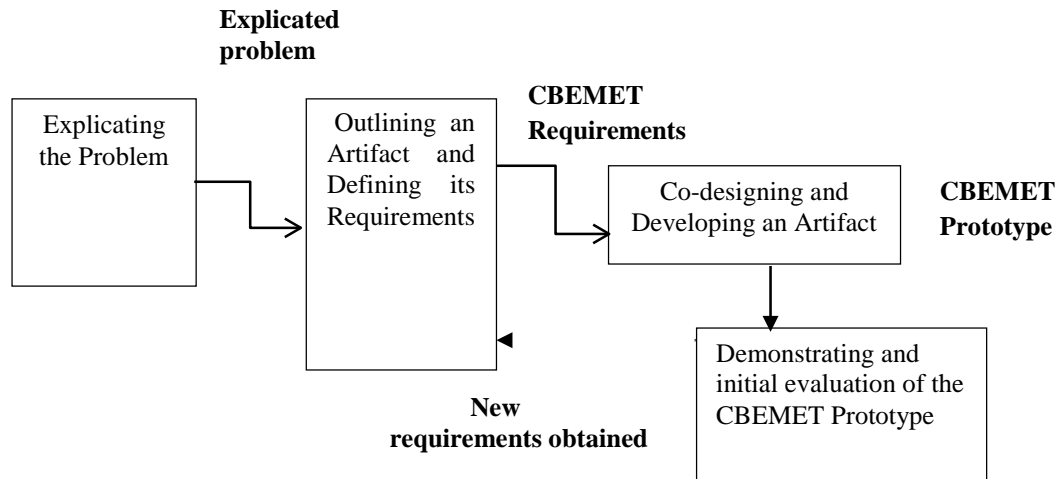


Figure 1. Design Science Research Framework adapted from (Johannesson & Perjons, 2014).

Participants

The population of the CBE academic staff as per the year 2017 records from human resource department is 161 lecturers. Out of 161 CBE teaching staff, whereby; 83 are based in Dar es Salaam Campus, 38 are based in Dodoma Campus, 31 are based in Mwanza Campus, while, 9 are in Mbeya Campus. In this study, 25 lecturers were purposively selected: 10 from Dar es Salaam Campus and 5 from each of the remaining 3 campuses. The purposive sampling was used because the target was the participant with the sought information (Bryman, 2012; Saunders & Philip, 2009; Denscombe, 2003).

Data collection method

Data for this study were collected in two phases. Phase I data aimed to gain an understanding and experience of CBE teachers in using mobile devices for educational related matters (see Table 1). Phase II data targeted soliciting views of the lecturers of the features and functionalities that MET need to possess (see Table 2). Data was collected through four interviews, one at each campus, and one FGD involving 8 teaching staff 2 from each campus. Observation on the working of the MET prototype was done in each campus and notes of the observed and interviews were taken and recorded for improving the application.

After the demonstration of the initial CBEMET prototype, the second phase of an interactive design discussion on the functionalities of the prototype together with the lecturers was undertaken. Table 1 shows sample questions used to probe the design features and functionalities of CBEMET in focus groups and interviews.

Table 1. Sample questions on the features and functionalities of the CBEMET Prototype

Demonstration of MET Prototype	Phase II – MET Prototype Experience
<p>Features expected:</p> <ol style="list-style-type: none"> 1. Log in interface 2. Available services 3. Navigation through 4. Access to different services 5. Arrangement of icons <p>The demonstration will pave way for the look on the following:</p> <ol style="list-style-type: none"> 1. Access to the services of the MET 2. Features of the MET 3. Functionalities of the MET <p>Outcomes:</p> <ol style="list-style-type: none"> 1. Testing of the services, features, and functionalities of the MET. 2. Lecturers' suggestions for improvement of the MET 	<ol style="list-style-type: none"> 1. What is your overall reaction to the observed functionalities of the MET prototype after using the initial design for two days? Please respond also to the following coming questions in this part: <ul style="list-style-type: none"> - How do you feel about sharing your contents online? - How do you feel about the arrangement of icons? 2. In terms of functionalities, what is missing? How can it be improved or changed? Why? 3. What is your opinion of the MET in terms of minimizing the educational-related challenges found at CBE? 4. In terms of features found on the screen, what do you think should be improved or changed? Why? 5. Briefly explain if the MET will be a solution to your personal development in your T & L environment and the innovative teaching. If NOT, please elaborate on your reaction.

Data coding and analysis

Data obtained from interviews and focus group discussions were subjected to content analysis while data obtained from observations and discussions, after the demonstration of the application, were used to re-design and develop the MET prototype to generate features of the mobile education tool that fully meets the needs of CBE teachers. The results of the observations and feedback obtained on the features and functionality of the tool are discussed in the results section of this paper.

CO-DESIGNING AND DEVELOPING CBEMET PROTOTYPE

The second objective of this paper was to co-design and co-develop a mobile education tool prototype incorporating CBE teachers' requirements. This was achieved through a series of iterations as presented in the subsequent subsections.

1st Iteration of co-designing and developing CBEMET Prototype

This was motivated as a result of a study by Mwandosya and Suero Montero, (2017) who identified the need for co-designing a mobile educational tool that meets lecturers' requirements of innovative teaching and learning at CBE.

In line with this need, the first phase of workshops for co-designing CBEMET prototype involved 10 teachers from Dar es Salaam Campus and 5 from each of the remaining 3 campuses. Figure 2 is a sample of such workshops at Dar es Salaam Campus.).

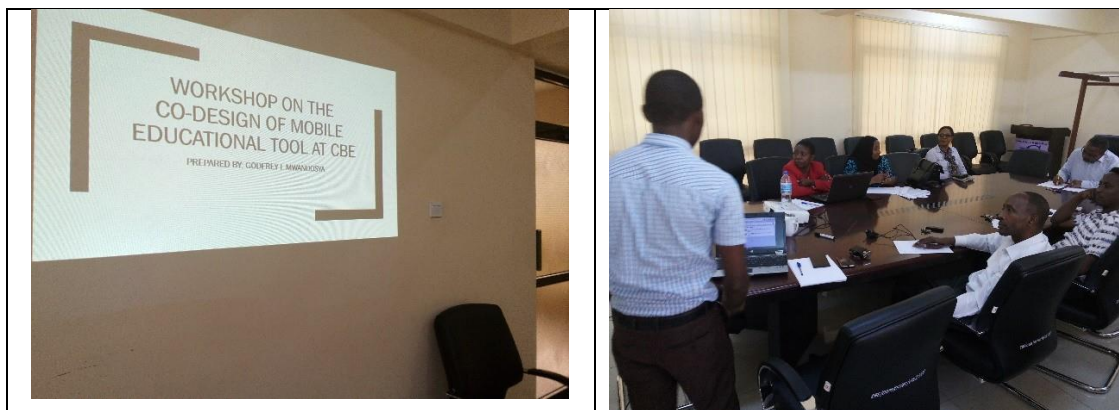


Figure 2. The first batch of lecturers' workshop at CBE, Dar es Salaam Campus

In these workshops, the developer and the researchers introduced the aim of the gatherings to lecturers for them to own the design of a mobile educational tool tailored for them before the start of the workshops.

Outcomes of the workshops:

The following feedback were obtained from CBE lecturers from Dar es Salaam Mwanza, Dodoma, and Mbeya campuses as the initial design requirements for CBEMET prototype

1. The login to the CBEMET prototype should be for CBE as a whole, not by campus-wise
2. The administrator of the system should be able to filter messages so that unwanted messages are blocked or sent to junk mails
3. The contents of the shared educational tool should be arranged by department-wise to minimize time to search and to realize a systematic approach to shared materials of the department in question
4. A lecturer should be able to delete a sent file in case it was wrongly picked or it is irrelevant
5. The CBEMET prototype should allow lecturers to record and post videos, audio presentations
6. CBEMET prototype should store videos and audio presentations for future use
7. CBEMET prototype should allow lecturers to change their passwords at next login
8. The CBEMET prototype should have its logo bearing the colors of CBE
9. It should be mandatory for user to register their first name, last name and e-mail address when logging in. Other particulars such as users' title, education background should remain optional until when users have started accessing the CBEMET prototype
10. Frequently asked questions (FAQs) should be presented somewhere in the system to make it friendlier to users
11. There should be an arrow to direct the user on where go next after logging in to the CBEMET prototype
12. There should be as little information as possible on one window. Only compulsory information should be portrayed at a time

2nd Iteration of the of the Co-design and development of the CBEMET Prototype

The second iteration came after the researchers and the developer of the CBEMET prototype had worked on the observed feedback from lecturers from all the four campuses and produced an initial design of the CBEMET prototype. This was an iterative process as lecturers had produced remarkable ideas for the designing each time they had a chance.

Another workshop was called upon in early December 2017 to proceed with the designing of the CBEMET prototype after obtaining the initial feedback on the design of the CBEMET prototype. In this workshop, the participants were presented the version of CBEMET prototype that considered the feedback they had stipulated in the first workshops. Figure 3 shows the initial design presented to the lecturers during the workshop.

**Mobile Education
Tool For CBE**

👤 Teachers Registration

Mrs

Halima

Bakari

+255752112233

h.bakari@cbe.ac.tz

Register

Already have an account?

Login

ORS - Copyright © 2018

Figure 3: The initial design of the CBEMET – registration, login menu

Activities that took place in this workshop were:

- the installation of the CBEMET prototype in the smartphone and mobile devices of the lecturers
- the navigation through the CBEMET prototype to see what has been done after the requirements

After the above activities, each of the lecturers were given two days to explore all features of CBEMET prototype to determine their usefulness. The findings of the observation would be presented in the following workshop as detailed in the subsequent subsection.

3rd Iteration of the Co-designing and development of the CBEMET Prototype

The next workshop was held in early January 2018 at Dar es Salaam Campus after each of the participating lecturers from all campuses had accessed the CBEMET prototype. Each of the participating lecturers in the co-designing activity had demonstrated a good command of using the CBEMET prototype by going through all the functionalities of the different menu items found.

A number of challenges were revealed during the discussions in this co-designing workshop. First, some of the lecturers had encountered access problem. They reported that the system did not work in their smartphones and other mobile devices their network bundles were small – which was noted by the researchers and the developer for future improvement of the system. Furthermore, it was reported that power saving options caused the screen of their devices to go to lock mode. Another challenge was the difficulty to select more than one file to download. At the post notes menu, it was not possible to upload contents. However, the menu items of the CBEMET application were found suitable. It was thus agreed in the workshop that all the challenges observed be rectified before the following workshop scheduled for June 2018.

Outcomes of the co-designing iterations

In a nutshell, all participants were largely satisfied with the outlook and the running of CBEMET prototype. The lecturers were excited in accessing CBEMET prototype online – they likened the application with the WhatsApp, but said the good thing with CBEMET prototype is that they owned it and are thus able to suggest further modifications they feel appropriate. In a nutshell, they felt really empowered in their work as lecturers. The lesson learnt by the researchers, the developer and lecturers during and after the re-designing sessions was that each participant learnt different ways to access, upload and download documents from and unto the CBEMET prototype.

Few suggestions for improvement raised were keenly recorded for the re-designing the CBEMET prototype so that it fully meets the requirements of the lecturers. Such suggestions were such as:

- in the registration part of the MET, the title should include Prof, and Dr. Initials, not only Mr., Mrs., Miss as the CBE institutions is ever expanding, and had 3 professors, 6 Ph.D. staff, and about 20 staff in Ph.D. programmes
- the function for changing the password received through email needs to work properly to enable lecturers to change their passwords for security reasons
- after logging in, a name of the logged in person should appear in the window
- the main menu or the login menu or both should have a logo that clearly indicates that the application belongs to CBE to ascertain copyright and visibility issues. This is because the application is will be accessed online through the Google Play Store.

At a discussion part, a name and photograph of the lecturer who is posting should also appear.

Re-designing CBEMET

The re-designing CBEMET prototype was done in consideration of feedback from the workshops. The re-designing involved the addition of a provision for each department to share their own notes. There was also the insertion of a CBE logo in the main menu window. Another improvement was the inclusion of titles of Dr. and Prof. in the registration window – as it was recommended by participants of the earlier workshops. Further, there was the inclusion of “News and updates” icon on the main menu, instead of inside one of the menus. The news and updates will remind users of important announcements on shared resources especially new modern technology and innovation inventions.

The third objective was to demonstrate the use of the CBE mobile education tool to CBE teachers after its improvement. In line with this objective, a training intended to demonstrate the modified version of the

CBEMET prototype to the 25 lecturers was organized at CBE Dar es Salaam Campus for all 25 lecturers from all campuses who had smartphones. The training aimed to make lecturers own the CBEMET prototype, familiarize themselves with the application and providing feedback for improvement. The researchers and the developer were closely monitoring the process to make sure that CBEMET prototype is working properly and that lecturers do not get stuck at any point. The activities that took place in the demonstration phase are summarized as follows:

Accessing CBEMET Prototype – the participants of these training would access CBEMET prototype through their smartphones using a provided domain. The process started by visiting the website **meducbe.ac.tz** and pressing “**Enter**” key. This opened a log in Window as shown in Figure 4:

Figure 4. The screenshot for login

With a registered e-mail (CBE e-mail) and a correct password one can log in and access the MET prototype.

Grouping lecturers – 25 lecturers were grouped into 5 groups consisting of 5 lecturers each. The objective was to get them collectively check how the CBEMET prototype works and thereafter give feedback for improvement.

FINDINGS

Focus group discussions – the FGDs were conducted after the demonstration phase to solicit the views of lecturers on the running of MET and to explore their suggestions for improvement. Major outcomes of the FGDs was a proposal to include video conferencing function into the system to enable lecturers to converse online. For example, one participant said, *“even the meetings can be done online between members of the management, instead of members of the management team traveling all the way from Mwanza, Dodoma, and Mbeya to Dar es Salaam just for a 2 hr meeting.”* This was taken up for further improvement of the system. also, the lecturers during the discussion revealed that training program should be prepared for all the lecturers of CBE to start using the prototype immediately.

Interviews–interviews were also held to solicit views of lecturers after the demonstration of CBEMET prototype phase. The interviews equally realized fruitful feedback which were taken on board in the improvement of CBEMET so that it enhances the teaching and learning in HEIs. One of the participants who had an issue with the security said, *“I am worried about sharing my documents online, what about if someone accesses them and use it in another institution?”*

Observation of lecturers’ reaction to CBEMET Prototype

The developer and the researchers simultaneously observed the reaction of lecturers to CBEMET. Generally, they were happy about the design of the MET prototype, especially because it enabled them to transfer experiences of using other social media contents to the system.

Agreements – to make sure that CBEMET is owned by all parties involved in its design, it was agreed that every suggestion on the improvement of the design and modifications of the CBEMET is dully checked by all the participants and the final agreement documented thereof was produced.

Documentation of how the system works, what were observed and resolved during the demonstration of the MET was done for future reference and maintenance of the application.

This section presents the features and functionalities of the version of CBEMET prototype which considered the requirements of 25 lecturers from all the four campuses of CBE. We start the presentation with the technical description of the CBEMET prototype and ends with the observed challenges and future plans for the similar works.

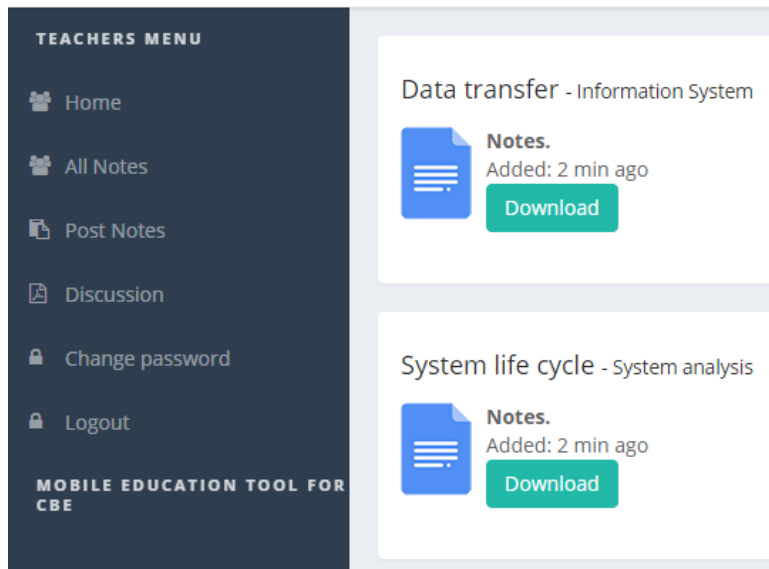


Figure 5. The main menu of the CBEMET prototype

Technical Description of the CBEMET Prototype

The application was developed using the framework Laravel v.5.4, Bootstrap 4. The front-end interface was developed using the HTML, CSS. The Server-side script being PHP (Object-oriented Programming). On the part of the Client-side Script, JavaScript, Ajax, and JQuery were used. This was done purposely due to their efficiency in developing applications. User's data is stored in an SQL database using MySQL for Android App and Java, JSON API for data retrieval. The MET prototype has 3000 lines of code.

A brief explanation of the CBEMET Prototype characteristics

The development of CBEMET prototype comes at a time when HEIs in Tanzania needs changes in the teaching and learning to match the technological changes that are taking place in world. Briefly, the characteristics of the CBEMET prototype is that it can run in mobile devices (smartphones, tablets, PDAs), laptops, and desktops as long as there is an internet connection. It is an application that is mobile in nature, it can be applied anywhere, anytime. Also, the CBEMET prototype involves only those who have CBE's email that is, members of staff in the emailing system of CBE.

The initial observations on the impact of the features of the CBEMET prototype have shown that teachers have abundant academic resources at their disposal which were not known and can now share them very easily through CBEMET prototype. Secondly, MET prototype has opened chances to teachers to collaborate in different projects. For example, one lecturer from the Business Administration department has shared his new project named "*Entrepreneurship sensitization for entrepreneurs doing business around the College of Business Education*" and has called for teachers to join and collaborate with him in writing project proposals. This suggest that the interaction among the teachers has tremendously increased through CBEMET.

Brief explanations of the functionalities of the CBEMET

The MET prototype starts with:

- i. registering by entering details such as title (Mr., Mrs., Prof, Miss. Ms., and Dr.), first name, surname, telephone number, and an email address
- ii. Login to CBEMET using an email address as a username and a password that is automatically brought to an email address the user registered. This automatic password enables the user of the CBEMET prototype to access the application and can be changed after accessing.
- iii. After logging in the system, the user will automatically be directed to a window with menus such as *Home page, All notes, Post Notes, Discussions, Change Password and Logout*.
- iv. On this page, users have an option to select the function they want.

A brief explanation of the menu items

Home- provides information about the MET prototype and a starting point to different menu items **All Notes** - is designed for viewing and downloading notes shared by lecturers for enhancing the shared experience in innovative teaching and learning. It thus enables lecturers to teach and learn at the same time

Post-Notes - this is designed for posting notes, innovations, PowerPoint presentations, multimedia resources, etc. It is designed to meet the requirements of the lectures as stipulated in (Mwandosya & Suero Montero, 2017).

Discussion - at the discussion menu, it is expected that lecturers will be able to post issues and interact online on issues that need quick responses ubiquitously. That is why the MET prototype is known as a mobile education tool!

Change Password – this is a feature for changing a temporary password supplied during the registration through the registered email of the user. The feature is meant to ensure the security of the users and content in the system.

Logout - after using the CBEMET the features allow user to leave the system safely.

DISCUSSIONS

The first objective of this paper was to identify mobile education tool's design features and functionalities for innovative teaching and learning at CBE. This objective was clearly realized because the 25 lecturers were able to give feedback and suggest a number of design features during the workshops held at different times.

The second objective was to co-design and co-develop a mobile education tool prototype incorporating CBE lecturers' requirements. Interesting design skills were observed during this stage, lecturers were able to pinpoint some design suggestions as if they were real application developers. They felt they own the prototype and were satisfied by the involvement. The third objective was to demonstrate the use of the mobile education tool to the CBE teachers after its development for feedback and suggestion for improvement before it was taken to the whole community of 161 lecturers. This objective was clearly met through focus group discussions, observations, workshops and interviews whereby a number of constructive feedbacks was collected to improve the working of the CBEMET prototype.

Earlier activities of the study focused on outlining the artifact and defining its requirements. The requirements were divided into two parts. The first part was about the contents to be included in the CBEMET prototype. The second part was about the functionalities and features of the CBEMET prototype itself. The activities in this stage were successful in the sense that they brought curiosity among lecturers that is, the manner in which they were enthusiastic to discuss how the system can enable them to share their innovative teaching and learning issues, anytime and anywhere. The ability to post notes and hold discussions with fellow lecturers and students online fostered teamwork and trust among themselves, analogous to this is a study by Cheong et al., (2012) who designed a Mobile-app-based Collaborative Learning System known as *myVote*, which was designed to support social interaction in order to promote higher-order thinking skills an objective that was highly attained whilst CBEMET prototype was primarily meant to promote innovative teaching and learning. The design stage of the CBEMET prototype generated a number of interesting design ideas from the participating lecturers, the researchers, and a developer which were used to improve the system, see for example, (Ford & Leinonen, 2006). The design stage proved that co-designing the CBEMET prototype with the lecturers, developers and researchers result in a technology that suits users' contextual background and needs for example Mramba et al., (2016). Contrary to a study by Oyelere et al., (2016) who in their study designed a mobile learning application for computing education (MobileEdu) which was tested through an experiment with 142 third year undergraduate students mainly for checking if MobileEdu improved their learning experience and not the design of MobileEdu. The main aim of their experiment was therefore to assess if the students who learned through MobileEdu attained improved learning engagement, results, and had better pedagogical experiences than those who learned by following the traditional face-to-face method. The students as users were not involved in the design of MobileEdu, meanwhile in the design of CBEMET prototype teachers as users were involved directly. In using

MobileEdu though, the students showed improved learning capabilities. A study by Ford & Leinonen, (2016) who developed a mobile tools and services platform for formal and informal learning (MobilED) showed similar process of a way of testing the functionalities of the tool as the way it was done with CBEMET prototype whereby the ideas of the learners from the first and second pilots were used to improve the MobilED an exercise that was successfully done and attained the objectives set.

Generally, it was established that CBEMET prototype has changed the perception of lecturers on the use of mobile devices for teaching and learning. Lecturers are seen shifting from frequent social media access to using the CBEMET prototype for teaching, learning and coordinating activities. For example, one notable change is that CBEMET prototype has made it possible to implement a project entitled “Introduction of Mobile Learning in Higher Education Institutions in Tanzania”. This project is expected to unite members of management teams, teachers, and students from selected higher education institutions in teaching using mobile learning tools. The sharing of projects’ activities will be done through the discussion forum of the CBEMET prototype. Furthermore, CBEMET prototype has realized the innovative teaching and learning through the use of educational audio and video tools, access of different shared educational resources, preparation of multimedia learning contents, and presentation skills.

CONCLUSION

The objectives of the study were (1) to identify the mobile education tool’s design features and functionalities for innovative teaching and learning at CBE, (2) to co-design design and co-develop a mobile education tool prototype incorporating CBE teachers’ requirements, and (3) to demonstrate and use the CBE mobile education tool to the CBE teachers after its development. In fulfillment of these objectives, we have demonstrated how mobile application can be co-designed and co-developed by developers and users in the contextual environment. Different features and functionalities of the CBEMET prototype were observed, discussed, and agreed upon for future improvement of the application. Through the workshops, lecturers were able to participate fully to design different items of the CBEMET prototype. With all the challenges that have been recorded as a result of co- designing of the prototype, the study’s objectives have been met. That is, a mobile education tool which emphasize interactivity, adaptivity, and instilling a sense of ownership of the application has been developed. The demonstration results were very encouraging and showed the appreciation of the contribution of mobile software features to education. The challenges encountered will be used to improve the CBEMET prototype until it is fully developed into a real integrated system for the entire community of CBE.

The biggest contribution of this paper is therefore using a DSR participatory approach combining lecturers, researchers, and software developers to design and develop a suitable mobile education tool to enhance teaching and learning in a contextualized environment (Muller, 2002). This study has shown how using DSR user participatory approach in designing a mobile education tool application can be done collaboratively and how the end product of such collaborations suits the requirements of users and inform subsequent designs, development of similar products. It underscores that collaborations and sharing of innovative experiences of individual teachers is vital for quality education in higher education institutions. Further, it proves that collaborations can be easily achieved through mobile technologies and the development of mobile education application tools. Moreover, the study stimulates the need to changes from the traditional way of teaching and learning mostly face-to-face to innovative teaching in higher learning institutions to serve the needs of the society in the best way and sustainably. As a result, the CBEMET prototype has enabled CBE lecturers to share educational resources online, to uploading and downloading educational resources, and to access departmental related documents. It provides uniformity of learning materials across all campuses, and in so doing, increases the quality of education. The CBE lecturers have been positively impacted by the CBEMET prototype and more suggestion has been received as using the MET prototype gaining momentum.

LIMITATIONS OF THE STUDY AND FUTURE WORK

The requirements and the development of the MET prototype only considered CBE environment, which means that some features may not apply in different set of environments. Furthermore, the lack of bandwidth appeared a limitation to the use of the application; by users who cannot afford buying large internet bundles from the internet operators. In addition, the system did not focus on the needs of students who are also the stakeholders of higher education in Tanzania. Therefore, future development of CBEMET should look into integrating students’ needs of access notes, recording lectures and other related educational materials to ensure innovative teaching and learning campaign.

The CBEMET prototype also lacks interactive forums that would make it more productive in terms of teaching and learning – compared to similar systems in developed countries such as Finland, Norway, Sweden, United Kingdom, and Turkey just to mention a few. These countries have shown tremendous development in using

innovative teaching and learning in HEIs. Other related activities of importance to be considered in future include assessing students' work electronically as suggested by (Alsadoon, 2017) and the importance of online instructional environment where instructors and students share for the innovative teaching and learning (Sarsar & Harmon, 2017).

CONFLICT OF INTEREST

There is no conflict of interest in this study.

Acknowledgments

Special appreciation goes to the developer and CBE lecturers who agreed and whole heartedly participated in the co-designing and developing of the CBEMET prototype. Also, special gratitude to the University of Eastern Finland whom the College of Business Education is affiliated with.

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CONFIRMATORY FACTOR ANALYSIS AND RELIABILITY OF THE BARRIERS TO SEEKING PSYCHOLOGICAL HELP SCALE AMONG TURKISH ADULTS

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ABSTRACT

The Barriers to Seeking Psychological Help Scale (BSPHS) was originally developed to measure factors that kept college students from seeking mental health assistance. However, the underutilization of mental health services among adults is also common, and understanding the factors that inhibit adults from seeking help for mental health issues is necessary. One important first step to increasing the use of mental health services among this population is to identify the barriers preventing them from using such services through valid and reliable scales. However, no validated and reliable scale currently exists in the Turkish language to measure the barriers to seeking psychological help among adults. Thus, the purpose of this cross-sectional study was to examine the underlying factor structure and reliability of the BSPHS among Turkish adults. A convenience sample of 208 (134 female, 74 male, $M=35.58$) Turkish adults completed the BSPHS and a demographic information form. Confirmatory factor analyses were performed to test the underlying factor structure of the BSPHS using three competing models. Reliability analysis was also used to examine mean inter-item correlation and item-total correlations, as well as to estimate Cronbach alpha reliability. The results of this study suggest that the BSPHS has a similar five-factor structure as suggested by Topkaya, Şahin, and Meydan (2017). Reliability analyses also suggested that all subscales of the BSPHS had adequate mean inter-item correlation, item-total correlations, as well as Cronbach alpha reliability. Therefore, the BSPHS can be used to measure the factors that inhibit Turkish adults from seeking psychological help. Future studies can examine convergent, divergent, and predictive validity and test-retest reliability of the BSPHS among Turkish adults.

Keywords: Barriers to seeking psychological help scale, confirmatory factor analysis, reliability, Turkish adults.

INTRODUCTION

Help-seeking is a term generally used to refer to the “behavior of actively seeking help from other people” (Rickwood, Deane, Wilson, & Ciarrochi, 2005). Help-seeking can be informal (e.g., trying to solve the problem on their own or seeking help from friends and family) and/or formal (e.g., seeking help from mental health professionals, college counseling centers, teachers) (Rickwood et al., 2005). Meta-analytic evidence suggests the efficacy of psychological therapies and counseling for treating mental disorders (Lipsey & Wilson, 1993; Shadish, Navarro, Matt, & Phillips, 2000). On the other hand, not seeking help or delaying help-seeking can result in negative health indicators, such as lower quality of life, substance abuse, engaging in risky sexual behavior, and premature death (Anderson & Lowen, 2010; Brindis et al., 2007; Brindis, Park, Ozer, & Irwin, 2002; Laski, 2015). Empirical evidence also suggests that distressed people receiving empirically supported therapies commonly experience increases in well-being, happiness, and quality of life and decreases in perceived life stress and negative mental health outcomes (Spring, 2007; Wampold & Imel, 2015). Although the benefits of help-seeking have been well documented in the literature, as well as the high prevalence of mental health problems reported among the general population in Turkey (Erol, Kılıç, Ulusoy, Keçeci, & Şimşek, 1998), the rates of formal help-seeking for psychological problems are rather low among Turkish adults (Topkaya, 2015a, 2015b). Therefore, understanding the factors that inhibit Turkish adults from seek mental health help is necessary.

A possible initial step to increase the use of mental health services among this population is to identify barriers inhibiting them from using such services through validated and reliable scales. However, there is currently no validated and reliable measure in the Turkish language that can be used to measure the barriers to seeking psychological help among adults. The Barriers to Seeking Psychological Help Scale (BSPHS) was originally developed to measure the factors that keep college students from seeking mental health assistance and may also be used to screen barriers to seeking psychological help among adults. However, since its development, its factor

structure has rarely been examined in different populations, such as Turkish adults. This is concerning because the barriers to seeking psychological help may be different and the proposed factor structure may not be the same for Turkish adults. Consequently, using the BSPHS subscale scores for Turkish adults may lead to erroneous conclusions without having observed consistent relationships between the BSPHS subscale items and related latent variables (Horn & McArdle, 1992).

The BSPHS consists of 17 items and 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. The fear of being stigmatized by society subscale measures irrational beliefs clients hold related to seeking psychological help in society. Trust in the mental health professional measures clients' concerns related to the mental health professional. Difficulties in self-disclosure measures clients' perceived difficulties disclosing their problems to a mental health professional. The perceived devaluation subscale measures self-derogatory beliefs related to seeking psychological help. Lastly, the lack of knowledge subscale measures lack of information about seeking psychological help. In the initial development of the scale across five studies, researchers examined the validity and reliability of the BSPHS and reported evidence for construct, convergent, and discriminant validity, as well as test-retest reliability and internal consistency.

Specifically, the BSPHS demonstrated a five correlated factor structure using exploratory factor analysis (EFA) in a college student sample. The fear of being stigmatized subscale was composed of four items and explained 34.24% of the total variance. This subscale's factor loadings, based on EFA, ranged from .74 to .94. The trust in the mental health professional subscale also consisted of four items and explained 10.30% of the total variance. Its factor loadings ranged from .31 to .81. Difficulties in self-disclosure was composed of three items and explained 8.33% of the total variance. The factor loadings ranged from .64 to .87. The perceived devaluation subscale also consisted of three items and explained 7.08% of the total variance, with factor loadings ranging from .40 to .86. Lastly, the lack of knowledge subscale consisted of three items and explained 6.71% of the total variance. Its factor loadings ranged from .33 to .95. Confirmatory factor analysis (CFA) using the robust maximum likelihood estimate also supported a five correlated factor structure in a cross-validation sample. Cronbach alpha internal consistency reliability estimates for the BSPHS subscales across two studies were also good, ranging from .58 (lack of knowledge) to .91 (fear of being stigmatized by society). The three-week stability coefficient or test-retest reliability was also good, ranging from .56 (perceived devaluation) to .75 (for difficulties in self-disclosure) among the subscales. Although researchers found evidence for validity and reliability of the BSPHS, evidence regarding the factor structure and reliability among Turkish adults is scarce. Thus, the purpose of this cross-sectional study was to examine the factor structure and reliability of the BSPHS among Turkish adults.

METHOD

Participants

A cross-sectional research design was used in this study. Participants were 208 Turkish adults living in the Central Black Sea Region of Turkey. They were selected using convenience sampling (Cohen, Manion, & Morrison, 2018). Specifically, the researchers included their relatives, acquaintances, and friends in the study sample. Then, they asked these people to help them find adults from Samsun city who were able to complete the survey. There were 134 women (64.4%) and 74 men (35.6%) who participated in the study. The age of the participants ranged from 18 to 80 years old, and the mean age was 35.58 years (*SD*: 13.15). Five participants did not report their age.

Measures

Demographics. A personal information form was used to collect information about the participants' sex and age.

BSPHS: The barriers to seeking psychological help among Turkish adults was measured by the BSPHS (Topkaya et al., 2017). More detailed information about the psychometric characteristics of the BSPHS were given in the introduction. Participants indicate their degree of agreement or disagreement with each item on a five-point Likert-type scale ranging from strongly disagree (1) to strongly agree (5). Scores can range from 4 to 20 for the fear of being stigmatized by society and trust in mental health professional subscales and from 3 to 15 for difficulties in self-disclosure, perceived devaluation, and lack of knowledge subscales. Higher scores reflect higher levels of perceived barriers in each dimension.

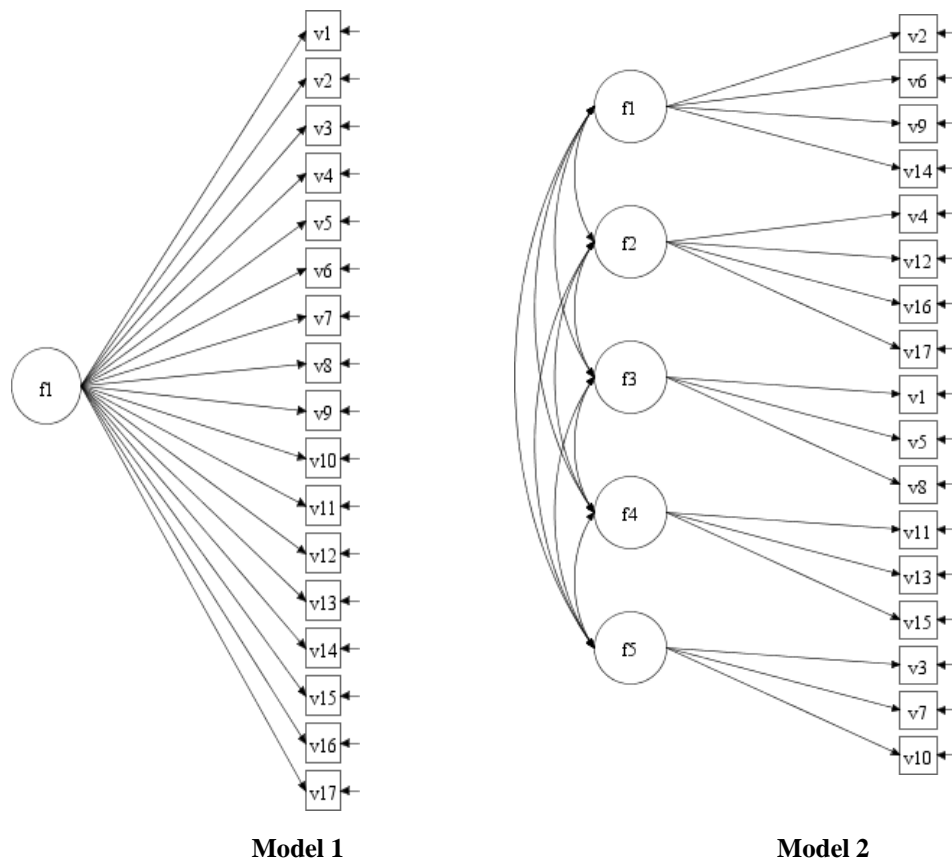
Procedure

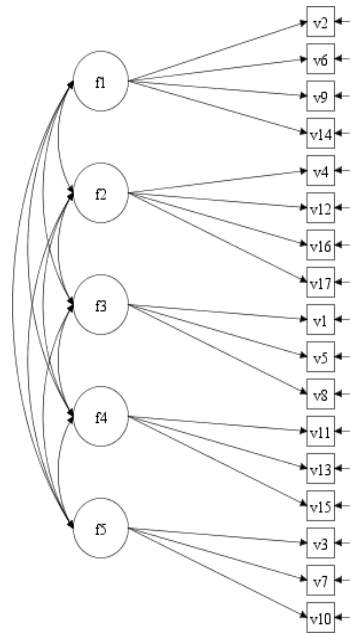
Data was collected between January and March 2019. Participants were informed about the study's purpose and ethical considerations. Specifically, the researchers told them that participation in the study was voluntary, the answers would remain anonymous, and the participants could withdraw from the study without any consequences.

Written informed consent was also obtained from all participants prior to completing the questionnaires. All adults voluntarily participated in the study and completed the questionnaires in approximately 10 minutes.

Statistical Analysis

All statistical analyses were performed using SPSS 23 and Mplus 7.0 (Muthén & Muthén, 1998–2015). All CFA models were estimated using the mean and variance adjusted maximum likelihood estimator (MLMV) taking into account of the use of ordered-categorical variables with five response categories (e.g., Likert-type scales) in this study (Finney & DiStefano, 2013; Rhemtulla, Brosseau-Liard, & Savalei, 2012). The MLMV produces parameter estimates and standard errors, as well as mean and variance adjusted chi-square statistics that are robust to non-normality (Muthén & Muthén, 1998–2015). In a recent extensive simulation study, Maydeu-Olivares (2017) found that the MLMV estimator is the optimal choice among different ML estimators across different normal and non-normal distributions with accurate Type I and standard errors. Three competing models were tested in this study: a single-factor model (Model 1), a correlated five-factor model (Model 2), and a correlated five-factor model that permits residual variances to be correlated based on substantive values or previous studies (Model 3). A schematic presentation of all competing models tested in the present study can be found in Figure 1. Assessment of model fit was based on multiple goodness of fit statistics: the adjusted Chi-Square (χ^2/df), Root Mean Square Error of Approximation (RMSEA) with its 90% confidence interval and significance level, Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and standardized root mean square residual (SRMR). Although no absolute standards exist for cut-off values for goodness of fit indices in CFA, values lower than 5 but higher than 3 typically indicate adequate model fit for χ^2/df , and values smaller than 3 indicate excellent fit. Values smaller than .08 or .06 for the RMSEA indicate adequate and excellent model fit, respectively. Values greater than .90 and .95 for the CFI and TLI indicate adequate and excellent model fit, respectively. Lastly, a SRMR value close to or less than .08 indicates a good fit to the data (Byrne, 2012; Gana & Broc, 2019; Keith, 2019; Wang & Wang, 2013). Reliability analyses were performed using mean inter-item correlation, item-total correlation, and Cronbach alpha internal consistency coefficient. The data that support the findings of this study are available in Open Science Framework (osf.io/hnfv4).





Model 3

Note: v=item, F1=Fear of being stigmatized by society, F2=Trust in the mental health professional, F3=Difficulties in self-disclosure, F4=Perceived devaluation, F5=Lack of knowledge in Model 2 and Model 3.

RESULTS

A series of CFAs were conducted to examine competing models among Turkish adults. Goodness of fit indices for the competing models are shown in Table 1. As seen in Table 1, the goodness of fit values for the single-factor model were poor (Model 1). The five correlated factor model, as suggested by Topkaya et al. (2017) for undergraduate students, had an acceptable fit to data (Model 2). However, inspection of local fit via normalized residual covariances and modification index for Model 2 suggested releasing error covariances between item 4 and item 12. Both items are related to worries about the mental health professional and from the trust of the mental health professional subscale.

Table 1: Goodness of fit indices for competing models

Note: $p < .001$.

	χ^2	df	χ^2/df	CFI	TLI	RMSEA	p	RMSEA 90% Confidence Interval	SRMR
Model 1	287.425	119	2.415	.765	.731	.082	.001*	.070-.095	.078
Model 2	164.081	109	1.505	.923	.904	.049	.514	.033-.064	.062
Model 3	149.281	108	1.382	.942	.927	.043	.755	.024-.059	.056

Thus, Model 3 estimated adding item 4 and item 12 to correlated errors. As seen in Table 1, Model 3 was the best fitting model to the data. Most goodness of fit indices were excellent. Table 2 shows standardized item factor loadings, item standard errors, z-values, latent factor correlations, and squared multiple correlation of items (R^2). The estimated R^2 values give information about how much variance of each observed BSPHS item was explained by the factor that item is loaded on and also equivalent to the squared standardized item factor loading for each item. All factor loadings and latent factor correlations were large and statistically significant at least at $p < .001$. The estimated R^2 values also ranged from medium to large effect sizes.

Table 2: Results of confirmatory factor analysis

Item No/Item	λ	S.E	z	R^2
Fear of being stigmatized by society (F1)				
2. I worry about being stigmatized as “problematic” and/or “crazy” if I seek psychological help.	.630	.060	10.501	.397
6. I worry about what other people would think about me if I seek psychological help.	.830	.033	25.120	.688
9. I worry about whether my friends would mock me if I seek psychological help.	.796	.036	21.932	.633
14. I don’t want to seek psychological help as it’s not accepted as “normal/natural” in the culture in which I grew up.	.740	.038	19.409	.548
Trust in the mental health professional (F2)				
4. I don’t trust professionals to keep my issues confidential.	.647	.056	11.454	.418
12. I worry that the professional wouldn’t understand me.	.767	.041	18.596	.589
16. I worry about whether the professional would listen to me adequately.	.689	.039	17.646	.474
17. I worry that the professional would be insensitive to my problems, as s/he constantly meets people with similar problems.	.632	.053	11.910	.399
Difficulties in self-disclosure (F3)				
1. I have difficulty in sharing my problems with a stranger even though he is a professional.	.664	.058	11.460	.441
5. I feel ashamed to tell my problems to the professional giving psychological help.	.812	.043	18.989	.659
8. I refuse to give information about my private problems (sex, violence, etc.), even to a professional.	.738	.045	16.589	.545
Perceived devaluation (F4)				
11. I would feel weak if I told my problems to a professional.	.770	.049	15.713	.593
13. My self-confidence might decrease if I seek psychological help.	.875	.035	25.111	.766
15. I worry that if I take psychological help once, then I would need it whenever I have a problem.	.532	.056	9.497	.283
Lack of knowledge (F5)				
3. I don’t want to spend time seeking psychological help as it would take too long.	.464	.076	6.144	.216
7. I don’t know how to contact professionals who provide psychological help.	.535	.069	7.717	.287
10. I don’t want to seek psychological help as places that provide such services are far away.	.660	.067	9.848	.436
Latent Factor Correlations				
F1				
F2	.610			
F3	.636	.657		
F4	.692	.622	.577	
F5	.653	.635	.572	.606

Note: λ =Item factor loading. All factor loadings and latent factor correlations were statistically significant at least at $p<0.001$.

The reliability of the BSPHS was analyzed by means of mean inter-item correlation, item-total correlations, and Cronbach alpha internal consistency coefficient. The results of the reliability analyses are shown in Table 3.

Table 2: Results of BSPHS Reliability Analyses

	<i>r</i>
Fear of being stigmatized by society	
BSPHS2	.562
BSPHS6	.746
BSPHS9	.697
BSPHS14	.641
Mean inter-item correlation	.553
Cronbach alpha (α)	.831
95% CI Cronbach alpha	.790-.866
Trust in the mental health professional	
BSPHS4	.457
BSPHS12	.483
BSPHS16	.663
BSPHS17	.619
Mean inter-item correlation	.438
Cronbach alpha (α)	.756
95% CI Cronbach alpha	.697-.806
Difficulties in self-disclosure	
BSPHS1	.579
BSPHS5	.664
BSPHS8	.609
Mean inter-item correlation	.543
Cronbach alpha (α)	.778
95% CI Cronbach alpha	.720-.825
Perceived devaluation	
BSPHS11	.591
BSPHS13	.697
BSPHS15	.453
Mean inter-item correlation	.504
Cronbach alpha (α)	.747
95% CI Cronbach alpha	.681-.801
Lack of knowledge	
BSPHS3	.261
BSPHS7	.299
BSPHS10	.497
Mean inter-item correlation	.283
Cronbach alpha (α)	.532
95% CI Cronbach alpha	.410-.632

Note: *r* = corrected item-total correlation, CI: Confidence interval.

As seen in Table 3, all subscales had an adequate mean inter-item correlation that ranged from .283 (lack of knowledge) to .553 (fear of being stigmatized by society). The item-total correlations of the subscales were also adequate, with levels ranging from .562 to .746 in fear of being stigmatized by society, .457 to .663 in trust in the mental health professional, .579 to .664 in difficulties in self-disclosure, .453 to .697 in perceived devaluation, and .261 to .497 in the lack of knowledge subscale. Cronbach alpha reliability estimates also ranged from .532 (lack of knowledge) to .831 (fear of being stigmatized by society).

DISCUSSION

As underutilization of mental health services among adults is common, it is important to understand the factors that inhibit adults from seeking psychological help. However, there is currently no available validated and reliable measure in the Turkish language that can be used to measure the barriers to seeking psychological help among adults. Thus, this study examined the underlying factor structure of BSPHS items and its reliability among Turkish adults. Specifically, this study tested one general factor model, a five correlated factor model, and a five correlated factor model with correlated errors in Turkish adults using confirmatory factor analyses. The results of the

confirmatory factor analyses found no support for the one-factor model, indicating that a common underlying factor was not adequate to account for the pattern of covariance across BSPHS items. There was adequate support for the correlated five-factor model and almost excellent support for the correlated five-factor model with correlated errors terms. The study findings are in line with Topkaya et al.'s (2017) study among undergraduate students showing that the five correlated factor model best fit the BSPHS. These findings suggest that the BSPHS may be used for assessing barriers related to seeking help for mental health issues among Turkish adults

The results of this study also suggest that the subscales of the BSPHS had a mean inter-item correlation ranging from .283 (lack of knowledge) to .553 (fear of being stigmatized by society). According to Clark and Watson (1995), average inter-item correlation is to be in the range of .15 to .50, but it could even be higher if the construct of interest is narrowly defined. All subscales of the BSPHS had a mean inter-item correlation within or above this criterion, suggesting that the subscales contain items that are particularly intercorrelated and measure different aspects of the construct of interest. The item-total correlation values for each item were also above .20 in each subscale, indicating good discrimination, such that higher scores on the item are associated with higher scale scores in each subscale and each item is a good indicator of the construct of interest (Meyers, Gamst, & Guarino, 2013). All subscales also had a Cronbach alpha coefficient above .70, except for the lack of knowledge subscale. However, the internal consistency reliability estimate of the lack of knowledge subscale was similar to that in Topkaya et al. (2017). According to DeVellis (2017), measurement tools with a Cronbach alpha reliability coefficient of .70 or above can be used for screening and research purposes. Thus, the BSPHS may also be used for screening and research purposes, with the notable exception of the lack of knowledge subscale. However, considering that the Cronbach alpha reliability coefficient is related to the number of items in a scale and mean inter-item correlation (DeVellis, 2017), the relatively low reliability of the lack of knowledge subscale may be related to the limited number of items in the subscale as the mean inter-item correlation was adequate (Clark & Watson, 1995). Overall, the findings of this study suggest that the BSPHS is a valid and reliable scale that can be used to measure factors that inhibit Turkish adults from seeking mental health assistance.

Finally, this study has some limitations. First, only a limited number of Turkish adults from a specific region of Turkey were used to test the underlying factor structure of the BSPHS. Thus, the external validity of this study is low. Future studies should examine the factor structure of the BSPHS using a more representative sample of Turkish adults. Second, this study only examined the construct validity of the BSPHS. Future studies should also look at the convergent, divergent, and predictive validity of the BSPHS among Turkish adults. Lastly, the reliability analyses of the BSPHS were limited to item analyses and Cronbach alpha internal consistency analyses. Future studies should also examine short-term and long-term test-retest reliability of the BSPHS.

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DEVELOPMENT OF A MODEL FOR DESIGN OF DIGITAL MIND GAMES IN TEACHING OF TURKISH COURSE BASED ON ITS' EFFECT ON WRITING SKILLS

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ABSTRACT

Communication skills also play an important role in maintaining a healthy social and work life. Skills such as speaking, writing, reading and listening are well known contributing also to academic success in almost all disciplines in lifelong learning. Turkish courses aims to gain such skills to students in almost all levels of formal educational. In Turkey, although new Turkish teaching programs for mother tongue training includes multi-stimulating activities that enhance teaching and learning environments. Beside that activities, technology enhanced activities are required to train the manpower of 21century donated with higher thinking skills such as critical thinking, creativity and problem solving which are all closely related with communication skills. Mind games are the activities that could be applied both in technology enriched and classical Turkish teaching environments are believed to improve these higher order skills. Mind games play an important role in making individuals to be aware of their potential, to make rapid and correct decisions, to create original solutions to problems, to improve themselves. Moreover, mind games contributes to develop interaction within teacher and students through collaborative and cooperative activities which improves team working and making course and school environment more interesting. The aim of this experimental study is to search the applicability of mind games to Turkish teaching courses. Qualitative and quantitative research methods were used. The effect of using mind games to writing skills in a classical teaching environment were investigated. Control and experimental groups of this study were selected from seventh grade students (25 control and 25 experimental) from a secondary school. The results of this study indicated that experimental group that used mind games activities were significantly more successful than control group that were instructed with traditional method. Based on this result, a model for the design of mind tool activities digitally will be developed.

DIGITAL CITIZENSHIP: A THEORETICAL REVIEW OF THE CONCEPT AND TRENDS

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ABSTRACT

This article aims to analyze the concepts and tendencies identified in research conducted on digital citizenship in the last ten years. To satisfy this objective, search parameters were established for articles in specialized databases. Within the results, the prevailing categories were concepts, abilities, empowerment, instruments, programs and technologies that favor digital citizenship. The main findings include that different definitions exist of the concept of digital citizenship and that information and communication technologies contribute to access to information, though not equally at the global level. Additionally, digital citizenship is promoted by different initiatives such as programs focused on citizen participation. Thus, research focused on digital citizenship adopts a transcultural perspective in educational, social, public and private arenas.

DISTANCE LEARNERS' AWARENESS ABOUT OERS

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ABSTRACT

This paper intends to reveal the results of a study in which distance learners' perceptions and awareness about open education resources were investigated. Openness in education is a movement about knowledge sharing, requirements of access, social justice, and capacity building. Open Education Resources (OERs) movement has been considered as another important milestones of openness in education. According to UNESCO (2018) open education resources (OERs) are teaching, learning and research materials in any medium -digital or otherwise – that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no limited restrictions. OER movement holds great potentials for different stakeholders such as educators, students, self-learners, and governments: Increasing access to quality educational materials, reducing the costs, improving student learning, enriching life-long learning opportunities, showcasing research to widest possible audience, enhancing a school's reputation as well as that of the teacher or researcher, creating opportunities for peer review, maximizing the use and increases availability of educational materials, and raising the quality standards for educational resources by gathering more contributors.

OER movement is still in awareness stage in Turkey despite the large-scale implementations, such as the Academic Informatics Network (EBA) Project of the Ministry of National Education (MoNE), Open Courseware Project, etc. These and more macro level initiatives are introduced later in this report. Meanwhile, the literature in Turkey concerning OERs is quite weak. Only three research studies have been published directly related to OERs and all of them focused on educators. No study found in the literature regarding perceptions of the learners about OERs. Since investigating the phenomenon in different contexts can provide better understanding, we need more studies focusing on different aspects, different stakeholders as distance learners.

This descriptive study was conducted to examine distance learners' perceptions and awareness about open education resources. It was conducted in Anadolu Univeristy distance learning programs. An online questionnaire to examine the distance learners' awareness about OERs and found out that a big majority of the 751 participants (around 65 percent) confuses OERs with formal open/distance learning courses. This study also revealed services that may increase the learners use of OERs. Moving an upper module after getting a sufficient grade in exams (62 percent of all the participants), getting a professors/instructors' support (58 percent), receiving a certificate after completion (49 percent), and having automated feedback about how successfully answered the questions in quizzes (45 percent) were regarded as important services (or characteristics) that might increase the use OERs by a big number of the participants. Surprisingly, activities require peer feedback (15 percent), teamwork (17 percent), and earning batches (19 percent) were found not as important as other services. This study additionally shown that OERs created and uploaded by a credible institution/person, easy to download, directly related to the user's field of interest and needs, includes clear learning objectives, have a high download ratio, and recently created, uploaded or revised were the factors affecting the learners usage of OERs. Interestingly only a few participants found the copyright issues as important as others. Furthermore, the participants noted insufficient quality, shortage of updated resources, inadequate internet connection for downloading and uploading, shortage of resources related to the fields of interest, and lack of experience about how to locate OERs as the most frequently barriers for use of OERs. In sum, there is a misunderstanding about definitions and understanding of OERs in Turkey. Quite a number of learners confuse OERs with open education courses and programs. There is a shortage of awareness and perceptions regarding OERs. It might be related to cost of access to textbooks, internet access, and some cultural characteristics.

EFFECT OF BLENDED LEARNING APPROACH ON THE PERFORMANCE OF TECHNICAL COLLEGE STUDENTS IN WOODWORK, IN OYO STATE, NIGERIA

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ABSTRACT

Blended learning approach is an education program that combines online digital media with traditional classroom methods which requires the physical presence of both teacher and student, with some element of student control over time, place, path, or pace. In this study, the researcher examined the effect of blended learning approach on the performance of technical college students in woodwork, in Oyo State, Nigeria. The study was a pretest, posttest control quasi experimental type. Purposive sampling technique was used to select two co-educational technical colleges in Oyo State. Twenty (20) students of Government Technical College Ibadan were used for Blended Learning Approach (BLA) as experimental group while also 20 students of Government Technical College Awe participated as control group for Conventional Learning Method (CLM). Three research instruments were used for this study, Blended learning approach package on introduction to woodjoint, Learners' achievement test (LAT) and Questionnaire on students' attitudes towards blended learning approach (QSATBLA). BLA package was evaluated and validated by educational technologists to ensure that the package is developed in line with the principle of instructional design while ICT expert ensured that navigation process runs appropriately. LAT was subjected to reliability using Kuder-Richardson formula 20 (KR-20) with the reliability index of 0.81 while QSATBLA also subjected to reliability utilizing Cronbach alpha with an index of 0.85. The findings of the study showed that there was a significant difference in the mean scores of experimental and control groups ($t_{(38)}=7.74$, $p<0.05$) in favour of the experimental group and there was significant difference in the attitude of experimental and control groups with $t_{(38)}=-3.623$, $p>0.05$. Based on the findings, it was recommended among others, that teachers in technical colleges should expose themselves to various available instructional software packages that can foster improve their teaching strategies and further enhance teaching competency and students should be exposed to blended learning approach to promote and encourage positive students' social interaction.

Keywords: Blended learning approach, Traditional classroom methods, Technical College and Woodjoint,

INTRODUCTION

Nigeria like any other developing country in Africa is highly sensitive to the need of providing vocational and technical education to her teeming population in order to equip them with saleable skills (Alade, 2004). Since human demands may be sociological, psychological, philosophical, political and economic in nature, the pursuit of man therefore, is to function in the society in ways satisfactory to the above demands. In this vein, it is essential to note that no matter the high level of expertise of Nigerian populace, a modern nation, like Nigeria, can be built better and faster if high premium is given to vocational and technical education (VTE). In other words, the introduction of VTE into Nigeria education is to:

- (a) provide trained manpower in the applied science, technology and business particularly at craft, advanced craft and technical levels.
- (b) provide the technical knowledge and vocational skills necessary for agricultural, commercial and economic development.
- (c) give training and impacting the necessary skills to individual who shall be self-reliant economically (FRN, 2004).

The national Policy on Education (NPE) has placed a great premium on VTE in view of its important role in technological and industrial development of Nigeria. It has recognized it as an aspect of education which leads to the acquisition of practical and applied skills as well as basic scientific knowledge (FRN, 2004). Vocational education (VE) is any form of education whose primary purpose is to prepare persons for gainful employment in a chosen occupation or to prepare individuals for enrolment in advanced technical education programmes (Okoro, 1993). Vocational education provides knowledge, develops skills, and also inculcates the attitudes that are necessary for entry and progress in an occupation. It is usually provided at upper secondary level, includes general education, practical training for the development of skills required by the chosen occupation and related theory.

Technical education is a special grade of vocational education in which success is dependent largely on technical information and understanding of the laws of science and principles of technology as applied to modern design, production, distribution and service (Osuala, 1995). It is a post-secondary vocational training programme, and graduates of technical education programmes usually bridge the gap between the professional engineer and the craftsmen (Alade, 2004). It is an aspect of education which utilizes scientific knowledge in the acquisition of practical and applied skills, in the solution of technical problems. However, VTE as a type of education or training designed for preparing the individual learner to earn a living, that is, to be self-reliant, or increase his earnings. It is kind of education which promotes the dignity of labour by entrenching work as the goal of education. The study of VTE makes the environment more useful and convenient for man.

Technical colleges are set of institutions which are sometimes called Technical Training Schools (TTS) in some states are where specialized trades are learned to highly skilled level. In addition, all the students undertake general education which includes English language, Mathematics and related sciences. Graduate of these institutions are designed as Craftsmen who carry out skilled functions in engineering industries requiring the use of variety of machinery and handtools (Adebute, 1990). The courses available in the Technical colleges as stipulated in the National Policy on Education include Mechanical Trade, Computer Craft Practice, Electrical Engineering Trades, Building Trades, Wood Trades, Hospitality, Textile Trades, Printing Trades, Beauty Culture trades and Business Trades.

Training in technical education in Nigeria dated back to pre-colonial era when trades were owned and jealously guarded by individual families. During this period, skills of the trades were passed down from one generation to another through father/son relationship. This type of skills acquired under this arrangement was purely psychomotor. No emphasis was laid on related trade, theory and design skills which are an integral part of technical education curriculum. Under formal system of education, demonstration is the only method adopted by workshop instructor in technical institutions in general to make students acquire the relevant workshop practical skills.

With the introduction of educational technology into our educational system, the traditional roles of the classroom teachers have changed through the acquisition and utilization of wide variety of resources and procedures. Yusuf (2000) opined that effective teaching is dependent on good communication between the teacher and the students. He further emphasized, that only media can promote student-teacher interaction and student-student interaction. The results of researchers have indicated that the importance of the use of instructional media in the teaching-learning process cannot be over-emphasized, and one of those media is information and communication technologies (ICTs). In recent years, there has been increased emphasis on student-centred instructions and ICTs to facilitate learning at all levels of education and training.

The contemporary age is regarded as knowledge age and the usefulness of ICT is no longer in contention. This is succinct recognition of the pervasive influence of ICT which have made knowledge the most priced commodity (Yusuf, 2005). Over the last couple of years educators have been introduced to new technologies that facilitate learning in and outside of the classroom and provide many opportunities for collaborative and interdisciplinary activities (Daccord, 2006). The rapid development of ICT has given different views in the teaching-learning process where conventional learning is no longer used by the teachers.

Face to face learning provides the social interaction which is needed for learning. In other words, face-to-face processes are important and it should not be left behind in learning (Bonk, 2004 & Iga, 2017). The ICT that can combine traditional and online learning is blended learning. Blended learning is a term increasingly used to describe the way e-learning is being combined with traditional classroom methods and independently study to create a new hybrid teaching methodology. Blended learning is a teaching style that consists of both traditional instruction combined with online and digital instruction. Blended learning is the combination of traditional (face-to-face) and online learning so that instruction occurs both in the classroom and online (Rovai & Jordan, 2004; Garrison & Vaughan, 2008). The benefits of blended learning include collaborative learning experience between the students and instructor; improves access as well as student attitude towards learning, communication is improved between the lecturers and students, and successful students' evaluations via the use of online testing and assessment with reporting features.

Statement of the Problem

The conventional methods of teaching have been in use for decades without change in technical colleges and this has contributed to the yearly low enrolment of the students to the VTE. Most of the studies on the use of ICTs for individualized learning cut across different disciplines in Nigeria but much have not been done to technical education. The use of blended learning as an ICT learning tool has been proved to benefit students globally. However, this learning tool also can be used in technical colleges. Therefore, this study determined the effect of blended learning approach on students' performance and attitudes in technical colleges in Oyo State.

Purpose of the Study

The purpose of this study was to determine the effects of blended learning approach on students' performance and attitude in technical colleges in Oyo state. Specifically, this study found out the:

1. significant difference in the achievement of the students taught using blended learning approach and conventional methods
2. attitude of students towards using blended learning approach for practical instruction in technical colleges

Research Questions

1. Is there any significant difference in the achievement of the students taught using blended learning approach and conventional learning methods for practical instruction?
2. Is there any significant difference in the attitude of the students exposed to BLA and CLM?

Research Hypothesis

- Ho1. There is no significant difference in the achievement of the students using blended learning approach and conventional learning method
- Ho2. There is no significant difference in the attitude of the students exposed to BLA and CLM.

METHODOLOGY

The study adopted the pretest-posttest control group quasi-experimental design. It was employed to investigate the effects of blended learning approach on students' performance in technical colleges.

The target population comprised all technical college students in Oyo State, Nigeria. Out of four technical colleges in Oyo State, two technical colleges were purposively selected for the study due to availability of ICT tools and proximity of the institutions to the researcher. These selected institutions are Government Technical College Ibadan and Government Technical College Awe, Oyo, Oyo State, Nigeria. Wood Trades as a course in the technical college was chosen because it is one of the practical subjects that students found difficult and purportedly having low students' enrolment. Introduction to woodwork practical skills which is compulsory as a subject under the Wood Trades was selected for the study. Twenty (20) students of Government Technical College Ibadan were used for Blended Learning Approach (BLA) and 20 students of Government Technical College Awe exposed to Conventional Learning Method (CLM).

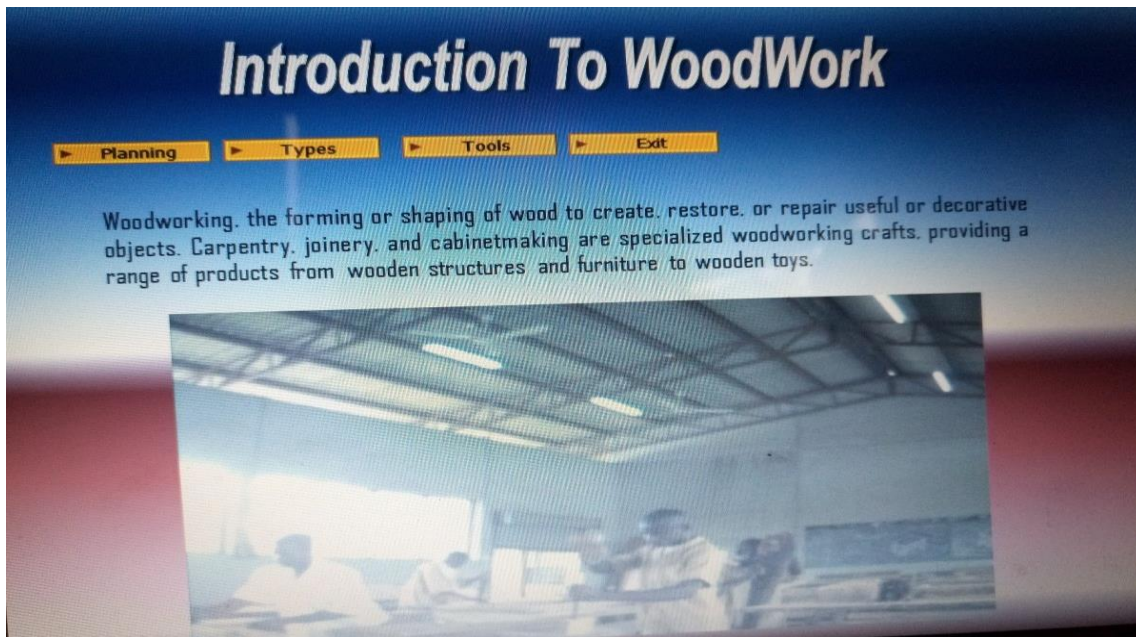
Instruments for Data Collection

The following three research instruments were used.

- a. Blended learning approach package on introduction to woodwork
- b. Learners' achievement test (LAT) on introduction woodwork
- c. Questionnaire on students' attitudes towards blended learning approach (QSATBLA)

Description of the Instruments

Blended learning approach was developed utilizing computer assisted instruction strategy on introduction to woodwork with special emphasis on the various types of woodwork, tools and processes of making the woodwork in the workshop. The package was designed in offline mode utilizing PowerPoint, and Learning Management System (LMS). The package also contained the motion, visual and audio modes of instruction.



Homepage screen of Blended Learning Approach

The learners' achievement test which was an essay test covered the content in the blended learning approach package and the same content taught with conventional learning method. The test has five questions and student to answer four. The questionnaire contained two sections (A and B). Section A contained respondent's personal information while section B contained 10 items that were appropriately responded to an adapted four-point Likert scale (strongly agree (SA), agree (A), disagree (D) and strongly disagree (SD)). The instrument were validated by the experts, two from educational technology, one information and communication technology expert, two technical college teachers and one educational evaluation expert. Blended learning approach package was evaluated and validated by educational technologists to ensure that the package is developed in line with the principle of instructional design which ICT expert ensured that navigation process runs appropriately. LAT was subjected to reliability using Kuder-Richardson formula 20 (KR-20) with the reliability index of 0.81 while QSATBLA also subjected to reliability utilizing Cronbach alpha with an index of 0.85.

Procedure for Data Collection

The study lasted for four weeks. During the first week, LAT was administered on the students for the pretest while 2 and 3 were used for the treatment and control group. The students in experimental group were informed about blended learning and they were introduced on how to use the instructional approach. BLA was developed in offline mode for easy accessibility and installed on computer systems. BLA students were allocated to computer with aid of ICT instructors of the selected technical college and the conventional method of learning using demonstration was carried out for control group by the teacher in charge in CLM group. Posttest was conducted on fourth week. Data collected were analyzed using t-test and descriptive statistic if estimated marginal mean was used to determine the magnitude of performance scores of the experimental and control group.

RESULTS AND DISCUSSION

To investigate the effect of blended learning approach in terms of students' achievement, in comparison to conventional learning method. This study conducted a t-test analysis for independent sample. In the pretest result, there was no significant difference, therefore t-test statistics was employed to analyse the data.

Table 1: t-test on the achievement of students at pretest level for the two groups

Groups	N	Mean	Std.	df	t	p	Remarks
BLA	20	17.20	4.28	38	0.08	2.021	Not Sig

CLM	20	17.09	3.89
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From Table 1, it can be interpreted that there was no significant difference ($t_{(38)} = 0.8$, $p > 0.05$) between the BLA (Experiment group) and CLM (Control group) scores. This indicated that there is no significant difference in the entry knowledge of the selected students in the two groups before the treatment and the two groups had similar levels of knowledge.

Hypothesis One

In order to test the hypothesis 1, the posttest scores of the experimental and control groups were subjected to t-test. The mean scores of the groups were presented in Table 2.

The hypothesis states that there is no significant difference in the achievement of the students exposed to BLA and CLM. To test the hypothesis, t-test was used for the analysis of the two group results.

Table 2: t-test of posttest on the achievement of the student exposed to BLA and CLM

Groups	N	Mean	Std.	df	t	p	Remarks
BLA	20	29.9	4.74	38	7.74	2.021	Not Sig
CLM	20	18.70	4.41				

From Table 2, it showed that there was a significant difference ($t_{(38)} = 7.74$, $p < 0.05$) between score of the BLA (Experiment group) and CLM (Control group). The implication was that there was significant differences in the achievement mean score of students exposed to BLA and CLM. This implied that BLA group performed significantly better than that of CLM group.

Hypothesis Two

There is no significant difference in the attitude of the students exposed to BLA and CLM. The t-test statistic was also employed to test the hypothesis.

Table 3: t-test on the attitudes of the two groups

Groups	N	Mean	Std.	df	t	p	Remarks
BLA	20	22.80	4.13	38	-3.623	0.001	Sig.
CLM	20	19.15	1.31				

Based on the result on Table 3, it showed that there was a significant difference between the students exposed to BLA and CLM in their attitude with $t_{(38)} = -3.623$, $p > 0.05$. The mean attitude of BLA (22.80) was greater than those taught with CLM (19.15).

DISCUSSION OF THE FINDINGS

The present study was to determine the effect of blended learning approach on technical college students' achievement in Woodwork. The findings revealed that there was a significant difference in the achievement of the students exposed to BLA and those that exposed to CLM. This finding was in line with the result of finding of Iga (0217) which stated that the learning result of students taught using blended learning model was higher than the learning result of students taught with traditional mode. Also, Ruba, Lubna, Osama, montaha Ansar and Nabeel (2014) carried out a study on effect of blended learning on academic achievement of students in the University of Jordan and found out that there was a significant and positive impact of blended learning on academic achievement of the students in University of Jordan. The findings have shown that blended learning has proved to be effective in facilitating the acquisition of technical skills among the students than CLM in woodwork of technical education. Also, students' attitude toward the two methods was significantly significant. The better attitude of the students that exposed to BLA over CLM has helped to improve the students' motivation towards practical skills in technical education. The superiority of BLA over CLM in the attitude of the students in technical skills may be connected with the involvement or participation of the students in the operation of ICTs and could also be attributed to the fascinating ways the blended learning approach brought to teaching-learning process.

CONCLUSION

The results show that the achievement scores of the students are not same when they exposed to different methods of instruction. The use of blended learning approach in presenting lesson especially in the workshop increases the achievement score of students in technical education and students have better positive attitudes towards technical education when exposed to BLA. Blended learning approach therefore brings about effective learning in teaching and learning of technical skills in technical education. This is an indication that BLA could be a very effective method of enhancing the practical knowledge acquisition in the technical colleges. Although, the use of

conventional learning method is gradually losing its acceptance, educators are yet to explore the innate advantage of BLA in the working of teaching and learning. Blended learning approach encourages students to learn more actively.

Recommendations

Based on the major findings of this study, the following recommendations are proffered:

1. Teachers in technical colleges should expose themselves to various available instructional software packages that can foster their teaching strategies and further enhance their teaching competency.
2. Teachers should expose their students to blended learning approach that promote and encourage social interaction, active classroom participation, increases thinking faculty, motivation and positive attitude among the students towards technical education.
3. Technical college management should assist and encourage their teachers to use relevant ICT-based instructional innovative like bended learning. This will enhance cooperative learning, creative thinking, provide avenue for individual difference and promote teaching and learning among the students in technical colleges.
4. Software developer and computer programmer should develop relevant computer packages for use within the Nigerian technical colleges.

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EFFECTS OF CONCEPT CARTOONS ON NIGERIAN PRIMARY FOUR PUPILS ACHIEVEMENT IN BASIC SCIENCE AND TECHNOLOGY

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ABSTRACT

The Study investigated the effects of concept cartoons on primary four pupils' achievement in Basic Science and Technology in Jos, Plateau State Nigeria. The non-randomized pre-test, post-test quasi experimental control group design was employed. A sample of 78 pupils from a population of 2000 pupils was used in the study. Two intact classes in one, out of 50 schools in the area of study were assigned to experiment and control groups, respectively. The experimental group was taught the concept of energy and its conversion using concept cartoons while the control group was taught the same concepts with the lecture method. A basic science and Technology Achievement Test with a reliability index of .85 was used to collect data from the pupils. Two research questions were answered using mean and standard deviation while two hypotheses were tested using Analysis of Covariance at 0.05 level of significance. Findings indicated that the experimental group taught using concept cartoons achieved higher than the control group taught using the lecture method $F(1, 78) = 6.819, p = .011$. Moreover, gender was found to have a significant influence on the achievement of four primary four pupils exposed to concept cartoons in favour of boys $F(1, 78) = 6.802, p = .013$. It was concluded that the use of concept cartoons significantly improved the achievement of primary four pupils in Basic Science and Technology. In the light of the findings, it was recommended that teachers should incorporate concept cartoons in teaching Basic Science and Technology concepts in primary schools.

INTRODUCTION

Science, technology engineering and mathematics (STEM) disciplines have been the subject of attention to stakeholders in STEM Education. This is as result of the relevance of STEM education to the growth and development of nations of the world which has necessitated the search for innovative and effective strategies of teaching STEM courses for improved learning and understanding (Larson, 2012). In view of the significant role of science and technology to national development, the Nigerian government through the Joint Admissions and Matriculation Board (JAMB) put in place a policy of 60:40 ratio in admissions for science-based courses in conventional universities and 70:30 ratio in technology-based universities in favour of science-based courses. The policy is in line with the goal of science education (Federal Republic of Nigeria [FRN], 2014) which is to produce scientists for national development and further studies, and, the course of technological development. In further pursuance of this goal, the government put in place other laudable efforts to promote the teaching and learning of science and technology in schools at the various levels of education. These include the establishment of more universities of technology, and special science schools at the secondary school level in many states of the federation; reviewing the basic and secondary school curricular in line with global trends in science and technology, making the study of basic science and technology compulsory at the basic level of education, training of science and technology teachers abroad in the technical aid programme and implementation of the STEP B project as well as provision of science kits to schools at the basic level of education.

Despite the fore-going efforts by the government to improve the teaching and learning of science and technology courses, Nigerian children recorded poor achievement in the subjects (Obeka, 2010; Ozoji, 2010; Usman, 2015; Micah, 2017). Some other studies have revealed that students' achievement in science and technology related-courses at the basic school level was not impressive (Kaduna State Ministry of Education, 2016; Micah, 2017). This may have contributed to the steady decline in the quality of SSCE results over the years in science subjects. is a clear indication of the low achievement. West African Examinations Council results of science and technology related courses such as chemistry, physics and biology show that the highest percentage number of students with credits in Biology, Physics and Chemistry from 2006 to 2011 were 38.08%, 46.89% and 50.94%, respectively (WAEC, 2011). These results show low achievement by the students. This is in consonance with the findings by Ezenwa (2005), that, the performance of students in science-related subjects is still below average. This has become a source of worry to all stakeholders in Nigeria education system. Researchers, educators, parents, the government and society express concern over the state of underachievement in science and technology subjects that are important in national development.

Existing research in STEM (Sadler, Sonnert, Hazari & Tai, 2012) disciplines indicate that exposure to STEM in early years of schooling is most strongly linked to taking up science, technology and mathematics courses and disciplines at the secondary and higher levels of education and consequently, STEM careers later in life. Basic Science and technology is taught at the basic level of education in Nigeria.

A number of factors have been put forward by researchers as being responsible for this state of affairs. Factors responsible for students' underachievement in science can be grouped into teacher related and facility-oriented factors. These factors include the teaching methods and materials used among other things (Ogunkola, 2008).

A number of factors have been put forward by researchers as being responsible for this state of affairs. Factors responsible for students' underachievement in science can be grouped into teacher related and facility-oriented factors. These factors include the teaching methods and materials used among other things (Ogunkola, 2008).

There have been growing concerns about the modes of teaching basic science and technology in Nigerian primary schools which are predominantly teacher-centered and do not engage pupils in hands-on activities. This situation makes learning of science and technology concepts boring and uninteresting to the learners, particularly at the basic level of education. This might be the reason STM teaching and learning in Nigeria do not appear to yield the desired outcomes.

Problems of underachievement, poor attitudes to science and lack of interest continue to be recorded in STM subjects at the primary level (Katniyon & Mundi, 2011) which is the foundation stage for further science. This is not good enough for a country that is aspiring to be one of the world's big economies come 2020. This calls for a paradigm shift in basic science and technology delivery in line with the objectives of the national policy on education which emphasizes teaching science with activity-oriented and effective methods for improved thinking and achievement outcomes. Such methods the problem-solving strategy, concept mapping strategy, computer simulation strategy and the use of concept cartoons.

Concept cartoons are cartoon-style drawings that show a range of viewpoints of an everyday event (Chris,2006) in science for instance. They are visual representations of science ideas in ways that are designed to motivate and engage learners and stimulate discussion of their ideas. Cartoons were designed by Keogh and Naylor (1999) as an innovative strategy to probe students' ideas where learners challenge their thinking while developing knowledge in scientific concepts. The use of concept cartoons is based on constructivism which emphasizes the construction of knowledge by the learner.

Significant features of concept cartoons according to Chin and Teou are that they challenge learners' misconceptions and help to correct them. Concept cartoons make learning easier and motivates learners of all ages and backgrounds (Katiniyon & Duguryil, 2019). They enhance problem-solving skills, argumentation, thereby help to promote and stimulate thinking in children.

OBJECTIVES

The objectives of the study were to:

1. Investigate the effects of concept cartoons on primary four pupils' achievement in basic science and technology in Jos, Nigeria.
2. Determine the pre-test mean achievement scores between primary four pupils taught Basic Science using concept cartoons and their counterparts taught using the lecture method?
3. Find out the post-test mean achievement score difference between primary four pupils taught Basic Science using concept cartoons and their counterparts taught using the lecture method?
4. Find out the difference between the post-test mean achievement scores of male and female students taught basic science and technology using concept cartoons?

Research Questions

1. What is the post-test mean achievement score difference between primary three pupils taught Basic Science using concept cartoons and their counterparts taught using the lecture method?
2. What is the difference between the post-test mean achievement scores of male and female students taught basic science and technology using concept cartoons?

Hypotheses

3. There is no significant difference between the post-test achievement mean scores of students taught using concept cartoons and those taught using the lecture method.
4. There is no significant influence of concept cartoons on gender with regard to the post-test achievement mean scores of primary four pupils.
- 5.

METHOD

A sample of 78 primary four pupils in two arms of one private school out of 50 schools taken from a population of 2000 pupils was used in the study. The non-randomized pre-test, post-test quasi experimental control group design was employed. The pupils were used in their intact classroom settings. They were exposed to a pre-test on Basic Science and Technology Achievement Test. One arm, the experimental group, was taught the concepts of energy and its conversion with concept cartoons while the second arm, the control group, was taught the same concepts with the lecture method. The teaching exercise lasted for five weeks.

A basic science and Technology Achievement Test with a reliability index of .85 was used to collect data from the pupils. Two research questions were answered using mean and standard deviation while two hypotheses were tested using Analysis of Covariance at 0.05 level of significance.

RESULTS

Results obtained from the study are presented on the basis of research questions and hypotheses as follows:

Research Question One

What is the post-test mean achievement score difference between students taught Basic Science and Technology using concept cartoons and their counterparts taught using the lecture method?

Table 1: Post-test Mean Score Difference between Students Taught Basic Science using Concept Cartoons and their Counterparts taught using the lecture method

Groups	Mean	SD	Mean difference
Experimental	54.91	16.20	
Control	46.74	11.78	8.17

Table 1 shows the post-test mean achievement score difference between students taught Basic Science and Technology using concept cartoons and their counterparts taught using the lecture method. Students taught Basic Science using concept cartoons had a mean of 54.91 and a standard deviation of 16.20 while the students taught using lecture method had a mean of 46.74 and standard deviation of 11.78. The mean difference was 8.17 in favour of pupils taught Basic Science and Technology using concept cartoons.

RESEARCH

What is the difference between the post-test mean scores of Male and Female students taught basic science and technology using concept cartoons?

Table 2: Post-test Mean Score Difference between Male and Female Students Taught Basic Science Using Concept Cartoons

Groups	Mean	SD	Mean difference
Female	56.03	23.29	
Male	52.00	9.35	4.03

Table 2 shows the post-test mean score difference between of Male and Female students taught basic science and technology using concept cartoons. Female Students taught Basic Science using concept cartoons had a mean of 56.03 and a standard deviation of 23.29 while the Male students taught using lecture method had a mean of 52.00 and standard deviation of 9.35. There was a mean difference of 4.03 between the mean achievement of scores of male and female students taught Basic Science using concept cartoons.

Hypothesis 1

There is no significant difference between the pre-test post-test achievement mean score of students taught using concept cartoons and those taught using the lecture method.

Table 3: Analysis of Covariance of Pre-test and Post-test Achievement Mean Scores of Experimental and Control Groups

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	2126.270 ^a	3	708.757	4.785	.004
Intercept	176900.030	1	176900.030	1194.304	.000
GROUP	1010.079	1	1010.079	6.819	.011
Pretest posttest	834.435	1	834.435	5.634	.020
GROUP*	213.947	1	213.947	1.444	.233
pre-test posttest					
Error	11553.340	78	148.120		
	193504.000	82			
Corrected Total	13679.610	81			
a.	R Squared = .155 (Adjusted R Squared = .123)				

Table 3 reveals the Analysis of Covariance of pre-test and post-test mean scores of pupils in experimental and control groups. This groups results show that $F(1,78)=6.819$, $p=0.011$) is less than 0.05 level of significance. Since the p-value is less than 0.05, this implies that there was a significant difference between the post-test achievement mean scores of students taught using concept cartoons and those taught using the lecture method. Therefore, null hypothesis was rejected.

Hypothesis 2

There is no significant effect of concept cartoon strategy on gender and post-test achievement mean scores of primary four pupils.

Table 4: Analysis of Covariance on Significant Effect of Concept Cartoon Strategy on Gender the between pretest and posttest achievement mean scores of Experimental and Control Groups

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	2297.970 ^a	3	708.757	4.785	.004
Intercept	96447.400	1	176900.030	1194.304	.000
GROUP	1265.470	1	1010.079	6.802	.011
Pretest posttest	1032.136	1	834.435	5.634	.020
GENDER * pre-test posttest	244.379	1	213.947	1.444	.013
Error	6069.667	40	148.120		
	11876.000	44			
Corrected Total	8367.636	43			

a. R Squared = .275 (Adjusted R Squared = .220)

Table 4 reveals the Analysis of Covariance (ANCOVA) of pre-test and post-test mean scores of pupils effect of concept cartoon strategy achievement mean scores of Experimental and control groups based on gender. These groups results indicate that $F(1, 78) = 6.802$, $p = 0.013$). The P-value 0.013 is less than 0.05 level of significance. Therefore, there was a significant influence of gender on pre-test and post-test achievement mean scores of the experimental group. Hence, the null hypothesis was rejected.

DISCUSSION

Findings indicated that the experimental group taught using concept cartoons achieved higher than the control group taught using the lecture method $F(1, 78) = 6.819$, $p=0.011$). The findings of this study lends credence to that of

Nel and Evriki (2008). Moreover, gender was found to have a significant influence on the achievement of four primary four pupils exposed to concept cartoons in favour of boys $F(1, 78) = 6.802, p = .013$. The idea of using concept cartoons in teaching science is not new. For instance, studies by Naylor and McMurdo (1990), Keogh and Naylor (1997), Wilson (1998) Duguryil, Katniyon and Biska (2019) investigated the effectiveness of teaching using concept cartoons.

Observations in the course of engaging the experimental group in working with worksheets in addition to posters, showed that primary four pupils were motivated and interested in learning the concept of energy and its conversion. These and the quality of classroom interactions in the course of teaching and learning of energy and its conversion must have contributed to the improved achievement outcome of pupils in the experimental group against their counterparts in the control group.

CONCLUSION

It was concluded that the use of concept cartoons significantly improved the achievement of Nigerian primary four pupils in Basic Science and Technology. Furthermore, gender was shown to have a significant influence on primary four pupils' achievement in Basic Science and Technology.

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EFFECTS OF CONCEPT MAPPING ON TEST ANXIETY AND ACHIEVEMENT IN MATHEMATICS AMONG SECONDARY STUDENTS IN LAGOS ISLAND, NIGERIA

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ABSTRACT

The study was undertaken to investigate the relative efficacy of one training method (concept mapping) on Test Anxiety and Achievement in Mathematics among secondary students in Lagos Island, Nigeria. The participants in the study comprised 164 senior secondary school II students (83 male and 81 female) who were randomly selected from two co-educational secondary schools in Lagos Island. The following instruments were used in the study: Mathophobia Check-Up (M-CU) and Mathematics Achievement Test (MAT). All instruments were used for pre and post-test assessments test. Three research hypotheses were raised to guide the study. The research design was Quasi experimental pre and post-test control design. The pre and post test scores were analysed using t-test. There were significant effects of training on mathematics anxiety. Mathematics achievement and gender among participants in the experimental groups, consequently, the three hypotheses were rejected ($p < 0.05$). It was recommended that efforts should be made to formally train teachers on the use of concept mapping as an instructional option.

Keywords: Concept Mapping, Test Anxiety, and Achievement in Mathematics

INTRODUCTION

Two pedagogical limitations have been identified as the major shortcomings in traditional secondary education, lecture based instruction and teacher centre instruction. Lecture based instruction emphasizes the passive acquisition of knowledge where students becomes passive recipients of knowledge and resort to rote learning, while teacher centred instruction dominates classroom activity with the teacher doing well over 80% of the talk.

The traditional classroom is characterized by direct demonstrations and activities to verify previously introduced concepts. Instruction, therefore is not for conceptual understanding but rather for memorizing and recalling of facts (Grows & Cebula, 2006 in Ayeobasan, 2012). Kulbir (2006) asserted that students of mathematics develop doubts about the fundamentals of the subject and this doubt further hinders their achievement throughout. He stressed further that teachers should not hesitate to explain them over and over again because only a clear understanding of these fundamentals can build a sound foundations for learning mathematics.

Osarenren & Asiedu (2007) submitted that the traditional way of teaching mathematics has not helped the growth of mathematics in Nigeria. This is the reason why performance of students is not really improving. Students are not able to think critically and their analyses of mathematical phenomena are quite faulty. A conceptual understanding requires students to think critically and act flexibly with what they know. Students often ask “how did you calculate that” instead of “why did you calculate it in that way”. Osarenren & Asiedu further concluded that it is high time to move away from the traditional way of teaching and learning mathematics to the realistic mathematics education. Teaching of mathematics should aim at assisting students to achieve high level of success which is commensurate with their abilities and potentials and that the mind of every Nigerian students could be developed in every aspect of mathematics through a well – thought-out innovative method of teaching and learning the core concepts which form the basis of comprehension that leads to problem solving.

Poor performance of students in mathematics at all levels of our education has been attributed to many factors. The Chief Examiners report of West African Examinations Council (WAEC) for May/June 2012 – 2014, revealed that students lacked understanding of basic principles and that they did not prepare for the examinations. The reports of the Chief Examiners have not improved over the years. Ayeobasan (2016) concurred with the submission of the Chief Examiners reports and further observed that students could not understand basic principles and concepts of mathematics correctly as well as prove logically and precisely a geometric proof.

However, since mathematics is a compulsory subject to be mastered for the progression in both individual and national development, there must be other methods that can be used to teach and learn mathematics successfully. For instance, conveying information to students is very important but teaching students how to think is more important. This is why concept mapping becomes imperative. Kulbir (2006) submitted that concepts are basic building blocks for thinking in any subject especially in mathematics where students need to classify objects and ideas as well as

derive rules, formulae and principles which provide the foundations for ideal networking to solve mathematical problems.

Esiobu (2018) described concept maps as graphical tools for organizing and representing knowledge. They include concepts usually enclosed in circles or boxes of some type and relationships between the two concepts. Words on the lines are referred to as linking words or linking phrases which specify the relationship between the two concepts. One major characteristic of concept maps is that the concepts are represented in a hierarchical fashion with the most general concepts at the top of the map and the more specific, less general concepts are arranged hierarchically structure for a particular domain of knowledge also depend on the context in which that knowledge is being applied or considered.

Richard (2012) further described concept teaching as models developed primarily to teach key concepts that serve as foundations for student higher-level thinking and to provide a basis for mutual understanding and communication. Such models are not designed to teach large amounts of information to students. However, by learning and applying key concepts within a given subject, students are able to transfer specific learning to more general areas. Concept learning is more than simply classifying objects and forming categories. It is also more than learning new labels or vocabulary to apply to classes of objects and ideas. Instead, concept learning involves the process of constructing knowledge and organizing information into comprehensive and complex cognitive structures.

There is an increasing recognition that affective factors play a critical role in the teaching and learning of mathematics. One affective factor that has probably received more attention than any other area that lies within the affective domain is anxiety towards mathematics. Anxiety is a universal human feelings which is been experienced from time to time. It becomes a problem requiring professional help when it intensifies and spread beyond normal limits. According to Gudy (2002) anxiety is an affective variable that includes the feeling of being uneasy, tense, worried or apprehensive about what might happen. It is a feeling that is produced by one's thought to a strange predicament. Moin (2006) describes anxiety as a very disagreeable and in most situations, ambiguous feelings which comes with unwanted changes in our physical situations such as dizziness, extreme perspiration shaking etc.

Ascraft (2002), submitted that mathematics anxiety is a feeling of tension, apprehension or fear that interferes with mathematics performance, Ayeobasan (2018) described same as the more intense feeling that a student exhibits in mathematics classrooms such as confidence, frustration, fear and mental disorganization to manipulate numbers and shapes. Mathematics anxiety is related to poor mathematics performance on mathematics achievement tests and subsequently connected to mathematics avoidance. Mathematics avoidance results in less completing exposure and mathematics practices leaving students more anxious and mathematically unprepared to achieve. Therefore, effective learning strategy such as concept mapping learning could enhance favourable learning outcomes in mathematics as well as reducing test anxiety in mathematics with improved mathematics achievement.

Statement of the Problem

Student's performance in mathematics among Nigerian students has not been encouraging over the years, despite concerted efforts made by the stakeholders. The West African Examination Council Chief Examiners Reports (2012 – 2014) and analysis of past mathematics results in Senior Secondary Certificate Examinations by WAEC (2016-2018) corroborated this observation of poor performance and high failure rate among senior secondary school students in mathematics.

Over the years the government has provided relevant text for effective teaching and learning of mathematics, instructional aids have also been provided and of recent, the state government implemented a policy of recruiting only trained teachers to the schools. All these were put in place with the sole aim of enhancing performance. In spite of these, performance in mathematics at the senior secondary school examination has not witnessed significant improvement. It even appears students have come to terms with their performance in mathematics. However, bearing in mind the potential benefits of studying and excelling in mathematics and the requirement of at least a credit pass for university admission, students could approach mathematics with zeal and enthusiasm with effective conceptualization of mathematics terms. If appropriate learning methods and necessary psychological supports are given, this zeal can be translated to high achievement.

Purpose of the Study

The purposes of this study are to:

1. investigate the relative effectiveness of training (concept mapping) on test anxiety in mathematics among participants.
2. determine the effect of training (concept mapping) on mathematics achievement among participants.

3. ascertain the effect of training (concept mapping) due to gender on mathematics achievement among participants.

Hypotheses

The following hypotheses were formulated and tested at 0.05 level of significance.

- i. There is no significant effect of training (concept mapping) on test anxiety post test scores of the participants in the experimental groups.
- ii. There is no significant effect of training (concept mapping) on mathematics achievement post test scores of the participants in the experimental groups.
- iii. There is no significant effect of training (concept mapping) due to gender on mathematics achievement post test scores of the participants in the experimental groups.

METHODOLOGY

The study adopted a pre-test/post test control group quasi experimental design. The population of the study comprised all secondary school students in Lagos Island metropolis in Lagos State, Nigeria.

Sample and Sampling Technique

The study sample comprised 164 (one hundred and sixty four) secondary school II students, who completed the pre-assessment measures, the students were selected from two secondary schools in Lagos Island Metropolis. The sample size in each of the schools were 84 and 80 totaling 164 from 326 senior secondary II students in the two selected schools.

The sampling procedure was multi stage sampling technique. All secondary schools in Lagos Island metropolis were put into two strata using the two educational zones in the metropolis (North and South). There are 14 (fourteen) schools with the following distributions: 8 in Lagos Island south and 6 in Lagos Island North zone of which one senior secondary school was purposively selected from each stratum. Two schools randomly selected using the hat and draw method were randomly assigned to training and one school for the control group.

The training and the control schools have two streams each with average class of 82, purposively selected intact classes from the streams in each selected schools were used for this study. The average age of the participants was 16.0 years. a total of 83 male and 81 female students participated in the study.

Instrumentation

The following two instruments were used for this study:

1. Mathophobia Check –Up (MC-U): This is a 30 items questionnaire designed by Hodges (1995) in Ayeobasan (2012) to measure students' state of health in mathematics whether they are low in mathophobia (no fear of mathematics) moderately high fear or an extreme fear of mathematics (a terminal stage of mathophobia). The test re-test reliability coefficient of 0.71 was obtained at a four weeks interval by the researchers during pilot study.
2. Mathematics Achievement Test (MAT): This was a 50 items multiple choice objective test in mathematics drawn from past mathematics questions of WAEC/NECO for the year 2015-2018). Though already validated by WAEC and was re-validated by the researcher for the purpose of this study. It has a high stability coefficient of 0.86 at 0.05 level of significance when tested during the pilot study using test re-test method within a four weeks interval.

RESULTS

There is no significant effect of training (concept mapping) on mathematics anxiety post test scores of the participants in the experimental groups.

Table 1

Pretest Mean

Pretest/Post test mean and standard deviation scores on participants

Mathophobia Check-Up

Group Participants	Pre-test Score	Post test Score	MD
Concept Mapping			
Mean	60.20	40.40	
N	84.00	84.00	19.80
S.D	8.40	5.40	
Control			
Mean	60.20	61.60	
N	80.00	80.00	1.40
S.D	8.80	8.90	

t-test Analysis

Groups	N	X	S.D	tcal	Tcrit
Training	84	40.40	5.40		
Control	80	56.9	8.80	7.40	1.25

P<0.05, df =162, tcal = 7.4, tcrit = 1.25

Since tcal > tcrit, then the null hypothesis is rejected and therefore uphold the alternative hypothesis, that is, there is a significant effect of training on post test scores of the participants in the experimental groups

Hypothesis 2: There is no significant effect of training (concept mapping) on mathematics achievement post test scores of the participants in the experimental groups.

Table 2

Pretest/Post test Mean and Standard Deviation Scores on Participants

Mathematics Achievement Test

Group Participants	Pre-test Score	Post test Score	MD
Concept Mapping			
Mean	30.4	54.6	
N	84.00	84.00	24.20
S.D	4.20	6.80	
Control			
Mean	44.00	46.50	
N	80.00	80.00	2.50
S.D	4.80	5.20	

t-test Analysis

Groups	N	X	S.D	t-cal	t-crit
Training	84	54.60	6.80		
Control	80	46.50	5.20	0.72	0.55

P<0.05, df = 162, tcal = 0.72, tcrit = 0.55

Since tcal > tcrit, then the null hypothesis is rejected and therefore uphold the alternative hypothesis, that is there is a significant effect of training on mathematics achievement post test scores of the participants in the experimental groups.

Hypothesis 3

There is no significant effect of training (concept mapping) due to gender on mathematics achievement post test scores of the participants in the experimental groups.

Table 3

Pretest/Post test and standard deviation scores across gender on mathematics achievement.

Group Participants	Pre-test Score	Post test Score	MD
Male			
Mean	40.20	56.80	
N	84.00	84.00	16.60
S.D	14.50	18.40	
Female			
Mean	38.00	42.50	
N	80.00	80.00	4.50
S.D	12.60	14.20	

t-test Analysis

Groups	N	\bar{X}	S.D	t-cal	t-crit
Male	83	56.80	18.40		
Female	81	42.50	14.20	0.65	0.24

 $P < 0.05$, $df = 82$, $t_{cal} = 0.65$, $t_{crit} = 0.24$

Since $t_{cal} > t_{crit}$, then the null hypothesis is rejected and therefore uphold the alternative hypothesis, that is, there is no significant effect of training (concept mapping) due to gender on mathematics post test scores.

DISCUSSION

The result of hypothesis one indicated that there was significant effect of training on mathematics anxiety post test scores among the participants. This is an indication that the training (concept mapping) is effective instructional technique of reducing anxiety in mathematics, the training group had 40.40 post mean score against control with 61.60, this findings concurred with the submission of Richard (2012) who found concept mapping as an effective and efficient strategy in reducing mathophobia among learners of mathematics. Akanbi (2011) also affirmed concept mapping and exposure therapy as very useful in the treatment of fear and anxiety related disorders such as test anxiety. Effects of training on mathematics achievement post test scores among the experimental groups. The results of hypothesis two indicated that there was a significant effect of training on mathematics achievement post test scores among the participants. This is an evidence that the training (concept mapping) is efficient instructional option for enhancing achievement in mathematics. The post mean scores of 54.60 and 46.50 training and control groups respectively indicated a clear disparity in the mathematics achievement.

This finding is in accordance with Esiobu (2018) who submitted that learner with lower phobia in mathematics demonstrates higher conceptual insight than students with higher phobia in mathematics.

Effect of training due to gender on mathematics achievement post test scores among participants. Male participants had higher post test mean scores 56.80 of mathematics achievement test than female participants who had 42.50. Similarly, there is a significant difference due to gender in the post test scores of mathematics achievement among participants.

This finding concurred with the submission of Lee & Lockheed (1990) in Ayeobasan (2012) that female students show little or no interest in subjects that are calculation oriented such as mathematics, physics, chemistry and further mathematics. They rather show greater interest in subjects that are literally oriented such as English Language, Christian/Islamic religion knowledge or history.

CONCLUSION

In the light of the findings, the following conclusions can be drawn.

1. There was a significant effect of training on mathematics anxiety post test scores among the participants. Training group had lower 40.40 against 61.60 post mean test scores on mathophobia check-up scale.
2. There was a significant effect of training on mathematics achievement post test scores among the participants. Training group had higher 54.60 against 46.50 post mean test scores on mathematics achievement test.
3. There was a significant effect due to gender on mathematics achievement test among participants. Male had 56.80 and 42.50 post mean test scores on mathematics achievement test.

Recommendation

In view of the findings, the following recommendations are therefore put forward.

1. Training in concept mapping as confirmed by this study is an efficacious means of reducing anxiety in mathematics among students. Based on this, effort should be made to formally train teachers on the use of concept mapping as an instructional option.
2. Training in concept mapping as confirmed by this study is a practicable means to positively enhance students' achievement in mathematics. This therefore, suggests that concept learning may serve as a viable means of improving low achievement in mathematics. Based on this, effort should be made to formally train teachers of mathematics the rudiments of concept learning.

THANK YOU FOR LISTENING

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EUROPEAN EMERGENCY NUMBER ASSOCIATION AS A RESPONSE TO THE LACK OF EDUCATION FOR EUROPEANS

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Abstract

This Article presents the essence of creating a single European emergency number 112. By means of statistical data, the level of awareness of the number among the citizens of all the European Union countries was presented. The article has been divided into several parts. First of all, the phenomenon of creating and functioning of emergency numbers is described. This was the basis for further reflection on the European Emergency Number Association, an organisation that contributes to increasing safety and security of the citizens in Europe by focusing on improving the emergency number 112. The Association also plays an active role in raising the awareness of the emergency number 112 among Europeans, as presented in the last part of this paper.

Keywords: European Emergency Number Association, emergency number, education, technology, society

METHODOLOGY:

The aim of the article was to present the possibility of using the European Emergency Number Association for improving the European emergency number 112. The following research problem was adopted in the article: How is the European Emergency Number Association platform built and what is its potential for improvement of the emergency number 112?

The articles were prepared using theoretical and empirical research methods. The analysis, synthesis and reasoning of the literature within the scope of safety, threats, emergency notification system, as well as Polish and international legal acts were carried out during the deliberations. The results of empirical research in the form of interviews with experts from the Police, State and Voluntary Fire Service, Polish Armed Forces, Tatra Mountain Volunteer Rescue Service and Polish Volunteer Mountain Rescued Service, scientists dealing with security issues, crisis management practitioners, as well as coordinators and operators of emergency numbers 112 were also presented.

1. Characteristics of the phenomenon in Europe - introduction

The European Union was created as a result of long standing political, economic and social integration of European countries. The roots of the European unity between particular states go back to the post-war period. Already then, the associated states established various forms and mechanisms of cooperation, such as organisations, institutions and bodies, the aim of which was integration. As the number of the Community members was increasing, the scope and areas of unification were being expanded. A common economic policy was being built, a foreign policy was being strengthened and a (military) security policy and cooperation on internal security and administrative cooperation between Member States was added. It should be noted that one of the objectives included in the Treaty on European Union (EU) is to develop the area of freedom and security, which the EU is to become, through the introduction of common legal and social standards as well as continuous improvement of the

citizens' standard of living. Security is a fundamental need of every human being, which is why the safety sciences constitute a mapping of social needs in problem theory, and therefore, the security is an object and subject of scientific research. The purpose of safety sciences is to provide people with knowledge that helps them to explain, understand, assess and predict the phenomena related to the safety of a particular entity. Such an attempt was made in this article in respect of the emergency number 112 and the necessity to make Europeans aware of its existence (Kaczmarczyk, 2014, p. 3).

The unique feature of the European Union is the fact that, while all Member States are sovereign and independent, when it comes to the Community they have decided to combine part of their sovereignty in particular areas. Moreover, the EU has created a single market based on four freedoms, within which there is a free movement of goods, persons, services and capital between all Member States. The single market means that over 500 million EU citizens can move freely within the territory of Member States and settle wherever they want to. As a result, every citizen of the EU has the right to choose in which Member State they wish to study, work or live permanently. In view of such an easy and unrestricted movement of people of different nationalities, the Member States must deal with a number of tasks. It should be stressed that the priority, both for the EU as a whole and for each Member State individually, is to ensure that every citizen is safe and that their rights are respected.

Ensuring safety is first and foremost the possibility of calling emergency services in the event of an emergency situation threatening life, health, property or the environment. Already in the last century it was asserted that the possibility to call for help must take place at supranational level, so that every citizen – without restrictions or barriers such as language barriers – could feel safe. That is why in 1991 The Council of the European Communities has decided to establish a single pan-European emergency number 112. This was to serve as an additional security measure at the European level.

The emergency number 112 is free of charge and can be reached in the territory of the European Union by both landlines and mobile phones. A call can be made also from phones with no SIM card. The pan-European emergency number is primarily intended to make it possible to call for complex help for both citizens of a particular country and visitors. In addition, the idea of establishment focused on the integration of services, entities and institutions designated by law to protect life, health, property and the environment.

The creation of the emergency number 112 was legally standardized by the Directive of the European Parliament and of the Council 2002/22/EC on universal service in 2002. The European Union has decided that the users should "...be able to call emergency numbers, in particular the single European emergency number 112, free of charge from any telephone (...) without any form of payment..."(Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive). These guidelines were to be implemented by the Member States by July 2003, and by the newly joined Member States until 1 May 2004. As a result, the Member States again have been faced with the important task of introducing and disseminating a new emergency number.

However, according to studies carried out by the European Commission, in 2011, only a quarter of EU citizens were aware of the existence and functioning of 112 as an emergency number that can be used to call for assistance in any of the EU Member States. The survey's results also show that little progress has been made as regards dissemination of knowledge on the number 112 among the citizens of the EU over the early years of its operation.

While in 2008, 22% of citizens of the Member States were aware of this number existence, in 2011 the level of civic knowledge rose to only 26%. However, by 2017 the awareness of the public has increased significantly. When asked about the knowledge of the emergency number functioning within the EU territory, almost half of respondents (49%) indicated the number 112. Nevertheless, these results are not satisfactory, because 39% of the respondents were not able to give the emergency number at all (European Commission Special Eurobarometer Report, *E-Communications and Digital Single Market*, UE 2018). Experts (emergency numbers coordinators) confirm this state of affairs. Unfortunately, most people do not know the emergency number, and if they have heard of it, they do not know how to use it.

The European Commission consistently calls on the Member States to increase their efforts to disseminate information concerning the number 112 among their citizens and to promote its usage. Ineffectiveness and negligence within the scope of functioning and usage of the emergency number 112 were reasons for the lawsuits filed by the European Commission against 14 Member States. As a result of the proceedings, these countries had to take reparation measures, making the full implementation of the EU standards in this area possible.

It is a difficult undertaking to ensure the proper functioning of 112 in all EU Member States. However, an organisation that contributes to improving the security thanks to the 112 emergency number on international level, has been established. European Emergency Number Association – EENA is a specific space for cooperation and learning for all entities involved in security creation.

2. Characteristics of the EENA platform

The idea behind the pan-European emergency number creation was to ensure that all citizens had access to help from the emergency services, regardless of the country where they currently stayed. This also gave rise to the need for a supranational body to support and synchronise these efforts.

The European Emergency Number Association (EENA) is tackling the problems faced by Member States in ensuring efficient emergency notification. It is a non-governmental organisation including more than 1500 representatives of emergency services from over 80 countries world-wide, 11 international organisations and more than 100 researchers.

The EENA's mission is to contribute to improving the security and safety of citizens. For this purpose, the EENA's works are concentrated on improving the emergency response services provided for citizens, mainly when using the pan-European emergency number 112.

The EENA constitutes a platform for searching practical solutions to the problems faced by the emergency services at local, regional and national level. It implements new technologies for efficient communication between emergency services and promotes the awareness of the emergency number 112 among Europeans.

The association operates on several levels of involvement, including conferences, workshops, working groups and online meetings. They address numerous areas of activities faced by emergency services. Nowadays, it is important to solve the problem of how to locate the caller who cannot explain where he or she is, and to effectively warn the public about local threats and crises. Although the location determination based on mobile phones has been available for nearly 10 years, one of the biggest challenge the emergency services are facing is still determination of the exact location of people in danger.

According to the experts (emergency numbers operators), determination of the victims' localization is currently the greatest difficulty that makes the immediate response impossible. The technologies being in use do not provide the exact location of the victim, and sometimes it also happens that the locations provided are false. This makes the work of emergency number operators very difficult. According to the experts (experts in crisis management), with regard to warning the public about the threats, many methods are used, but it depends on the solutions applied in different regions. The solution that is the most commonly used is media (television, radio, social media). The division into social groups is important in this case. Each group is reached in a different way. Thus, for example: as regards the youth, the social media are the most effective way of communication (e.g. Facebook, Instagram, chat), when for the elderly it would be radio and television. In smaller towns, more traditional solutions are used, which boil down to communicating information about the threat through the sound system installed in police cars. The Government Centre for Security has been sending warnings about bad weather conditions to all mobile phone users for some time now. In order to determine the exact location of the person who needs help and effective methods to warn about threats, the most effective solutions are constantly being sought. In the opinion of experts (the Police, the Fire Brigade, the Armed Forces of the Republic of Poland, voluntary services), the systemic solutions are needed, and they should be the same for all regions of the EU.

It should be noted that these issues are being tackled by many countries. Facing this type of problem, they are implementing a new technology which makes it possible to take full advantage of the 21st century opportunities.

Advanced Mobile Location (AML) has been developed in the United Kingdom as a solution when the caller is in the problematic location in emergency situations. When a person in danger calls the emergency services using a smartphone with AML enabled, the phone automatically activates its location service in order to determine the location and it sends the information to the emergency services via SMS (Annual Report 2018, 2019, p. 16.). The service uses GPS or Wi-Fi, whichever is better at the moment. It has been estimated that this technique is up to 4000 times more accurate than the previously used localisation system. AML is being implemented in the United Kingdom by a growing number of smartphone manufacturers and mobile operators. The accuracy of this solution is confirmed by statistics prepared in 2018, according to which almost $\frac{3}{4}$ of all emergency calls (73%) were made using a mobile phone (Implementation of the single European emergency number 112 – Results of the twelfth data-gathering round, 2019, p. 2.).

Currently, AML is fully implemented in Belgium, Estonia, Finland, Ireland, Lithuania, Malta, Slovenia and in the United Kingdom. The European Commission contributes to these results by funding the implementation of AML in Germany, Denmark, France, Croatia, Hungary, Portugal and Sweden, bringing the number of AML countries to fifteen. This service is also available in countries outside Europe, including New Zealand, the United Arab Emirates and the United States.

It is extremely important that the European Electronic Communications Code has ordered all the EU Member States to implement the AML by December 2020.

In addition, EENA's activities focus on helping more than 80 million disabled Europeans, for whom the current emergency notification system is not fully accessible, as it is mainly based on voice calls. According to the experts (emergency numbers operators, emergency services of the Tatra Volunteer Water Search and Rescue), the notifications from disabled people are qualified as the most difficult ones. That is because the system is not adapted

to their capabilities. EENA's works are aimed at integration of new technologies with the emergency services to pick up not only voice, but also information on localization, text provided in the real-time, photos, video calls and other digital data, to become part of the future.

A report drawn up in 2018 on the implementation of the European number 112 shows that 23 Member States have implemented alternative access to emergency services for disabled users via SMS. The reports from these countries point to certain problems following the implementation of this service. The main problem is one-way communication, which means that an SMS message can only be sent by a disabled person to the emergency number 112, and therefore, the operator of emergency numbers has no possibility to make a return contact. In other Member States, the disabled have no access to the emergency number at all, such as Poland, Italy and Spain, or the number is not available at any time of the day, e.g. the Czech Republic.

Another important element that has already been implemented throughout the European Union is the Pan-European in-vehicle emergency call system (eCall). This is a great step forward in the area of automatic emergency notification. The aim of this system is to improve safety and efficiency in road transport within the territory of the European Union. From 1 April 2018 any new car, in order to be authorised for use within the territory of the EU must be fitted with a module that detects road collisions and automatically calls for help to the scene of an emergency. The experts (emergency numbers operators, dispatchers of Emergency Ambulance Services) are cautious about this system. Some of them are of the opinion that the system heavily loads the Emergency Communication Centre, as collision results in an automatic call, even when it is not required.

Despite the implementation of new technologies for the purpose of improving the 112 service, EENA plays yet another, equally important role in the scope of the emergency notification. This platform enables the flow of information concerning the occurrence of an emergency situation between the countries throughout the European Union. According to the experts (emergency numbers operators), this function is extremely helpful. There are problems concerning coordination of the event involving neighbouring countries' services.

A special EENA's database is used to handle this type of notifications. The database ensures the exchange of information between the Rescue Notification Centres within the Community. Any citizen staying on the territory of the country covered by the European Emergency Number 112 Association, and who is in a life or health emergency, will receive direct help.

"The EENA has 19 Member States:

- Austria;
- Belgium;
- Bulgaria;
- Croatia;
- The Czech Republic;
- Estonia;
- Finland;
- Iceland;
- Ireland;
- Latvia;
- Lithuania;
- Luxembourg;

- The Netherlands;
- Poland;
- Romania;
- Slovakia;
- Sweden;
- The United Kingdom;
- Hungary" (<https://www.gov.pl/web/numer-alarmowy-112/eena-europejskie-stowarzyszenie-numeru-alarmowego-112> access on 02 July 2019).

By coordinating cooperation between emergency call centres from all Member States, the EENA plays another equally important role – it prepares reports on the activities of the emergency line, adding up the data received from each of the Member States.

However, the analysis of statistical data does not allow a clear indication of the level of public awareness of the use of emergency numbers, as data from individual Member States vary and fluctuate considerably.

3. The essence of education for Europeans

The European number 112 is an emergency number, available free-of-charge, which can be called to reach the police, fire brigade and ambulance services in all Member States of the European Union. The universal nature of this number is extremely important, especially when using the EU's freedom of movement of persons among Member States.

The information on the official EENA website shows that less than half of European citizens identify 112 as an emergency number anywhere in the EU, and 70% of them have not come across any information about the European emergency number 112 in their country. As the number of Europeans travelling to Member States increases, the awareness of the single European emergency number is now more necessary than ever. All experts (emergency number operators, experts from the Police, State and Voluntary Fire Brigades, Emergency Ambulance Service, the Tatra Volunteer Search and Rescue, Polish Armed Forces, scientists) are of the same opinion and notice large gaps in knowledge among the society about the functioning of the emergency number 112.

Education for safety should be a fundamental and lifelong learning process, from a very early age, when parents are the main teachers, to the adult life of an individual. According to experts (teachers in educational institutions), however, parents do not always realise that they are also responsible for the knowledge of education for safety and the functioning of the emergency number. Some of them also redirect the full educational responsibility in the field of safety to school facilities. This is a misconception, because the curriculum, e.g. in Poland, does not provide for some issues, while others are implemented to a very limited extent.

Education is one of the areas of life which is not subjected to uniformization. Each Member State is free to shape its own school and examination system. Education is not part of integration processes understood as the uniformization of legal regulations, which would impose the necessity of changes. This means that there is no single imposed model of education that is unitary across the whole European Union. Although the Member States are responsible for education and training systems, the European Union helps them to achieve a high-quality

education by exchanging good practice, setting goals and values, and providing funding and expertise. The EU's education and training strategy includes, inter alia, the following objectives:

- implementation of lifelong learning and learning mobility,
- promotion of equity, social cohesion and active citizenship.

Despite the full autonomy of the educational system, there are legal regulations that do not relate to the content of education, but to ensuring an equal access to education at all levels for the EU Member States' citizens.

Every child in primary school is familiarised with the emergency numbers – both the pan-European 112 emergency number and national emergency numbers (if any). Although this is only theoretical knowledge, it is sufficient for basic knowledge. It should also be noted that some experts believe, however, that the knowledge of emergency numbers should also be provided in a practical way. Adults are a completely different problem for education, as it is much more difficult to create an educational platform for them. As the research has shown, the oldest age groups have the least knowledge of emergency numbers (European Commission Special Euro barometer Report, E-Communications and Digital Single Market, 2018, p. 135.).

In 2018, calls directed to the 112 telephone number constituted 48% of all calls directed to emergency numbers. This is mainly because each country, when implementing the 112 telephone number, has had an influence on the form in which it will operate. In Denmark, Estonia, Finland, the Netherlands, Malta, Portugal, Romania and Sweden, the 112 telephone number is the only emergency number. Other countries use both the 112 telephone number and other national emergency numbers.

In Poland, emergency numbers were standardised a few decades ago and adopted the 9XY format – a.k.a. popular "nines" (Kucharczyk, Poznański, 2013, p. 18.). In other European countries, however, different emergency numbers were used. Therefore, it was at least difficult to call for help for people outside the borders of their own country.

However, regardless of the organisational structure of the 112 emergency number, the most important element in calling for help in each country is reliable and credible information about what has happened, where, how many people are affected and what services are needed to resolve the emergency (Lis, 2018, p. 93.). Therefore, it is extremely important to educate every citizen about what and how to report when calling the emergency number. It should be noted, however, that the lack of ability to communicate information about a threat is a priority and the adequate knowledge of how to react in situations that threaten human life, health, property and the environment should be possessed in order to minimise their effects.

A significant difficulty for both emergency number operators and emergency services is to determine the exact location of the person in need of help. It should be noted that all technologies implemented to clarify the place of the caller are of an ancillary nature, and the exact place must be indicated, if it is possible, by the person concerned himself/herself. It is therefore important to be able to describe one's own location because, according to reports from the UK medical service, when a caller gives their exact location, the call duration can be reduced by up to a few minutes (Technical Report Emergency Communications (EMTEL) <http://www.etsi.org/standards-search> access on 120 July 2019). According to experts (Tatra Volunteer Search and Rescue), the call duration can be reduced even more by the precise location given by the system, which automatically displays on computer screen during a telephone call. In this case, it is only important to provide information about an incident. In Poland,

the system that has been in operation for 5 years and which meets those requirements is the Ratunek [Rescue] application. However, it is used primarily in mountain areas. It has been also observed that Poland's neighbouring countries, such as the Slovak Republic, use a similar application working primarily in the mountains as well. It should be noted that this application can also be used throughout the country.

The surveys conducted in all Member States in 2017 have shown that the public awareness of the emergency number is increasing: more than six out of ten respondents (61%) would call 112 in their own country in the event of an emergency, whereas almost half of the respondents (49%) would call 112 anywhere in the E.U in the event of an emergency. Alas, 39% of citizens were unable to identify the emergency number at all (Implementation of the single European emergency number 112 – Results of the twelfth data-gathering round, 2019, p. 17-18).

Therefore, the EENA together with the European Parliament have launched a number of projects to raise public awareness of the 112 emergency number. One of these projects is a promotional campaign involving airlines and airports to raise awareness of the European emergency number among travellers. Airports and airlines have undertaken to display promotional materials, such as posters and banners, in key areas, including departure gates, information points and departure points at airports, in-flight magazines, websites and airline brochures. Similar campaigns have been applied to travel agencies and camping places (<https://eena.org/112-campaigns/>; accessed on 10 May 2019). It should be noted, however, that those efforts were largely directed at travellers, whereas the need to call for emergency services can affect anyone, regardless of age, gender or current accommodation.

Another way to promote the 112 telephone number was the creation of European 112 Day that is annually held on February 11 (11/2). Every year on that day, a number of initiatives are launched in all Member States to disseminate information on the 112 emergency number and, above all, to spread knowledge of its proper use. However, every effort should be made to raise public awareness of the use of the emergency number, not only on holidays, so that it will be used only in urgent situations that endanger life, health, property and the environment.

In conclusion, safety is important for all organisations (understood as states), including those that have a specific nature and, by their very nature, are called upon to ensure that their members are safe and have development opportunity (<https://eena.org/112-campaigns/>; accessed on: 10 May 2019). This will be possible, inter alia, by having knowledge about threats, how to handle them and where to seek help when needed. An effective response to alarm events depends not only on the knowledge, which country nationals should have, but also on technologies that assist to collect and transfer information. The success will depend on effective collaboration between the organisation's member and the systems or technologies that help save lives and health. A human being together with their knowledge and technologies should be thus treated as two separate organisms among which symbiosis must take place. Then it will be possible to talk about an increase in safety among the citizens of the European Union.

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FAKE NEWS - PHENOMENON, RESULTS, EDUCATION

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Methodology

The aim of the article was to present the phenomenon of fake news, its results and the possibilities of preventing it. An attempt was made to answer the research problem that took the form of the following questions: should fake news be treated as a new threat? What impact do they have on creating either positive or negative images of not only persons, but also phenomena? Theoretical and empirical research methods were used for preparing the article. Analysis, synthesis and inference of subject literature on safety, threats, information manipulation and education for safety have been conducted. The results of empirical studies in the form of interviews with experts, namely spokespeople, journalists and psychologists were also used.

Introduction

The increasing occurrence of threats in various domains of life and the risk of the emergence of new ones make people do what they can to care for their own safety (B. Kaczmarczyk, 2013, p.17). Several years ago heated discussions regarding the natural and human-caused threats were taking place (B. Kaczmarczyk, 2014, p.153).¹ Nowadays, we basically know what kind of response these threats require, so they should be classified as "known" or, simply speaking, "old" threats that occur relatively often. As Marian Kozub indicated in 1999, the discussion on threats should concern the future as it will be entirely different from what we imagine (P.F. Drucker, 1999, p. 67). In today's world his predictions have become facts, and in 2019 entirely different type of threats should be discussed. First and foremost, it should be assumed that the contemporary threats are different, and the answers to them are inadequate in terms of their nature and scale, and it can be, therefore, assumed, that the answer to the new threats will require new strategic way of thinking. As many theorists point out, we keep on reacting instead of preventing and acting pre-emptively; we act separately as individuals while the challenges are complex and complicated. Time period and the scope of our thinking about not only the future, but primarily about its safety are definitely too short and limited (M. Kozub, in Z. Piątek (ed.), 2006, pp. 12–13). This challenge can only be tackled through scientific exploration of security and risk issues, which, through values and adaptability possibilities linked inter alia to their fragmentation, will effectively address threats and thus ensure the highest possible level of security (B. Kaczmarczyk, 2014, p. 153) It should be pointed out that we are living in times in which manipulation and lie as well as lack of objective knowledge constitute an integral element of our existence. The users, who often create their own versions of the reality, are often the ones to determine what is true and what is not. One of the ways of communicating with the world is creating and distributing untrue information, known

as fake news. This phenomenon emerged in the 21st century, and, thanks to the modern technology, it spreads increasingly fast and is becoming easier and easier to be created. Never before have people had access to such amount of information, and never before have they been attacked with messages from various sources to such an extent. Thus, it is not surprising that organizations and citizens try to benefit from these opportunities.

Media in human life

By the word „*media*” we mean television, radio, press and the Internet. The media are becoming the phenomenon of a date of revolutionary importance (I. Wolska-Zogota, in W. Horyń (ed.), 2002, p. 321). They are itself a chance to reach all citizens, regardless of age. The media play an important role in shaping attitudes and views. They have a significant impact on social life (Z. Grzegorowski, 2013, p. 208).

Various organisations, enterprises and institutions interact with the citizens via media. The activity of all authorities who want to play a significant role in the contemporary world has to encompass cooperation with media which can help them create the desired image. Media also have the power to destroy it by publishing fake information, or information that is essentially true, but is presented in a non-objective way that evokes negative feelings in its recipients. Specialists are able to modify information in such a way that only selected pieces of it, aimed at evoking specific reactions, reach the audience (Z. Grzegorowski, 2013, p. 208).

In the contemporary information society every person can share their views via media - the Internet in particular. Thus, everyone can limitlessly create their own vision of reality which is not subject to any regulations.

The traditional mass media did not offer the opportunity to interactively react to the presented contents. The approach to information transfer changed with the development of modern technologies and popularisation of access to the Internet. Development of the Internet brought numerous benefits, but also generated various challenges and threats. Fake news, which often counterbalance boring facts, are a phenomenon that emerged when publishing information became possible for all Internet users. They lack trustworthiness which should by definition be a feature of information coming from journalists who were responsible for informing the rest of the society about what was happening around the globe.

Function of the media

Mass media serve a number of functions that are carried out as a contribution to the functioning of a given society. Their tasks are related to planned activity resulting from the set objective (A. Kozłowska, 2006, p. 68). This means that every media coverage is published in relation to a previously set objective that has a certain purpose (Figure 1).



Fig. 1 Media release pattern

Source: own elaboration.

One of the most important function of the media is information. Nowadays, media play an enormous role - also educational and opinion-forming - in human life (I. Wolska-Zogota, 2002, p. 321). They constitute a platform that makes it possible to hold a public debate (A. Kozłowska, 2006, p. 105). They are currently the main source from which Polish people acquire knowledge (<https://businessinsider.com.pl/media/skad-polacy-czerpia-informacje-telewizje-i-serwisy-internetowe-dzieli-przepasc/8qelfcy> accessed on 05 July 2018). Both Internet and television information services are the leading sources of information used by them. Media broadcasts also perform the cultural and entertainment function (A. Kozłowska, 2006, p. 69, 105).

Communications, in particular those that can be encountered online, are rarely verified by experts which significantly reduces their quality. As a result, untrustworthy messages coming from the media spread erroneous information among people, and reduce the knowledge of the entire society. This fact has been confirmed by experts (spokespeople) who believe that such actions are aimed at a specific goal, for example decreasing the awareness and knowledge of the society. At this point, one should ask why such information has been published online. What did the author or authors want to achieve by that?

It is a fact that, both in the past and in the present, problems have arisen regarding the distinction between reliable messages and journalistic manipulation or even propaganda and persuasion (I. Kamińska-Szmaj in P. Krzyżanowski (ed.), P. Nowak (ed.), 2004, p.13). Manipulation allows for a certain amount of insincerity in the information provided, while propaganda is based on psychological background. The purpose of the message is to direct the audience's thinking in the way intended by the author. Propaganda influences the recipient's mind and will. It stimulates concrete emotions in a completely deliberated manner (M. Lęgiędź-Gałuszka, in K. Kowalczyk (ed.), W. Wróblewski (ed.), 2006, p. 133).

Before the emergence of the Internet, the journalists used manipulation, abusing the press law and journalistic ethics rules. Currently, every human being can become some kind of a "journalist", i.e. a person who presents the information gathered himself/herself through the mass media. According to the experts (psychologists), this situation is quite dangerous as it gives full freedom to anonymous discrediting people. It is also important that people posting the fake news remains unpunished as a rule, thus they are acting with more courage.

The Internet as the most important medium of the present day

The hierarchy of the media's importance, which serves as the main source of knowledge for Poles, has been changing over the years (<https://businessinsider.com.pl/media/skad-polacy-czerpia-informacje-telewizje-i-serwisy-internetowe-dzieli-przepasc/8qelfcy> accessed on 05 July 2019). The so-called baby boomers generation (people born between 1946 and 1964) made use of press mainly, therefore the use of books in order to supplement their knowledge is natural for them. These people act as guardians and teachers of the younger generation, the so-called Generation X (born between 1965-1981), having a significant influence on them and preserving tradition of cultivating the knowledge acquired through printed materials. However, it was the television which developed intensively during the Generation's X youth which they put on the first place. The youngest generations, the so-called generations Y and Z, use mainly smartphones and computers with Internet access (<http://niezalezna.pl/220981-szokujacy-raport-to-pokolenie-jest-zawsze-online#dziekujemy> accessed on 01 July 2019) (Fig. 2).

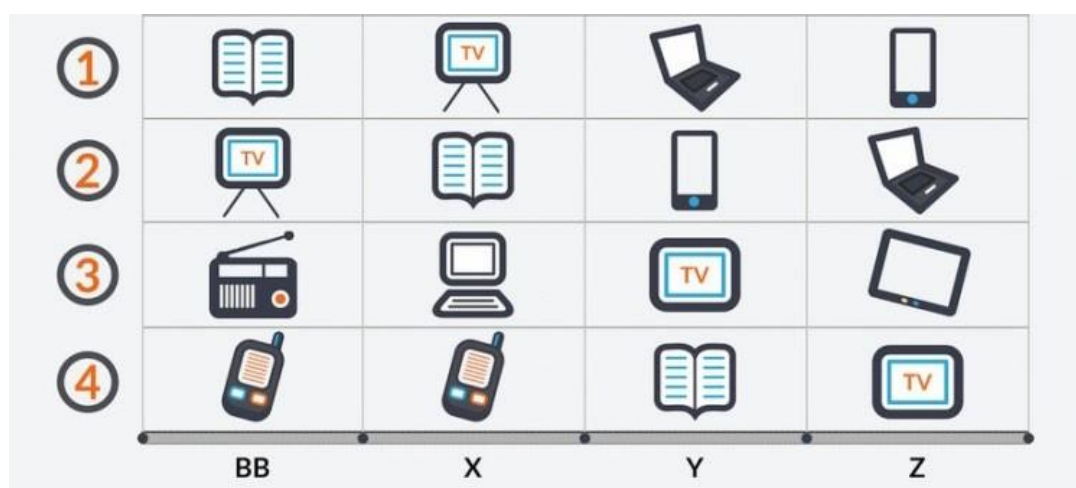


Fig. 2 Hierarchy of the media importance among different generations

Source: <http://niezalezna.pl/220981-szokujacy-raport-to-pokolenie-jest-zawsze-online#dziekujemy>; accessed on 01.06.2019.

Children and youth do not remember the world without the Internet. It is a natural platform for communication, entertainment and an inexhaustible source of information for them. Referring to the characteristics of the Internet, one can notice its significant advantage over traditional media. The Internet can be characterised by an unlimited reach and relatively low price. The interactivity of the transfer is crucial for the purpose of dissemination of messages on the network. A recipient who is allowed to participate in the transmission of information is more interested in the communication itself, and the multitude of these interested parties results in spreading the information exceptionally quickly (<https://mediaclick.pl/internet-jako-medium-komunikacyjne/> accessed on 03 July 2019).

Spreading of information in the network

Fake news

The lie in media has existed itself since the mass media was created, but the emergence of the term fake news dates back to 2016. It was then that BuzzFeed journalists were exposing an entity spreading fake news located in a small Macedonian town. More than 100 websites were registered there, disseminating false information related to the presidential elections in the United States. The authors of the texts, the headlines of which informed about Donald Trump's support for the Pope or the legal conviction of Hillary Clinton, were mainly teenagers. They earned money thanks to thousands of displays of the information. Macedonians quickly noticed that the best way to maximize the number of visits to the site is to publish links on social media, especially on Facebook. The current life of the idea of "fake news" was shaped in this way.

A survey conducted at the end of 2017 for the On Board Think Kong Group showed that as many as half of the Poles have dealt with fake news, within the six months period preceding the survey (<https://newsrm.tv/komunikat-pr/fake-news-polskim-internecie/> accessed on 03 July 2019). Among those in contact with the fake news, more than 14% disseminated this information without knowing it was false.

The fake news is a specific type of message broadcast in order to deceive the recipients or to harm individuals or institutions to whom the information relates. These messages are transmitted via media, currently mainly with usage of the network. The spectacular headline attracts the attention of a great number of people who want to participate in the process of spreading the interesting information. There are two variants of fake news. A complete news, in which false, factually contradictory information is provided, and such a news in which falsity depends on the point of view and interpretation.

Passing unverified information thoughtlessly leads to disinformation of the society, which is extremely confident in media (Fig. 3). According to the experts (psychologists), the public confidence in media is a result of lack of experience in the field of manipulation. It is relatively new phenomenon, and society is not aware of the game it is playing.



Fig. 3 Fake news features

Source: own elaboration base on <https://www.press.pl/magazyn-press/arttykul/55061,krotki-przewodnik-po-fake-newsach> accessed on 02.06.2019.

Fake news effects

The social media serve as one of the main sources of information for Internet users. Nowadays, any person can be a creator of reality by sharing various types of contents on social media channels. Simultaneously, popularity of this trend causes development of a negative phenomenon which is the fake news.

The false information is not a product of the times we live in. In principle, it has always accompanied people. However, currently they reach a very wide audience thanks to new technologies and communication methods. According to the experts (journalists), technologies have made it possible that today any person can destroy or promote the other. Access to data, networks, instant messengers is unlimited. The society also believes in "freedom of speech", it means that anyone can say anything without consequences. In fact, there are some defamation lawsuits, but it is a costly and lengthy process.

Activity in social media through the selection of specific content implies leaving specific data there. This information can be used to create a profile of a given person that contains general data, such as sex, age, race, education or profession, but also psychological data related to beliefs, personality or the level of intelligence. Such profiles can then become a tool for selecting recipients of fake contents published by bots. They automatically classify users as potentially interested in certain fake information.

The main reason for the popularity of social media as distributors of fake news is the fact that there are virtually no systems of quality and reliability control of the posted content.

For example, estimates show that 9 - 15 percent of Twitter accounts are automated. It is as many as 27-46 million accounts given the total number of 326 million users of this microblog (Status as at 11 June 2019). Twitter is a tool that is commonly used by journalists who can create a fictitious reality by promoting fake contents.

Since most social media users treat them as a reliable source of everyday information, it seems reasonable to teach people how to recognise bots on the Internet.

Because of the fact that fake news are growing in popularity, actions aimed at eliminating untrue information should be taken, for the consequences of its distribution may be severe. An example that confirms the above is the case of the American food industry giant who fell victim to fake news regarding Pepsi beverages being infected with HIV. This information caused the prices of their shares to drop, and it took months for them to become stable again, even after the information was confirmed to be untrue.

It has not been proven so far that fake news could have influenced the results of the US presidential elections of 2016 or the British referendum on leaving the European Union. However, there are numerous speculations on these issues. The phenomenon of their popularisation itself cannot be taken lightly, though. Burma, where fake news posted on Facebook were used to build up the hatred of the Buddhists towards the Muslim Rohingya minority, is a particularly dire example of it. It fostered ethnic cleansing that the Burmese army has been conducting for several years, in which several thousand Rohingya people were killed and several hundred thousand were forced to flee the country.

Social awareness and education

The phenomenon of fake news is relatively new, and not yet known sufficiently. The society is not always able to recognise such news, which is a challenge for education authorities. Currently, society considers fake news to be more of an oddity, an opportunity to make it big in the media, or play a prank on friends. There are even professional generators of fake news (Fig. 4).



Fig. 4 Fake news generator

Source: <http://dziennikbulwarowy.pl/> accessed on 04.06.2019.

Fake news should be detected more efficiently if they are to be fought. After such information has been located its influence should be skilfully managed, and it should be reported to the administrators of social media or Internet portals as "contested by an external fact verifier"

Automation of analytical processes is a tool that is used not only by the creators of fake news, but also by organisations responsible for battling the phenomenon. Artificial Intelligence detection systems are helpful in locating and eradicating fake news and bots responsible for their generation.

The administrators of social media should use the potential of analytical platforms and the machine learning technology in order to eliminate or block fake news-distributing bots. Analysis and detection of patterns contained in data as well as implementation of the machine learning methods enable identification of accounts that spread fake information. The systems analyse such data as frequency and the type of published contents, and then, using algorithms, they autonomously qualify accounts as either real or created for the purposes of distributing fake information.

The Internet users should also be cautious when it comes to selecting trustworthy information . Basic methods of filtering fictitious information consist in verification of author's credibility, control of content quality and verification of the quality of the information itself. References to other sources, citations and information whether the text has also been published on other websites are the details that should be verified.

Following these rules can minimise the risk of being manipulated by entities who want to create informational chaos in order to gain certain benefits.

The above issues should be considered in the context of education for security. Education has always been a priority. Along with skills it has been prerogatives of all citizens, which granted them additional rights. It is a continuation of activities that were undertaken in the past, and in Poland it is the successor of rules and principles of the knightly upbringing (the 10th - 15th century), preparation for defence (the 18th century), military training (the 20th century) and civil defence (the second half of the 20th century). Deliberations on education for security began in the 21st century (B. Kaczmarczyk, P. Dobrowolski, M. Dąbrowska, 2018, p. 137). Multiple threats are discussed as part of it. New, negative phenomena such as fake news should be incorporated in it, and people should be taught proper behaviours from the earliest years of their life. This way, the negative image of the phenomenon can be reduced.

Summary

Fake news are untruths, misrepresentations and overinterpretations, mostly political. People, who are sealed in "information bubbles", mostly receive information that fits their worldview. They become radicalised and begin to believe things that they want to believe. On the basis of demand breeding supply, the recipients are often provided with ever-new pieces of information which often have nothing to do with the truth.

The borderline between real and fake news has faded. It is caused by loss of trust in the biased media, which, in turn, engage in subtle fact interpretation and practical politics. The Internet has lowered the standards of publishing by participating in the race for speed and exclusivity. News that lack credibility and are far from facts have become an effective tool in the hands of various kinds of ideologists. It depends on us and the rules we follow whether fake news will serve their purpose or merely become useless information noise.

The spread of fake information on the Internet poses a problem. However, battle against this phenomenon must take place at the level of education and teaching critical thinking.

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FOR A PHENOMENOLOGICAL TEACHING

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ABSTRACT

This contribution is proposed to review the line of phenomenological-hermeneutical research as an approach to teaching, illustrating the conceptual assumptions and theoretical perspectives based on the models of analysis of the educational relationship. These models have been verified in a three-year project about fable of Action Research addressed to the teachers of the comprehensive San Cesario-San Donato di Lecce Institute. The hermeneutic work proposed by taking the steps of the training experience carried out by recollecting it in an original way, indicates to the reader "under what conditions something (in this case the educational event) happens, and thus brings the person (in this case The educator) in front of his possibilities, so that the event can happen, in the right way, and be accepted".

INTERSUBJECTIVITY IN THE EDUCATIONAL RELATIONSHIP¹

It is an essential attribute of conscious subjectivity that it can adopt different attitudes or approaches towards the world to express suitable ideas about given phenomena.

Husserl opposes subjectivism to objectivism (Husserl, 1976). He took great interest in the temporal character of conscious acts and the manner of temporality of the intentional objects of conscious acts. Subjects engage in the direct experience of the self-giveness of the object. Their participation lies in their intentionality. Intentional relations are the necessary condition of being in the worldly experience. Intentional acts are involved in the constitution of original transcendental, including the perception of natural objects (Husserl, 2001; Husserl, 2016).

We are not a *solus ipse*, we are only imaginable as surrounded by other humans. There is a relation between my perceptual interpretation, on the one hand, and interactions between the thing and its circumstances on the other hand.

Unlike the Cartesian approach, the world must be a teleologically universal world. There must be an intersubjective structure, we are asked to free ourselves from the notion of a single being, unless as a mere abstraction which we should get rid of (Camhy, 1986).

To understand intersubjectivity and its place in human experience, we should question ourselves about its intrinsic structure, that is perception, noema, noesis, protention, retention, transcendental reduction, subject, object and intersubjectivity.

Intersubjectivity is at the heart of consciousness. To demonstrate this, we could start from the philosophical attitude, radicalized by Descartes with his universal doubt. Following that line of reasoning, we could claim, 'I am consciousness'. All that is not my consciousness is transcendent, that is, as I am the only certainty, and to know what transcends me, I should 'open myself to the world'. If I were a "a monad without windows" I could not question myself on the world. That is the "*logos*", where acts and actions intertwine.

Thinking for Husserl is a form of experiencing. If a colour-blind person lived alone, he would claim that true colours are what he thinks they are, while only maintaining relationships with others gives us the possibility of adjusting our perspective to reach the most fulfilling one.

The world is basically a matter of acts in which objects appear to a consciousness, in its intersubjectivity. The world is to be intended as "objectively existent", as "*conscious acts*", that is the conscience of an entire community committed to intersubjectivity; "being in itself" has always been intersubjective (so much so that the 'I' could be other than itself, following a principle of "before" and "after"). Reason lies in "*interaction*" whereby interaction is not "empathy", that is the ability to share and understand the emotions of others; it is rather a movement towards someone else's position, a change of perspective, an interpretation of someone else's behaviour. Empathy is therefore a triad between I, the World and the Other, where knowing is always "knowledge of something", an adjustment to a world refers to a kind of unveiling of something that was there all the time but not explicitly present in consciousness.

Educators and learners "resound" in the same experience, in a space centred around "us", where "we" comes before "you"; perception and interpretation arise in this common space.

Therefore, given that the "I" is given knowledge of itself, as capable of experiencing from the inside and the outside, how can it be possible to experience Others as conscious beings, but without being able to experience them "from the inside". In other words: why are some bodies entitled to have a conscience?

A possible answer might derive from Kant's stance, the "I" could be entitled to have an 'a priori' category to which ascribe Others' experience. This categorization depends on the culture to which the 'I' belongs. Such an explanation

*Daniela De Leo, Unisalento.

suffers many limitations, as we would not know what a “man” really is, if it wasn’t for the culture of belonging. We could claim that a given man is a student, a doctor, a teacher and so on, but no definition would give a satisfactory explanation for him as a “man”, as “other”. The alter ego would be treated as a “sign”, changing the explanation according to the culture of origin.

In phenomenology, the transfer of meaning occurring through the process of pairing is a reciprocal transference; understanding the other, my own self-experience is also adapted, thereby suggesting that the mutual transfer happens at the same time.

This stratum anticipates and unites all possible historical variations of how we experience Others, and it plays a central role in phenomenology (Costa, 2015, Caputo, 2017). “Things” are subjected to “causality”, that is, the “I” is interested in those objects which “unveil”, when someone appears, and you intend it as something, the relation is not one of causation, but of “motivation,” and it is proper to speak about our purpose. Just because a subject’s awareness of another is prompted by motivation, it is not to be connected to a social connection, because society does not determine knowledge of Others, but the other way around, so much so that different society structures are characterized by different original relationships between one another.

To answer the question, “Why do we tie the “mind” to a material “body?””, Husserl suggests a sort of “mental experiment” to get to the core of someone’s else experience. This deep-structure of intentional consciousness comes to light in the course of what Husserl calls the “phenomenological reduction”, that is what is left to us when we get rid of our judgment of the natural world, of culture and society. It’s not about a “lack of intersubjectivity” – even the “I” can be other than self, according to a ‘before’ and an ‘after’ - it is rather the evidence of the crucial role of intersubjectivity, to allow for the *strata* in the life of the subject (Husserl 2016).

Husserl distinguishes between static and genetic elements of experience. Phenomenology of genesis then is the phenomenology of the original or primordial becoming in time.

Genetic phenomenology consists of a “backwards in time” route; it is not phenomenologically useful, because the task of phenomenology is to recover this life - world by uncovering the abstractive strata that have been laid over it, and which are grounded on *validity*, which is reduction to ownness. By static we understand and fulfil the need for a constitutive approach that is concerned with how something is given, the essential structures, the *primordial sphere*, where primordial means “necessary” rather than “before” everything. This *primordial sphere* “primordial reduction” – brings us in the presence of, or rather reduces the Self, in what concerns its relation to the world, to what Husserl calls the “primordial sphere”.

To find this primordial sphere, one should ask: “what kind of world would we live in if we were not able to conceive others as intentional as we are”; to understand this, we should deprive people of social objects, for example, banknotes. The meaning of a banknote is shared by the whole community. A subject unable to identify others bodily would see a paper and a signature, but we would think of it as a banknote, also because there would be no one to give it to. There are also “social feelings”, such as jealousy, hatred, envy, love. In the words of Ricoeur, ‘the solipsistic type of analysis is but a hyperbolic attempt which unveils the lack of meaningfulness of someone’s experience, deprived of their community and only related to one’s sphere of ownness’ (Ricoeur, 1975).

Such a lack of meaningfulness also means that we are not related to Others just because we live in a world of meanings. Autism is an example, as its most striking feature is social disconnection. People with autism know the purpose of a cup of coffee, but they cannot attribute any intentionality, so they do not know what a person might do with it. It is a cultural world deprived of people. We can be in this world without others, hence the criticism of Heidegger’s work, who claims “*being in the world is being with*”, while the ‘autistic’ example goes in the opposite direction. Culture affects us, but it is not the reason why we ascribe intentionality to Others.

If we were to imagine this primordial state, we would understand that we could not approach one another as an individual, as a person, because the idea of person itself is intersubjective. However, our *perception* would remain. Perception does not involve intersubjectivity, there is no collective intentionality, which is necessary to social understanding. Thanks to perception, the process of intersubjectivity begins with a bodily awareness. The perception of the body is not enough, though. Embodied intersubjectivity includes perceiving the same thing at the same time and an association of one’s body with that of the other, each assimilating the sense experience of the other as equivalent to their own. Husserl brings the alter ego into the sphere of one’s necessarily intersubjective experience of things (Husserl 2001, Kortoom, 2002).

Once we get to the visual perception of the body of the other, we can move from the input to the actual ascription of intentional states. What Husserl defines *passive intentional constitution*, that is striving to perceive Others, a *passive intentionality* because meaning is transferred onto the other in a purely passive manner. The Other is indirectly “appresented” to me through their material body, through a perceived physical likeness.

Body and behaviour are not enough to ascribe an intentional state to Others. The *apperceptive transposition* is possible when Others are ‘appresented’ because of an analogy with my own experience. My ascription of intentional states to another being already presupposes that we share a common environment. The Other’s body is apperceived as being aware of the same things as me.

Phenomenology has received Schutz’s view, the alter ego appears in a more immediate and direct manner than my own self experience, to understand the actions of others, their whys, meanings and motives, what others are up to (Costa, 2015).

Schutz’s position is acceptable yet comprehending the intended meaning of the other self would need a prior experience

of myself as a psychophysical unity, otherwise no comparison would be possible between the two entities.

On the importance of behaviour in the process of ascribing an intentional state to Others, phenomenology and behaviourism hold different views. On seeing someone acting, we also see a process of adjustment to the world, which is the evidence of their existence, and, if it wasn't for the body's differences, we would be tempted to ascribe an intentional mind even to animals. Furthermore, language is the added value capable of objectivizing and giving an understanding of human actions. Ryle, a behaviourist, claims that 'in making sense of what you say, in appreciating your jokes, in unmasking your chess-stratagems, in following your arguments and in hearing you pick holes in my arguments, I am not inferring to the workings of your mind, I am following them'. Ryle reduces the matter to the mere significance of gestures – as in autism – while Husserl considers the body in its totality, in its process of adjustment to the world, giving it logical reason, and not because, as Baron-Cohen would put it, 'we are readers of the mind by nature', capable of seeing intentionality in Others, but because the 'I' allows the content of the other's own intending to become manifest. Recent research on mirror neurons have shown that the vision of an action directly activates motor programmes for executing similar actions. Yet that is just a way to *decode actions*. The mirror neuron system responds to human and robotic actions, but that does not mean we can ascribe an intentional state to a robot, or the other way around, we can experience Others without the activation of the mirror neurons – even the chimpanzee, on the other hand, can activate mirror neurons. To experience Others we need three components, body, behaviour and meaning, otherwise History, culture and society would not exist. That is the neutral, residual state. If we were not able to ascribe each of these characteristics, we would fall in the autism category, as we would not be able to see Others the way we perceive them. In education, students actively construct their knowledge of the world through experience and interaction.

The educational setting should therefore be dynamic, as learning depends heavily on:

1. The students' inner resources
2. What goes by the name of Gallese's *intentional attunement*.

The concept of scaffolding is very similar to Vygotsky's notion of the *zone of proximal development*, and it's not uncommon for the terms to be used interchangeably. Scaffolding involves helpful, structured interaction between an adult and a child with the aim of helping the child achieve a specific goal, and so does Gallese's *intentional attunement* (Gallese, 2007).

There is a relationship between the sensory-motor system and cognition. For example, motor-related areas of the brain associated with piano playing are activated, and the same is true for classical ballet dancers; hence the tendency to process information through different motor-perceptive ways.

Therefore, educators need to:

- consider that infants and toddlers use their senses to take in stimuli from the environment and respond through reflexes and motor activity; for instance, in nursery school a child might perceive the noise of a dry autumn leaf, thus associating that noise to dryness;
- help sustain natural language development by providing environments full of language development opportunities and use a perceptive language, for example, the word 'football' could be associated with a physical activity;
- set the conditions to enhance the process whereby perceptual information becomes increasingly differentiated and specific to the things in the world and to what one can do with those things. For example, in a primary or secondary school lab, setting up a real lab in the classroom, telling learners why something is going to be done.

More to the point:

- draw on the concept of the *Zone of Proximal Development* and *intentional attunement*;
- use the metaphor as a cognitive tool to facilitate the connection between perception and external stimuli;
- give opportunities for role inversions instead of replication and direct imitation of cultural experience, as imitation means to reproduce the motor sequence of a given action;
- create a purposeful and coherent organization of experiences to help students achieve the desired intersubjective attitude towards relationships;
- metacommunicate, according to Bateson, that is shifting from what you are supposed to learn (understanding, level 1) to learning about how things occur, that is deutero-learning (level 2).
- Encourage students to share their thoughts to help them reach broader concepts and generalizations, benefiting from metaphors in the instructional process (De Leo, 2008).

THE FAIRYTALE TEXT FOR THE CONSTRUCTION OF THE EDUCATIONAL RELATIONSHIP²

The goal of the educator is to improve their pupils' competence, enable them to engage in the learning process, improve their skills and apply them in the work environment. As a result, "a learning process to teach" is necessary and this implies a new theoretical system, which satisfies the requirements of a model and the theory based on that model. Every position is grounded both upon epistemological principles and the practical features related to the analysis of a given "research and action" path.

² Gabriella Armenise, Unisalento.

Clearly, educational strategies should be based upon a direction which follows the relation between theory and practice, giving a pedagogical framework for the setting of training objectives, providing education for students and future teachers, and guiding them to a specific action to be accomplished in the professional environment. It is therefore necessary to create the ideological ‘subsoil’ for the “action research” (De Leo, 2016) and to set up an effective “architecture” incorporating concepts such as “learning to learn” and “learning to become” (De Carlo, 2012). The aim, in the broader context of the European Teacher (Augenti, Amatucci, 2013) is to rethink “the teacher’s professional development” (Molinari, 2013), using the experiences and emotions of professionals as resources (De Carlo, 2012).

In this sense, an effective teaching model should be designed to give pupils both the theoretical and the practical aspects, followed by a theory based upon that learning model. This teaching model can make use of whatever activity is aimed at a better understanding of “meaning” (Armenise, 2016; De Leo, 2016). This process brings the grounds closer to our “learning to know”, then gradually “learning to think” (Piccinno, 2016), not taking for granted what has already been presented. After all, each of us should be able to find a productive and effective way in the work environment.

The educator/teacher should try to deliver contents which focus on high ethical standards, and which are appropriate to the needs of the individuals and society. We should not forget that the success of education is up to us. There is a necessity to progress in education, which calls for a common ground across different cultures on the nature of teaching; teachers’ competences can be outlined in broad paradigms, such as cooperation, the teacher as a social agent, and professional education. We should focus on the promotion of educational models, defining skills and competences in professional practice. To be fully effective in teaching, and capable of adjusting to the evolving needs of learners in a world of rapid social, cultural, economic and technological change, teachers themselves need to reflect on their own learning requirements, competences and skills in the context of their school environment, following what is established by European standards. Teaching should adjust to the most recent European guidelines, with a view to strengthening skills related to citizenship, life, career, personal and social responsibility in modern European democracies. What is relevant for the educator in a hermeneutical perspective is to shape an effective educational relationship, with European guidelines always in the back of their minds. Indeed, cross-cultural views of teaching and learning seem to highlight the need for a systemic, context-bound perspective of teachers’ competence development and expertise. The relation between education, didactics and hermeneutics should be considered, shortening the distance between those disciplines, through an effective intercultural process. It would be a matter of openness to cultural development within the frame of an educational setting while participatory action research and action learning is a vehicle for the development of teachers’ intercultural competence.

The aim is to train teachers in an intercultural methodology using fables and fairy-tales as these have been proven to be an educational tool with great intercultural power in our multicultural society. When teaching methodology involves emotions, the result is effective, and the distance between pupil and educator is minimized, thanks to the fantastic world of stories. Through the wisdom of tradition, the teacher can focus on what the future holds, by having students choose to retell in writing one of the tales they have previously read or heard in their own words, focusing on the moral of the story.

When children learn about other cultural traditions, it broadens their view of their own world – they also learn to think critically about the lessons/morals of a variety of fables, supporting possible interest in future subjects. One need only think of the scientific, humanistic and artistic fields. Every text might appear simple, even banal, but these are wise stories infused with meaning and symbols which should be investigated further. For instance, the struggle between good and evil is a recurrent theme in fairy tales all around the world, in every step of life’s development, and in popular culture. Narrative is a useful approach towards enhancing student learning and engagement. Tools and knowledge are typically conveyed to young children through routine family life and social practices so that the children internalize the interpretations and gradually develop and reconstruct their own moral code. This gives them a better understanding of themselves, learning about their own needs and fears, following the path traced by enchantment and magic, but never losing touch with reality.

Once the educational activity has been established, we should focus on “learning to read”, recognizing the object of our analysis, and how individuals act (young and adults, perhaps already in the work environment, not necessarily in the field of education), in the ongoing frame of European lifelong learning (Dozza, Olivieri, 2016). It is in this context that the recipients of the learning process should be given the opportunity to challenge themselves, in full compliance with the criteria for analysis and suggested educational strategies for lifelong learning, devised following the lifelong education model, possibly in line with their personal experience. The entire educational process should be devised to help students and future teachers achieve the target, which is “learning to educate” (Agostinetto, 2013), and above all “learning to become” (De Carlo, 2012), thus working to promote activities of “education and self-education” and carrying out certification and competence assessment (formal, non-formal and informal).

A module of Creative Writing Literature for Children arises from the need to introduce students to specific issues about writing and reading of contemporary children’s fiction and to give them practical experience of writing for a wide age range of children and young people. The rationale underlying a Creative Writing module within a Childhood Literature course springs from the need to make children aware of the content of what they are reading - children learn and create their mother tongue not by sitting at their desks doing pencil and paper tasks in isolation from their peers, or drilling structures out of context, but by interacting with and manipulating language and by engaging in meaningful use, “creating writing” through “animation” (Rodia, 2011, p. 9).

Each module should be designed to develop students’ understanding of the major features of short stories, fables and fairy tales, their language skills, cultural awareness, critical thinking skills, creativity and a willingness to produce work collectively. Special attention should be given to the relationship between graphic sign and meaning inferred, and

to the preparatory stages which lead to the writing or rewriting of a concept. Subject and content are connected to meaningful reality within the recipient's experience, leading to "opportunities of meaning" then to "building new realms of thought" (De Leo, 2016).

Writing or rewriting fantasy stories should always happen in the light of contemporary views on teaching practice and communication with a child placed, play based approach. At the same time, the teacher is an active observer who gives support and stimulates the child to reach his highest developmental potential, given his visual perceptual skills and what is recommended in textbooks. This is a less conformist and less binding methodological approach which, should occasion rise, can be revisited.

This "re-evaluation" needs to follow a different coordination of gestures, thought and visual perceptions. Step-by-step activities might be helpful, characterized by "writing and fantasizing" (Rodia, 2011). To give some examples, through composition and re-composition games, the student can freely compose sentences corresponding to the teacher's input using key words – which should be recognized – and/or text insertion questions – pupils are given an example sentence and must choose the best place to put the sentence in the reading passage.

In a Creative Writing workshop at academic level, students develop their creative writing skills, including in-depth understanding of structure, style, genre, etc. as well as feedback skills. The module also gives students the chance to lead a creative writing workshop for children, as individuals or in a group. Those targets could be summarized as follows: 1) learning to handle documentary sources; 2) understanding research tools and methodologies in the field; 3) improving the learner/teacher relationship. In the later part of the course, which concerns creative writing workshops with children, students will develop skills related to the teaching of creative writing. The academic dimension of the section, completely integrated throughout, helps them develop communication, research and essay-writing skills as well as methodical and critical abilities.

More specifically, in the workshop activities, and under the guidance of the trainer, students will try and choose a list of situations which stimulate their imagination. Students will try and create a set of sentences to start from (e.g.: The boy was waiting to be rescued; The wolf was struck by the prince's spear; The old lady was helped by her granddaughter, and so on). Then they can break the sentences down trying to detect the subject, the action, the characters, the moods.

Pupils might create a pack of cards to combine and invent new stories, then offer the activity to their classmates – some pictures related to a character, others to a situation. Students might also choose to express characters and actions through symbols. This is a more complex task, but it is necessary to work on symbols, their meanings and their negotiation (AA. VV., 2016). Pupils combine different themes taken at random, creating new stories to tell, so that children are involved creatively, and able to invent new stories again. This final procedural step results in effective performance by creatively involving groups of children in a classroom, inventing and rewriting stories from classic fairy tales. The writing teacher sets about the business of gradually developing the children's repertoire as writers.

The educator should submit step-by-step activities and drills, to encourage pupils to approach the world of imagination – reading stories, for instance. Moreover, pupils should be helped to understand the conventional image of the sign, which needs to be creatively "re-written", always with a different technique, in the light of ongoing cultural and social transformations.

An approach to the fantastic dimension should always start with the delivery of initial contents, and "alternative routes" should offer changes and transformations, always considering the educational profiles and the interests of the pupils. To facilitate the task, participants are sometimes asked to take part in working groups specially designed by the educator. As far as contents are concerned, some practical examples are as follows: 1) epistemology of creative writing; 2) production of a narrative text (but also a fable or a fairy tale), starting from given elements and making possible changes within the space of "creative writing" in the light of Rodari's theory of the fantastic, that is the combination "Me and the fairy tales"; 3) the production of textbooks through addition and subtraction; 4) the production of a text as a consequence of different stories intertwined; 5) the production of texts taking into account the different points of view; 6) the production of a text changing the original style and using figures of speech; 7) the production of joint or collective texts; 8) writing new stories, drawing inspiration from "misleading historical background"; 9) writing a realistic story; 10) writing stories about a dream, a memory, an intuition (Rodia, 2011).

Classrooms should be "activity-based", keeping in mind the possible development of new competences – latent or manifest - using best practices in the classroom while positively impacting students by providing motivation to learn and promoting success in a global world. It is a matter of devising an experimental "open system" which is highly structured and builds competences, rewriting content, which might reveal other, unprecedented dimensions (De Carlo, 2012; De Leo, 2016).

Teaching methods should foster deep approaches to study by encouraging students to take personal initiative in the performance of their task. The learning environment should encourage experimentation, as children need to be well motivated, to enhance theory and critical thinking skills. It is a matter of devising a substrate of fixed competencies focusing on the educational paths that foster or expand intellectual skills. It is necessary to understand what knowledge is about – it is a patchwork (a set) made of many pieces (the processes) characterized by different strategies, and which help the individual relate to the different "educational paths".

Learning Programs in Italy are currently focused on acquiring skills and competences. Since 1985, The new curriculum has started to consider the plurality which characterizes human knowledge, and the different paths to follow. Pluralism is one of the greatest challenges in education. We should consider that the current educational syllabus is affected by social transformations and global cultural changes, as well as by information technology, a falling birth rate, and a much longer

educational pathway, starting at the age of three and ending at University. It is of course important that pupils develop various types of thinking, e.g. mathematical, musical, scientific, historical, while teachers are asked to present the learning contents of reality in a different style. A cross-disciplinary approach between different subjects becomes important. The Italian educational pathway, characterized by a core curriculum which considers educational action and encompasses the three levels (from three to fourteen, covering pre-school, primary school and high school) simplifies the transition between different levels of education. Physical and psychosocial growth during early childhood during this formative phase of life needs teachers open to dialogue and discussion, ready to provide effective research tools to encourage mutual listening and the open, constructive exchange of ideas, essential for continual improvement. Hence the importance of workshops devoted to reading fairy tales and fables, created with the intention of promoting reading as a sheer “personal pleasure”, while educators and pupils, leave their social role aside to become mere individuals and recognize literature’s intrinsic “value in use” (Bruno, 2018, pp. 34-36). In line with the government’s policy, schools should be inspired and guided by a welcoming dialogue, toward a specific goal, namely promoting young people’s autonomy, identity and active citizenship (Bruno, 2018, p. 36; Tonelli, 2013, p. 87). Fables can effectively motivate students to learn both in pre-schools and in primary school. Therefore, the logical consequence is promoting training courses on fables and fairy tales for teachers (AA. VV. 1980; AA. VV. 1986; Rodia, 2012).

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İLETİŞİM ÖLÇEĞİ: ÖZEL YETENEKLİ ÖĞRENCİLERDE PİLOT UYGULAMA ÇALIŞMASI

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ÖZET

Bu araştırmanın amacı Susan Barkman ve Krisanna Machtmes tarafından 2002 yılında geliştirilen İletişim Ölçeğini Türkçeye uyarlayarak özel yetenekli öğrencilere uygulamaktır. Kişilerarası iletişim becerilerini geliştirmeye yönelik çalışmaların az sayıda olması ve özel yetenekli öğrencilerin iletişim sorunlarını çözmeye yönelik doğrudan bir yaklaşımın olmaması çalışmanın önemini arttırmaktadır. Özel yetenekli öğrencilerin kişilerarası iletişim becerileri tespit edildikten sonra bu sonuca göre iletişim becerilerini destekleyici programlar uygulanarak öğrencilerin iletişim becerilerinin geliştirilmesi hedeflenmektedir. Bu çalışma sayesinde özel yetenekli öğrencilerin iletişimi becerilerini tespit etmeye yönelik bir ölçek uyarlaması yapılacaktır. Araştırmanın nicel kısmı 13 ve 18 yaşları arasında bulunan toplam 102 özel yetenekli öğrenciler üzerinde uygulanmıştır. 23 maddeden oluşan 6 boyutlu model doğrulayıcı faktör analizinde uyumlu bulunmuştur. Çalışma sonucunda ölçek güvenilir ve geçerli bulunmuştur.

Anahtar Kelimeler: iletişim, ölçek, özel yetenekli öğrenci

GİRİŞ

Özel yetenekli öğrenciler akademik bağlamda yaşlarına göre üstün performans göstermektedir (Renzulli, 1986). Akademik bilgi düzeyleri yüksek olmalarına rağmen iletişim becerilerinin yüksek olmadığına dair önemli çalışmalar mevcuttur (Clark, 1997; Diezmann & Watters, 1995). Akranlarına göre daha duyarlı ve mükemmeliyetçi olmaları kişilerarası iletişimi de sorun haline getirebilmektedir (Hewitt & Flett, 1991; Downey & Feldman, 1996). Kişilerarası sorunlar yetişkin veya öğretmenlere karşı değil, hırslı yapıda olmaları nedeni ile daha çok kendi akranlarına karşı olduğu ve bu akranları ile fikir alışverişlerinde bulunmadıkları ayrıca öğretmenlerinin bu konuda onlara yardımcı olmaları için bir takım çözüm önerileri getirmeleri gerektiği belirtilmiştir (Sonntag, 1973). Özel yetenekli çocuklar genellikle akranlarına karşı belirli bir mesafede uzak kalmayı tercih etmekte; iletişime dayalı eksiklikler ve sorunlar yaşamaktadır (Lewis, 1999; Buescher, 1985).

Akranları arasında yabancı gibi algılanmalarının yanı sıra yapılan bir araştırmaya göre %20-25 oranında özel yetenekli bireylerin sosyal ve duygusal zorluklar yaşadıkları tespit edilmiştir. Buna bağlı olarak akranları ve öğretmenleri ile olan iletişim sorunları da artmakta ve sosyal dışlanmışlık ve yalnızlık gibi sorunlar ile karşı karşıya kalmaktadırlar (Janos, 1985).

Özel yeteneğe sahip çocuklar kendilerini daha az sosyal ve popüler gördükleri için sosyal aktivitelere katılma ve arkadaşlık kurma konusunda sorunlar yaşamaktadır (Dauber & Benow, 1990). Fazla duyarlı olmaları bu çocukların başkaları tarafından sorun çıkartan ve uyumsuz kimseler olarak adlandırılmalarına sebep olmaktadır (Freeman, 1979).

Sosyal soruların dışında alan yazın incelendiğinde zekâ bakımından üstünler eğitiminde kişilerarası iletişim becerilerine yönelik sözel olmayan ve nicel yeteneğe dayalı az sayıda çalışmaların olduğu tespit edilmiştir. Yapılan çalışmalar özel yetenekli öğrencilerin akademik becerilerinin kişiler arası iletişime pek de fazla katkıda bulunmadığını göstermektedir (Lewis, 1999). Ayrıca alan yazın incelendiğinde özel yetenekli öğrenciler için kişilerarası iletişime dayalı çalışmaların yetersizliği ve kişilerarası iletişim becerileri envanterinin bulunmaması ciddi eksiler olarak karşımıza çıkmaktadır.

Dolayısıyla yapılan araştırmalar göre ve alan yazın da incelendiğinde bu araştırmanın temel sorunu kişilerarası iletişim sorunu yaşayan özel yetenekli öğrencilerin bu sorunlarının çözümü için destekleyici bir program modelinin oluşturulması ile program modelinin işlevsellik boyutunun ne düzeyde olduğu ile ilgilidir. Özel yetenekli öğrencilerin ergenlik yaşlarında bilgi düzeyleri arttıkça kişilerarası iletişim sorunları da artmaktadır. Zekâ seviyelerine göre iletişim sorunları da değişmektedir (Freeman, 1979; Silverman, 1998). Zekâ bakımından üstünler eğitiminde kişilerarası iletişim becerilerine yönelik sözel olmayan ve nicel yeteneğe dayalı az sayıda alan yazını olduğu tespit edilmiştir. Özel yetenekli öğrencilerin akademik becerilerinin kişiler arası iletişime çok fazla katkıda bulunmadığını belirten çalışmalar vardır (Lewis, 1999). Bu açıdan ele alındığında kişilerarası iletişim becerilerini geliştirmeye yönelik çalışmaların azlığı ve özel yetenekli öğrencilerin sahip oldukları sorunları çözmeye yönelik doğrudan bir yaklaşımın olmaması, öğrencilerin kişilerarası iletişim becerilerini geliştirmesine yönelik destekleyici programlara ihtiyaçları olduğunu göstermektedir.

Bu araştırmanın amacı özel yetenekli öğrencilerin kişilerarası iletişim becerilerini destekleyici program modeli oluşturarak kişilerarası iletişim sorunu yaşayan öğrencilerin sorunlarını ortadan kaldırmaya yöneliktir. Buna yönelik öncelikli olarak özel yetenekli öğrencilere pilot uygulama çalışması uygulanmaktadır.

BULGULAR

Araştırma

Çalışma Grubu

Ölçek pilot çalışması yaşları 13 ile 18 arasında olan toplam 102 özel yetenekli öğrenci üzerinde uygulanmıştır. Araştırma kapsamında örneklemin 42'si (%41,2) kadın, 60'ı (%58,8) erkek öğrenciden oluşmaktadır. Örnekleme yer alan öğrencilerin; 84 'ü (%82,4) 13-15; 18 'i (%17,6) 16-18 yaşlarındadır. 78 kişi, 7-9 (%76,5) sınıf düzeyinde iken; 24 kişi, 10-12 (%23,5) sınıf düzeyindedir.

İletişim Ölçeği

23 maddeden ve 6 alt boyuttan oluşan İletişim Ölçeği (Barkman & Macthmes, 2002), derecelendirmesi 5'li likert üzerinden yapılmaktadır. Ölçeğin alt boyutları : “kişinin kendi iletişim tarzı bilinci”, “farklı iletişim tarzlarını anlama ve değerlendirme”, “empati kurabilme”, “başkalarının tarzlarıyla eşleşecek şekilde kendi iletişim tarzlarını

ayarlama (iletişimsel uyarlanabilirlik)", "temel bilgilerin iletilmesi" ve "etkileşim yönetimi" olarak nitelenmektedir.

23 maddeden oluşan ölçekte puan değerleri 0 ile 92 arasında değişmektedir. Puanların yüksek olması iletişim becerilerinin de yüksek olduğu anlamını taşımaktadır. İletişim becerilerine yönelik alan yazın incelendiğinde İletişim ölçeğinin kullanıldığı araştırmalarda güvenilirlik kat sayılarının kabul edilebilir bir düzeyde olduğu ve gençlerin iletişim becerilerini ölçmek için yaş seviyesine göre en uygun ölçme aracı olarak görüldüğü tespit edilmiştir (Duerden vd.,2010). Güvenilirlik katsayısı 0,80 olarak elde edilmiştir. Fakat standartlar 0,50'den 0,90'a aracın kullanım amacı ve içeriğine göre farklılık göstermektedir. Ölçeğin ölçmek istediğini elde etme derecesine göre geçerlilik değişmektedir. İç tutarlılık sayısı 0,79 olarak hesaplanmıştır. Orijinal ölçekte yapılan çalışmalarda iki faktörün de iç tutarlılığın yüksek olduğu tespit edilmiştir. 102 özel yetenekli öğrenciye uygulanan pilot uygulama çalışması sonucunda iletişim ölçeğinin güvenilirliği .88 bulunmuştur.

İletişim Becerileri Ölçeğinin Türkçeye Çevirisi

Uyarlama aşamasında Krisanna Machtmes ile dijital ortamda iletişim kurulmuştur. Yaşları 13-18 aralığında olan özel yetenekli öğrencilerin iletişim becerilerini ölçmeye yönelik pilot çalışma için iletişim ölçeğinin Türkçeye uyarlanması konusunda gerekli izinler alınmıştır. Anadili Türkçe olan katılımcılarda kullanılabilmesi için bağımsız çevirmenler tarafından orijinal dili İngilizce olan ölçek Türkçeye çevrilmiştir. Çevirmenler tarafından dört farklı çeviri yapılmıştır. Bunlar özel eğitim alanında Bilim ve Sanat Merkezinde görev yapan iki uzman ile İletişim Bilimlerinde görev yapan iki öğretim elemanı olarak çalışmaktadır.

Sonraki aşamada ölçeğin Türkçe versiyonu beş İngilizce öğretmeni tarafından İngilizceye çevrilmiştir. Ölçek maddeleri Türkçeden İngilizceye ve İngilizceden Türkçeye çevrilerek karşılaştırılmıştır. Bir sonraki aşamada ise ölçek maddelerinin anlaşılabilirliğini test etmek amacı ile ölçek Bilim ve Sanat Merkezinde öğrenim gören 102 öğrenciye pilot uygulama şeklinde test edilmiştir. Öğrencilerin anlayamadıkları sorular dikkate alınarak anlaşılabilir bir biçimde tekrar düzenlenmiştir. En son aşamada ölçeğin güvenilirlik ve geçerlilik çalışması yapılarak ölçek hazır hale getirilmiştir.

Madde Analizi ve Güvenilirlik

Ölçeğin madde ayırcılığını belirlemek için yapılan analiz sonucunda, düzeltilmiş korelasyon katsayılarının .07 ile .60 aralığında değiştiği bulunmuştur. Tablo 1'de analiz sonucu yer almaktadır.

Tablo 1. İletişim Ölçeği Maddelerinin Korelasyon Puanları

Madde No	<i>r_{jx}</i>	Madde No	<i>r_{jx}</i>	Madde No	<i>r_{jx}</i>
1	.41	9	.44	17	.50
2	.59	10	.49	18	.43
3	.59	11	.44	19	.59
4	.41	12	.58	20	.39
5	.50	13	.57	21	.46
6	.57	14	.87	22	.46
7	.37	15	.60	23	.27
8	.38	16	.07		

Ölçeğin tamamı için Cronbach's (α) katsayısı .88 olarak bulunmuştur.

SONUÇ VE TARTIŞMA

Bu çalışmada, 2002 yılında geliştirilen İletişim Ölçeğinin Türkçeye uyarlanması ve ölçek maddeleri temel alınarak hazırlanan nicel sorular kapsamında özel yetenekli öğrencilerin iletişim becerilerini ifade etmelerine yönelik görüşlerinin alınması amaçlanmıştır. Alan yazında yapılan taramalar iletişim becerilerinin zekâ seviyelerine göre farklılık gösterebildiği bu nedenle özel yetenekli öğrencilerde zihinsel işlevin bir göstergesi olarak iletişim becerilerinin ölçülmesi gerektiği anlaşılmaktadır.

Alan yazın incelendiğinde özel yetenekli öğrencilerin dil yapıları ile ilgili olarak erken yaşlarda konuşabildikleri ortaya çıkarılmıştır. Ancak özel yetenekli öğrencilerde dilin farklı yapısı ile ilgili çalışmalar Lewis (1999) tarafından gerçekleştirilmiştir. Lewis, özel yetenekli çocukların dil yapılarını pragmatik bir bakış açısı ile ele almıştır. Çeşitli analiz seviyeleri ile bu çocukların dil kullarımlarına yer vermiştir.

Lewis (1999) kendi çalışmasında *özel yetenekli öğrencilerin pragmatik dil kullarımlarını* üç seviyede analiz etmiştir. Bunlar:

- İletişimsel Niyet
- Varsayım
- Söylem Organizasyonu

İletişimsel niyet, varsayım ve söylem organizasyonu etkileşim meydana geldiğinde buldukları *ortama* göre şekillenmektedir. Üç farklı okul aktiviteleri ile öğrenciler 45 dakikalık video kayıtları altına alınmıştır.

Lewis, özel yetenekli öğrenciler üzerinde yaptığı çalışma sonucunda analiz düzeyinin odak noktasının konuşmacının iletişimsel niyetleri ve bu niyetlerin dinleyici üzerindeki etkilerini ortaya çıkarmıştır. Özel yetenekli öğrencilerin ileri düzeyde pragmatik dil kullarımlarına sahip oldukları sonucuna ulaşmıştır. Ancak araştırmanın sonuçlarına göre; akademik çevrede özel yetenekli öğrenciler ileri düzeyde pragmatik dil kullarımları göstermesine rağmen, sosyal bağlamda tam olarak bu öğrencilerin pragmatik becerilerinden söz etmek mümkün değildir. Lewis özgün araştırmaları sayesinde özel yetenekli çocukların dil kullanımı ile ilgili ihtiyaç analizi yaparak program geliştirilebileceğini öngörmektedir.

Ritchie (1981) tarafından Purdue Üniversitesi'nde yapılan çalışmada ise zekâ bakımından özel yetenekli çocuklar ile normal çocuklar arasında kişilerarası duyarlılık seviyeleri üzerine inceleme yapılmıştır. Araştırmanın amacı zekâ bakımından 10 yaşında bulunan özel yetenekli çocukları ile 10 yaşında bulunan normal çocukları arasında ve 12 yaşında bulunan özel yetenekli çocuklar ile 12 yaşında bulunan normal çocuklar arasındaki kişilerarası duyarlılık seviyeleri arasında önemli farklılıkların olup olmadığını belirlemektir. 5 boyutta 30 maddelik ölçek belirtilen yaş gruplarındaki çocuklara uygulanmıştır.

Araştırma sonucunda Ritchie, 10 ve 12 yaş grupları arasında kişilerarası duyarlılık seviyelerinde ciddi farkların olmadığını ortaya çıkarmıştır. Sadece 10 yaş grubunda bulunan özel yetenekli çocukların normal çocuklara göre duyarlılık düzeylerinin biraz daha fazla olduğu görülmüştür. Ritchie, akademik açıdan yüksek zekâ düzeyine sahip olan özel yetenekli çocukların kişilerarası duyarlılıklarının da yüksek olacağı anlamına gelmediğini ifade etmiştir.

Perham (2012) tarafından Arizona Üniversitesi'nde gerçekleştirilen araştırmada özel yetenekli öğrencilerin grup içi iletişim beceri farklılıkları tespit edilmeye çalışılmıştır. Veri toplama aracı olarak kullanılan DESSA (The Devereux Student Strengths Assessment) 8 alt boyuttan ve 72 maddeden oluşmaktadır. Beşli likert ölçeğine göre sorular oluşturulmuştur. Ölçeğin iç tutarlılık düzeyi .89 ile .94 arasında değişmektedir. Test-tekrar test ile elde edilen güvenilirlik kat sayısı ise .79 ile .94 arasında farklılık göstermektedir. 60 puanın üzerinde bulunan öğrenciler yüksek, 40 ve bunun altında kalan öğrenciler ise geliştirilmeye ihtiyaç duyulan kategoriye alınmıştır. Öğrencilerin kişilerarası iletişim becerileri ile zeka düzeyleri; korelasyon ve faktör analizi tespit edilmiştir.

Perham tarafından elde edilen verilere göre kişilerarası iletişim becerilerinin zekâ seviyesi, yaş ve cinsiyet ile bağlantılı olduğu sonucuna ulaşılmıştır. Kız öğrencilerin kişilerarası iletişim becerilerinin çok daha yüksek olduğu ortaya çıkarılmıştır. Ayrıca sayısal yeteneği olan özel yetenekli öğrencilerin sözel yeteneği olan öğrencilere göre iletişim becerilerinin daha yüksek olduğu tespit edilmiştir. Özel yetenekli öğrencilerin iletişim becerilerinin çeşitli eğitimler ile geliştirilebileceği öngörülmüştür.

Barkman ve Macchmes (2002) yaptıkları çalışmada 12-18 yaşları arasında ergenlerin iletişim becerilerini ölçmeye çalışmıştır. Güvenilirlik kat sayısı .8 olarak bulunmuştur. Fakat standartlar .5'ten .9'a araç için amaçlanan kullanım ve içeriğe göre değişebildiği belirtilmiştir. İç tutarlılık sayısı ise .79 olarak bulunmuştur. Pilot çalışmamız sonucunda güvenilirlik kat sayısının .88 olarak bulunması ise özel yetenekli öğrencilerin iletişim becerilerini ölçmek için ölçme aracının uygun olduğunu göstermektedir.

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İletişim Ölçeği

1.	Herhangi bir kişi ile konuşurken göz teması kurmaya çalışırım.
2.	Söylemeye çalıştığım şeyi beden dilim ile ifade ederim.
3.	Söylemek istediğim şeyi pekiştirmek için beden dilimi kullanırım.
4.	Söylemeye çalıştıkları şeyi pekiştirmek için insanların ellerini kullandıklarını fark ederim.
5.	Ne söylemeye çalıştığımı göstermek için ellerimi kullanırım.
6.	Ne söylemeye çalıştıklarını anlamama yardımcı olması için insanların vücut dilini izlemeye çalışırım.
7.	Kendi söyleyeceğimi düşünmeye başlamadan önce karşımdakinin sözünü bitirmesini beklerim.
8.	Diğer insanların sözlerini kesmeden onları dinlerim.
9.	Bir insanın beni sadece dinlediği fakat söylediklerimi anlamak için kulak vermediği zamanı bilirim.
10.	Cevap vermeden önce kişinin ne söylediğini anladığımdan emin olurum.
11.	Başkalarının ne söylediğini anladığımdan emin olmak için onların söylediklerini yeniden ifade ederim.
12.	Arkadaşlarımla neler yaşadıklarını anladığımı bilmeleri için kendi tecrübelerimi kullanırım.
13.	Birini dinlerken ne hissettiğini anlamaya çalışırım.
14.	Başkalarının bakış açısını anlamaya çalışırım.
15.	İki kişi aynı şeyi farklı şekillerde söylemeye çalıştıkları zaman bunu fark ederim.
16.	Konuşma tarzımı iletişim kurduğum kişiye göre ayarlarım (arkadaş, ebeveyn, öğretmen vb.)
17.	Beni anlamasına yardımcı olmak için karşımdakinin benimle nasıl konuştuğuna bağlı olarak konuşma biçimimi değiştiririm.
18.	Söylemeye çalıştığım şeyi pekiştirmek için ses tonumu kullanırım.
19.	Derdimi anlatmak benim için kolaydır.
20.	İnsanlar hiç durmadan konuştuklarında sohbeti yeniden yönlendirmenin yollarını bulurum.
21.	Sadece ses tonuna tepki vermek yerine karşımdakinin söylediklerine cevap vermeye çalışırım.
22.	Konuşmadan önce kafamda birtakım düşünceler kurarım.
23.	Birisi sinirlendiğinde sakinleşmesine yardımcı olmak için ses tonumu değiştiririm.

IMPACTS OF INDUSTRY 4.0 ON EDUCATION AND JOB SKILLS OF FUTURE

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ABSTRACT

Considering the huge and rapid impacts of industry 4.0 on 21st century's individuals' life in all areas, each building blocks composing the society must be carefully analyzed and planned including formal and informal institutions/organizations, government and specifically the educational system with its' dynamics. With the enormous and rapid technological steps into new age, reshaping all the ways we live today is unavoidable. This will not wait too long since the concept of "future" would be spelled in next ten years in light of those stunning developments in technology. Nowadays nobody is sure about the consequences of the developments in technologies such as artificial intelligence, wearable technologies, robotics, big data, learner analysis, genetic engineering, neurotechnology, etc. Regarding the manpower of future, considerations for the skills and knowledge that will differ from today's requirements is essential for the preparation of next generations who could maintain their life. Starting to think about possible new job types and to make plans for such job skills is vital. This study aims to explore and discuss on various impacts of industry 4.0 for educational systems and to take care important issues for the planning of educational programs/curriculum for next (in light of demand for future knowledge and skills that individuals are expected to be denoted with). As one of the most important technological innovations of our age that will have serious impacts on future world, robotics and robotics education are among the top hot topics in educational phenomenon. The applications of robotics in enhancing students' higher order skills through worldwide including Turkey are increasingly using in educational settings. In scope of this study the finger prints for the effective integration of robotic education programs in schools will also be discussed in light of present applications of robotics.

INSTAGRAM AS AN EDUCATION PLATFORM FOR EFL LEARNERS

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ABSTRACT

Social media platforms have gained an exceptional popularity especially in the last ten years and become an important part of human lives. Among the popular social media platforms, Instagram is used by millions of people every day especially by the young adults. Given this significance, social media platforms have been used for educational purposes, too. Thus, this study aimed at exploring university students' opinions about Instagram as an educational platform with respect to educational and language learning purposes and its effect on students' language learning process supplementary to formal classes. Using mixed methodology, 219 university students learning English were included in the survey, and 80 students took part in the experimental part of the study which was designed to explore the impact of Instagram on students' language learning process. Six students from the experimental group were also interviewed for their opinions about the Instagram use during the experimental part of the study. Carrying out quantitative and qualitative analyses, the findings show that Instagram is the most frequently used social media platform among the participants and they favor using it for educational and language learning purposes. Additionally, it was found that Instagram had a positive impact on students' language learning based on the achievement scores. Thus, it is concluded that Instagram can be used to enhance learning of English supplementary to formal teaching by exposing the students to language while they are using this platform as part of their every day practices.

INVESTIGATION OF LIFE SATISFACTION OF UNIVERSITY STUDENTS ACCORDING TO VARIOUS VARIABLES

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ABSTRACT

Life Satisfaction is an important element of an individual's sense of well-being in general. University students have problems with life satisfaction from time to time. University years are a period in which students try their adult roles, prepare for working life and idealize their values more. The aim of this study is to examine the life satisfaction levels of university students according to gender, class, place of residence, income level, number of siblings, education level of parents and whether or not parents are alive. The research was carried out with 550 students in Kyrgyzstan-Turkey Manas University's various faculties of the ongoing 229 male, 321 female and in 2017-2018 academic year. To determine the level of life satisfaction of students developed by Diener, Emmons, Laresen and Griffin (1985) in order to The Life Satisfaction Scale adapted to Turkish by Köker (1985) and the Personal Information Form developed by the researcher were used to obtain information about independent variables. According to the results of the research, life satisfaction levels of university students vary according to income levels and place variables. Results in accordance with the findings and recommendations were made.

Keywords: Life Satisfaction, Shelter, Satisfaction Areas, University Student

INTRODUCTION

Satisfaction with Life is an important element of the individual's well-being in general. One of the sections of society where life satisfaction is important, reflecting the perception and evaluations of the individual's life, is university students. University years are a period in which students try their adult roles, prepare for working life and more idealize the values of their lives.

Throughout history, how many people find their lives meaningful about how to get satisfaction in life on this issue, many philosophers, in recent history has revealed many views on the subject of psychology. The concept of life satisfaction was first introduced by Neugarten in 1961 and later led to many researches. The concept of satisfaction in life satisfaction; expectations, requirements, requests and wishes are met (Özer and Karabulut, 2003: 72).

Life satisfaction is the result obtained from the comparison of what one wants and what he / she gets in life according to Neugarten (Onur, 1997: 368). Diener, Emmons, Larsen, and Griffin (1985); They defined life satisfaction as a positive evaluation of an individual's whole life in accordance with the criteria determined by an individual. According to Pavot and Diener (1993), life satisfaction is the cognitive component of subjective well-being, and it is the appraisal of one's life as a result of comparisons between the individual's perception of living conditions and the criteria he imposes on himself (cited in: Chechen, 2007: 181).

In 1973, psychology thesis abstracts were used in the same sense with happiness for life satisfaction; In 1974, the majority of articles subject to subjective well-being a Social Indicators Research 'magazine was published. In this research, subjective well-being was used in the same sense as life satisfaction (Özer, p.28,2001).

When life satisfaction is said, it should be understood that satisfaction is not related to a certain situation, but overall satisfaction in all life (Vara, 1999; Avşaroğlu et al., 2005). Life satisfaction is the emotional response or attitude of a person to his / her life in work, leisure and other time periods (Köker, 1991).

Life satisfaction includes individuals' lives and all aspects of their lives. Happiness, morale and so on. expresses the state of being good from different angles such as (Neugarten et al., 1961). Life satisfaction is one of the most important factors affecting the individual's mental health and social relations.

The concepts of subjective well-being and life satisfaction have been stated by many scientists and researchers as the main goals of life. Subjective well-being is very much related to how an individual evaluates his / her life. It has been shown that the harmony or incompatibility between the goals of the individual and the extent to which he / she can achieve these goals is a determining factor in achieving happiness (Rask et al., 2002).

The concept of subjective well-being consists of two main elements: the first element describes the cognitive aspect and the second element describes the emotional aspect. Dorahy et al. In their study in 2000, they suggested that cognitive element determines the perception of life satisfaction. In addition, Rask et al., 2002, the emotional element includes positive and negative affect states. Subjective well-being is a positive evaluation of one's life. Buddha positive affect, satisfaction, dedication, attachment and meaning of life together (Diener and Seligman 2004).

There are many theories that suggest that subjective well-being is the result of comparisons between some standards and real conditions. If the actual situation exceeds the established standard, happiness will occur. Given satisfaction, such comparisons can be made consciously. However, in the case of emotions, the comparison of standards with emotions is made unconscious or subconscious. Judicial theories determine what kind of events are positive or negative; they can foresee the amount of emotion that events will reveal (Şahin, 2008: 24). Accordingly, the difference between the conditions in the individual's life and the evaluation of these conditions by the individual is important. The standards used by the individual in judicial theories are important. In these comparisons, satisfaction occurs according to what the individual feels from the individual he / she compares. Such social comparisons affect mental health (Köker, 1991: 85).

Subjective well-being studies include how and why people evaluate their personal lives as positive. These studies include concepts such as life satisfaction, positive emotions, happiness and morale (Özgen, 2012). In general, many ways to improve the quality of life and satisfaction with life have been investigated. Developments in the field of medicine, occupations such as meditation, technological inventions used in daily life can increase the happiness of people, and make them feel better (Sarıcaoğlu, 2011). Life satisfaction, which constitutes the cognitive part of subjective well-being, shows the general satisfaction of the individual towards his / her own life. Life satisfaction, which covers the whole of an individual's life, is the result of comparing the actual situation with its expectations. In other words, life satisfaction is obtained as a result of the comparison of what one wants and what they have (Özgen, 2012).

The more one feels the deprivation of a requirement and the harder it works to satisfy it, the happier the moment it satisfies it. Thus, the deprivation and pain initially created by a need leads to a sense of ownership and pleasure later created by the need. Today, individuals are faced with a life full of challenges that make themselves felt in every field. These strains can disrupt the psychological balance of the individual, revealing the energy necessary for the continuation of life on the one hand, while leaving the individual helpless, vulnerable and weak with a paradox that can destroy all energy.

Life satisfaction generally includes the whole life of a person and all aspects of this life. It is also defined as change such as happiness and morale (Koçoğlu, 2006). Life satisfaction is defined as the satisfaction that an individual receives in his or her life (Özdevecioğlu, 2003). According to Diener (1984), life satisfaction includes satisfaction from life, desire to change life, satisfaction from the past, satisfaction from the future, and the views of that person's relatives about that person. Satisfaction areas can be work, family, leisure, health, money, self and close environment. In this context, the concept of life satisfaction is one of the most important goals in the life of the individual, and it is also of great interest to researchers.

The number of studies related to satisfaction in the field of psychology has increased significantly in recent years. Studies examining the importance and satisfaction of human life are indispensable for psychology. It is to give meaning to the life of individuals, which makes life satisfaction come to the forefront. Life satisfaction is defined as the positive evaluation of an individual's whole life in accordance with the criteria determined by him / her. Life satisfaction is seen as the cognitive component of subjective well-being and includes comparisons between the criteria imposed on the individual and his / her perception of living conditions, and thus his / her appraisal about his / her own life. (Dingiltepe2009).

When life satisfaction is mentioned, it should be understood that the satisfaction of a certain situation is not the satisfaction of the whole life in general. Life satisfaction is the emotional response or attitude of a person to life in work, leisure and other time periods. Life satisfaction includes individuals' lives and all aspects of their lives. Happiness, morale, satisfaction, etc. expresses the state of being good from different angles such as. Life satisfaction is one of the most important factors that affect the mental health and social relations of the individual (Aydmer 2011).

When life satisfaction is said, it is not satisfaction about a particular situation, but satisfaction in all experiences in general. Happiness, morale and so on. expresses the state of being good in various aspects such as (Vara, 1999; Ozer and Karabulut, 2003). In daily relationships, positive emotions dominate negative emotions (Aksaray, Yildiz and Ergun, 1998).

Life satisfaction is defined as the positive evaluation of an individual's whole life in accordance with the criteria determined by an individual (Diener, Emmons, Larsen and Griffin, 1985; Veenhoven, 1996).

Life satisfaction is the cognitive component of subjective well-being and includes comparisons between the criteria imposed on the individual and his / her perception of living conditions, and thus his / her appraisal about his / her life (Deniz, 2006; Pavot & Diener, 1993).

The importance of subjective well-being shows that it is directly related to individual and social value systems as it increases deep, meaningful relationships and productivity, quality of life and creates positive effects on psychological and physical health. Diener (1984), who is a name in the nursing home in the relationship between physical activity and life satisfaction of the elderly examined the findings obtained; revealed a strong relationship with health life satisfaction. Research has shown that subjective well-being is determined by many factors such as life goals, personality traits, income level, and obstacles in life (Rask et al. 2002).

Life satisfaction, which encompasses the whole of life, is an important indicator of how a person is in mental health. Various obstacles, difficulties, conflicts and sudden negative changes that may occur in life may cause a decrease in the level of life satisfaction (Demirel & Canat, 2004: 6).

If a person expresses satisfaction with his / her life, he / she often experiences positive emotions and rarely negative emotions, and we can say that his / her subjective well-being level is high (Diener and Lucas 1999).

Experimental findings indicate that individuals with high levels of subjective well-being exhibit less symptoms of mental discomfort, function more positively in the social environment, have stronger interpersonal relationships, an optimal health-oriented lifestyle, and a more harmonious temperament, as well as cognitive styles that provide more personal development. (Diener 1984, 1994, 2000; Diener, Suh, Lucas and Smith 1999; Lyubomirsky, Sheldon and Schkade 2005; Pressman and Cohen 2005).

Many variables including experiential, psychological, cognitive, motivational, personality-related, cultural, contextual, and demographic factors can be associated with subjective well-being (Argyle 1999; DeNeve and Cooper 1998; Diener 1984, 1994; Diener et al. 1999).

According to Shmotkin (2005), subjective well-being forms offer alternative ways of adapting to changes, deficiencies in personal resources and threatening living conditions. High subjective well-being is the determinant of an individual's optimal functioning (Keyes 2005; Ryan and Deci 2001) and is considered an important individual and social goal (Diener 2000; Seligman 2000).

Veenhoven (1996) defines life satisfaction as the degree of positive development of the whole quality of life as a whole, while the determinants of life satisfaction are changes in life (quality of society, place in society, personal abilities), course of life events, experience (function of pleasure experience, love). It also refers to the relationship between the satisfaction of life and the satisfaction of life, the inner production of emotions, the capacity of enjoyment, the inner progress of development (calculating or inferring, the meanings at the basis of emotions, the differences in the development of the living space and the whole).

Life satisfaction is defined as the positive evaluation of an individual's whole life in accordance with the criteria determined by an individual. Studies on life satisfaction show that gender, race, and income have almost no effect on predicting life satisfaction and happiness, and that psychological variables, for example, personal tendencies, close relationships, and culture have more impact on explaining life satisfaction. (Chechen, 2008) .

It is frequently stated that individuals who share the opinion that life is a meaning and direction are individuals with optimal life satisfaction. Life satisfaction, defined in a very simple and clear way, does not seem to be such an easily understandable concept. As a result, one's happiness is an event involving all areas of life. Accordingly, employees will generally be satisfied, or they will not be satisfied in the whole of life. Thus, it is not possible to distinguish the satisfaction from work from life satisfaction, which includes all of the living spaces (Keser, 2005).

Life satisfaction assesses how satisfied people are with their lives in general. The scale does not measure satisfaction for certain living areas such as financial status, health or success, but it allows them to think about all these areas in general and to sort and respond to their own way of life (Güler, Emeç, 2006).

Satisfaction, fulfillment of people's expectations, needs, desires and desires or hunger in the organism, thirst sexuality and so on. basic biological needs, such as curiosity, love, proximity, success, and so on. It is defined as the restoration of the balance state as a result of the elimination of spiritual needs. Life satisfaction is defined as the positive evaluation of an individual's whole life in accordance with the criteria determined by an individual. In other words, life satisfaction is a result of comparing people's expectations with their real situations. Life satisfaction includes individuals' lives and all aspects of their lives. Life satisfaction does not mean the satisfaction of individuals regarding a certain situation, a certain process, but the satisfaction of all their lives in general. Life satisfaction is related to age, gender, working and working conditions, education level, religion, race income level, marriage and family life, social life, personality traits, environment, biological factors (Dilmaç, Ekşi.2001).

There are also writers who do not believe in the concept of life satisfaction and think that one will never experience satisfaction in his life. Schopenhaur (2010) also supports this view, which describes that every desire spreads in many new desires, but states that satisfaction can only be achieved by going beyond all desires.

Satisfaction is the fulfillment of expectations, requirements, wishes and wishes. "Satisfaction with life" is the situation or result obtained by comparing a person's expectations (what he wants) to what he has (what he has). In other words, it expresses the result of comparing one's expectations with the real situation (Özer, Karabulut and Özsoy, 2003).

As a study of subjects from seventeen different countries showed (Diener, 2000), the vast majority of university students place more emphasis on life satisfaction and happiness than money. Some researches indicate that university students with high life satisfaction take more responsibility for their different roles, that they have more satisfaction in romantic relationships, school and family areas, less stress (Bailey and Miller, 1998) and less emotional loneliness (Chechen, 2007). show that they live. In some other studies conducted on university students, there is a positive relationship between life satisfaction and self-esteem (Yetim, 2003); life satisfaction was negatively related to depression, hopelessness, state and trait anxiety (Gündoğar et al., 2007). Therefore, it can be said that the increase in life satisfaction in university students plays a significant role in the realization of positive psychological health.

In this theory, a person's typical thoughts about the future affect their life and thus their subjective well-being. According to this theory, optimism is a tendency that a person has generalized to expect positive results in his or

her life. If a person expects positive results, he / she works for his / her goals. However, if one expects failure, he does not make an effort to achieve his goals (Cha, 2003).

Various research results indicate that subjective well-being and optimism have a positive relationship. Aydın and Tezer (1991) found that as optimism increases, general health status of individuals improves and optimistic students are more successful in academic field.

In some studies examining the life satisfaction of university students, the level of life satisfaction of girls is significantly higher than that of boys when the general life satisfaction is examined by gender. (Uz Baş, 2011; Tuzgöl Dost, 2007) or did not change according to gender (Bailey and Miller, 1998; Gündoğar et al., 2007; Tümkaya, 2011; Zullig, Huebner and Pun, 2009) were obtained. These findings, in Turkey Koker's (1991) findings of his research on adolescents and Cenkseven and Akbas (2007) is in line with the findings of university students. Most studies on different age groups indicate that there is no significant relationship between life satisfaction and gender (Fugl-Meyer, Melin and Fugl-Meyer, 2002; Hampton and Marshall, 2000; Hintikka, 2001; Katja, Paivi, Marja-Terttu and Pekka, 2002). According to Diener (1984), biosocial variables such as gender and age are among the factors that affect subjective well-being, but Diener and Diener (1996) suggest that socio-economic status has relatively stronger relationships with subjective well-being by age and The strongest socio-structural Pamukkale University Faculty of Education Magazine Year 2007 (2) 22. Issue 140 predictors income.

Organizations such as the Pew Foundation and the World Value Survey monitor data on life satisfaction in many countries and are used to develop social policies. When the data obtained are examined, it is noteworthy that these data generally include developed societies with high welfare level. There is not enough data about life satisfaction in African countries and other developing countries (Gündoğar, Gül, Demirci, Uskun, 2007).

As we have seen, it is very difficult to define life satisfaction with the help of various scales, because life is already wide enough to cover everything. In order to get rid of this confusion, it is preferred to measure life satisfaction with the help of global life satisfaction questions. However, many studies aim to define the element structure of life satisfaction by examining the effects of variables such as being married, self-confidence, control area, age, gender, and health on life satisfaction. (Dikmen, 1995).

Life Satisfaction; Life satisfaction is defined as the positive evaluation of an individual's whole life in accordance with the criteria determined by an individual (Diener, Emmons, Larsen and Griffin, 1985).

Subjective well-being is often used instead of life satisfaction. However, subjective well-being is a concept with a wider content including life satisfaction. Subjective well-being criteria include life satisfaction (Keser, 2003: 122). Subjective well-being constitutes the cognitive part of the concept of life satisfaction, the person's perceptions of living conditions and their own criteria to compare the value of life includes the appraisal (Deniz, 2006; Selçukoğlu, 2001).

According to the orphan, subjective well-being includes the meaning of an individual's evaluation of his / her life from a point of view. Evaluating the life of the individual; their reactions and judgments constitute the subjective well-being of the individual. There are three dimensions to the individual's self-assessment. However, it has been suggested that they will be classified in a general dimension related to each other. These are positive emotion, negative emotion and life satisfaction. The pleasures, joys and pleasant emotions experienced in the positive emotion dimension; In the negative emotion dimension, it was determined that the lack of unpleasant, bad and painful emotions was important for goodness. Life satisfaction includes cognitive judgments and evaluations related to general life (Yetim, 2001: 135-138).

While life satisfaction is based on the recent and direct events of the individual, in other words, while trying to determine how satisfying the life he is living in, happiness is handled in relation to future actions. Thus, the concept of life satisfaction is a more concrete concept than the concept of happiness. The concept of happiness is always expected to reach a certain goal in the form of a result (Keser, 2003: 124).

As a result, the concept of life satisfaction can be confused with other concepts to be fully defined along with its elements. Therefore, in our study, we will try to define the concept of life satisfaction on the basis of general life satisfaction, not on the basis of the scale, but on the basis of the individual's positions of life with different roles (work, home hayab, leisure etc.).

METHOD

Method of research

In this study, descriptive research methods were selected. General screening models are scanning arrangements made on a whole, a group, sample or sample to be taken from the universe in order to reach a general judgment about the universe in a universe consisting of many elements (Karasar, 2010; 79). Relational survey model, literature survey, descriptive method, survey technique, analysis, synthesis and comparison method were used. SPSS 16.00 package program was used in the analysis of the data obtained by the survey technique.

Population and sample of the research

The study population in the 2016-2017 academic year, Kyrgyzstan-Turkey Manas University, 550 students constitute ongoing in various faculties. In addition, the class status of the students was taken into consideration in the sample selection and the preparatory class was included. The students who form the sample of the research were randomly selected from the classes on the day of the survey and disproportionately selected by easy sampling method.

Table 1. Working Group Frequency and Percentages

Faculty	Frequency	Percent
Literature	142	25,8
Communication	107	19,5
Economy	114	20,7
Fine Arts	62	11,3
Science	83	15,1
Other	42	7,6
Gender		
Girl	321	58,4
Male	229	41,6
Class		
Preparatory class	95	17,3
First class	118	21,5
Second class	108	19,6
Third Class	104	18,9
FourthClass	125	22,7
Location		
I'm living with my family	193	35,1
I live in the dorms	167	30,4
I live at home with friends	114	20,7
Other	76	13,8
Income		
Less than 10000 Som	119	21,6
Between 10-15 Thousand Som	141	25,6
Between 15-20 Thousand Som	135	24,5
More Than 20 Thousand Som	155	28,2
Number of siblings		
No sister	30	5,5
1 Brother	55	10,0
2 siblings	105	19,1

3 Brothers	144	26,2
Brother 4 and up	216	39,3
Mother Education		
Primary school	32	5,8
Middle School	63	11,5
High school	167	30,4
University	288	52,4
Father Education		
Primary school	30	5,5
Middle School	63	11,5
High school	164	29,8
University	293	53,3
Parents Right Status		
Mother Father Right	442	80,4
No parents	2	,4
Mother Right Father None	43	7,8
Father Right Mother None	16	2,9
Parents Separated Divorced	47	8,5

According to Table 1: The percentage of 142 students in the Faculty of Literature is 25.8, the percentage of 107 students in the Faculty of Communication is 19.5, the percentage of 114 students in the Faculty of Economics is 20.7, the percentage of 62 students in the Faculty of Fine Arts is 11.3, the percentage of 83 students in the Faculty of Science is 15.1, the percentage of 42 students in other faculties is 7.6. According to gender: 321 percent of female students 58.4, male students 229 percent 41.6, According to class: 95 percent of students in preparatory class 17.3, 118 percent of first class students 21.5, 108 percent of second class students 19.6, third class 104 students 18.9 percent, fourth grade 125 students 22.7 percent, based on where I live: with my family 193 percent of students 35.1, staying in dormitories 167 percent of students 30.4, living with friends at home 114 percent of students 20.7, other 76 percent of students 13.8, Family income level: Less than 10000 som 119 percent of students 21.6, 10- Percentage of 141 students from 15 thousand som 25.6, Percentage of students from 15-20 thousand som 24.5, Percentage of students from more than 20 thousand som 155 28.2, Number of siblings: no siblings 30 percent of students 5.5, one brother 55 students 10.0 percent, two siblings 105 the percentage of students is 19.1, the percentage of three brothers is 144, the percentage of students is 26.2 39.3, Mother education level: 32 percent of primary school students 5.8, secondary school 63 percent of students 11.5, high school 167 percent of students 30.4, university 288 percent of students 52.4, Father education level: 30 percent of primary school students 5.5, 11.5 percent of secondary school 63 students, high school 164 student percentage 29.8, university 293 student percentage 53.3, according to parental right status: parent right 442 student percentage 80.4, no parent 2 student percentage .4, no parent right student 43 student percentage 7.8, no parent right mother 16 student the percentage of 2.9, the divorce of the parents divorced 47 percent of 8.5 students.

IMPORTANCE OF RESEARCH

Spiritual well-being of university students is of particular importance to society. According to Moller (1996), the future prosperity of a nation depends on the well-being of students. In particular, the interest shown to the situation of students with leadership personality is an investment for the future of the country. Life satisfaction is one of the concepts that have taken place in our lives since the existence of humanity. Life satisfaction is the cognitive component of subjective well-being and includes appraisal of an individual's life. Factors that make life worth living have been the subject of curiosity since ancient times and it is stated that the real source of a life worth living is that the individual is satisfied with his life.

Problem Sentence

In recent years, there has been an increase in students' research on the concept of life satisfaction. Life satisfaction is a positive evaluation of an individual's whole life in accordance with the criteria determined by him / her. Life satisfaction is defined as the general cognitive evaluations of the individual about whether he / she is satisfied with his / her own life or in terms of certain living areas such as family, friends and living environment. Accordingly, individuals with high levels of subjective well-being have more life satisfaction and positive emotions are experienced more than negative emotions. What the meaning given to the lives of university students is a problem that the research seeks answers. Quality of life satisfaction is an important issue for university students as in all age groups. It is inevitable that there will be a change in the quality of life of young people who move away from their homes and families and start living in another environment for university education. Most of the students who win the university earn a school in a city different from where they live. This requires students to adapt to a new life and leads to significant changes in the lives of many young people and bio psychosocial problems. Life satisfaction is one of the most important determinants of the general sense of well-being and quality of life and includes the judgment of quality of life and well-being based on the qualities of the individual. In other words, it is a cognitive assessment based on individual's judgment of his / her own life according to various criteria. Life satisfaction includes various aspects of life in general; age, gender, health, work life, economic situation, education level, place of residence, social support and environmental conditions. The most important and first problem faced by students in university life is the "housing" problem. The majority of university students stay at home or in a dormitory during their education, apart from their families. Dormitories are usually large buildings with a large number of students and are generally preferred by most students in that they are close to the campus, provide a more relaxed environment than the home, and offer the opportunity to socialize with students. However, the increasing number of universities, increasing the student capacity and inadequate student dormitory capacities in recent years increase the academic and social problems of university students along with the housing problem. The most viable alternative to a dormitory for students is renting a house with one or more friends. Leaving home and family that they are accustomed to, changing the living environment and starting living together with people they do not know are important changes that may affect the physical, mental and social lives of students. Living in suitable environments, having adequate conditions and meeting the physical, mental and social needs of the students will increase their life satisfaction. Leaving home and family that they are accustomed to, changing the living environment and starting living together with people they do not know are important changes that may affect the physical, mental and social lives of students. Living in suitable environments, having adequate conditions and meeting the physical, mental and social needs of the students will increase their life satisfaction. Do university students have a statistically significant difference according to their place of residence and sub-dimensions, according to their gender, class level, faculty, family income level?

Sub Problems

Kyrgyzstan-Turkey Manas University student of life satisfaction:

Does it vary according to the place of residence, gender, class level, family income level, number of siblings, parental education status, whether the parents are alive or not, and the faculty they study?

limitations

The sample of the study is limited to KTMU students studying in the 2016-2017 academic year. The Satisfaction Scale of Life Satisfaction Scale .

Data collection tool

Two data collection tools were used in this study. Life Satisfaction Scale was developed by Diener, Emmons, Laresen and Griffin (1985); Adaptation to Turkish was performed by Köker (1991). The scale consists of five items related to life satisfaction. Each item is answered according to a 7-graded response system (1: not at all suitable - 7: very appropriate). The scale, which aims to measure general life satisfaction, is suitable for all ages from adolescents to adults. The translation of the scale into Turkish and the validity study of the scale with the

“superficial validity” technique was conducted by Köker (1991). The data on the independent variables of the study were obtained by the Personal Information Form prepared by the researcher.

Data Collection and Analysis

The data obtained from the study were analyzed using SPSS (Statistical Package for Social Sciences) Windows 16.0 program. Descriptive statistical methods (number, percentage, mean, standard deviation, one-way analysis of variance and LSD) were used to evaluate the data. Life satisfaction scale is normally distributed.

Reliability / Validity of the Scale

The students (n = 550); The mean score of the scale was 23.81, the standard deviation was 7.12, and the internal consistency of the scale. 84 and item-total correlation of items was found to range between .57 and .64. Validity: The Confirmatory Factor Analysis revealed that the scale consisted of one factor and the fit indices were sufficient. The Confirmatory Factor Analysis, which includes multiple group comparisons, showed that the theoretical structure of the scale was the same (constant) for each sample. Simultaneous validity and discriminant validity of the scale were observed to be sufficient. There was a significant relationship between total score and life satisfaction, and variables of similar structures (eg self-esteem, positive mood, etc.). In terms of discriminant validity, the relationship between life satisfaction and the desire to self-censor with a structure different from life satisfaction is meaningless. The scale includes a metric metric that changes from "(1) I strongly disagree to" (7) I completely agree. The scale can be applied to all individuals over the age of 16 years. The scores obtained from the scale vary between 7 and 35. As the score obtained from the scale increases, life satisfaction increases.

Life Satisfaction Scale

Diener, Griffin, Larsen and Emmons (1985) was developed to determine the satisfaction of life. The scale consists of 5 items. Each of the five items has 7 different answer options. Each item is scored between 1 and 7 and 5 to 35 points are obtained from the whole scale. The low score obtained from the scale is accepted as an indicator of low life satisfaction. A high score is also considered as a high level of life satisfaction. The scale was adapted to Turkish by Köker (1991) and the reliability coefficient was found to be 0.85 with test-retest method. In this study, the Cronbach alpha coefficient for the reliability of the scale was calculated as .85. Validity and reliability of the scale was made by Sultan Çamur Karataş in 1988. (Yılmaz, Sayıl, 1996).

RESULTS

In this section, the frequency distributions of demographic information defining the sample, such as gender, age, faculty and department, are given. Descriptive statistics of the scores obtained from the Satisfaction with Life Scale, findings of statistical analyzes and interpretations of the analyzes were included.

Table 2. Frequency and% Data of Life Satisfaction Scale of University Students by Location

		Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Very little agree	Agree	Strongly agree
I have an ideal life in many ways.	n	34	91	97	65	70	155	38
	%	6,2	6,5	17,6	11,8	2,7	28,2	6,9
My living conditions are excellent	n	29	80	99	74	75	139	54
	%	5,3	14,5	18,0	13,5	3,6	25,3	9,8
My life satisfies me	n	25	76	92	98	70	138	51
	%	4,5	13,8	16,7	17,8	2,7	5,1	9,3
So far, I have achieved the important things I want in life	n	25	69	98	87	96	122	53
	%	4,5	12,5	17,8	15,8	7,5	2,2	9,6
If I had the chance to live my life again, I wouldn't change anything.	n	67	87	84	70	87	102	53
	%	12,2	15,8	5,3	12,7	5,8	8,5	9,6

Table 3. Data of Life Satisfaction Scale of University Students by Location

Items	N	Lowest possible score	Highest possible score	Average	Standard deviation
I have an ideal life in many ways.	550	1,00	7,00	4,2055	1,79849
My living conditions are excellent	550	1,00	7,00	4,3073	1,78287
My life satisfies me	550	1,00	7,00	4,3273	1,72999
So far, I have achieved the important things I want in life	550	1,00	7,00	4,3418	1,70488
If I had the chance to live my life again, I wouldn't change anything.	550	1,00	7,00	3,9836	1,91193

According to the data in Table 3 I have a life close to ideal in many ways the lowest score can be taken 1, the highest score can be 7, average 4, 2055, standard deviation is 1,79849.

Im My living conditions are excellent the lowest score is 1, the highest score is 7, average 4, 3073, standard deviation is 1, 78287.

Im My life satisfies me the lowest score is 1, the highest score is 7, average 4, 3273, standard deviation is 1, 72999.

‘So far, I have achieved the important things I want in life the lowest score can be taken 1, the highest score can be 7, average 4, 3418, standard deviation 1, 70488.

If I had the chance to live my life again, I wouldn't change anything the lowest score is 1, the highest score is 7, the average is 3.9836, the standard deviation is 1, 91193.

Table 4. One-way ANOVA Findings of University Students' Satisfaction with Life Scale

Place of Residence	Sum of Squares	D.F.	Mean Square	F	Signification
Between Groups	2583,485	3	861,162	21,415	, 000 p<0.000 meaningful
Within Groups	21956,459	546	40,213		
Total	24539,944	549			

According to Table 4, it is seen that there are significant differences according to the findings of one-way analysis of variance in order to see whether there is a difference in the opinions of university students about life satisfaction according to their accommodation. (p <0.000 significant).

Table 5. LSD (Least Significant Difference) Test Findings Related to Life Satisfaction Scale of University Students

Money Spent in a Month	Difference Between Means	Importance of Level	
I'm living with my family	I live in the dorms	5,21051	p<0.05
I'm living with my family	Living at home with friends	3,74166	p<0.05
I'm living with my family	Other	2,85131	p<0.05
I live in the dorms	Other	2,35920	p<0.05

DF.549.

According to the data in Table 5, there are differences between the LSD findings of üniversite I live with my family and stay in the dormitory ”between ,2 5,21051, I live with my family I live with my friends , 74 166. In favor of living with my family, living with my family-other ”in favor of living with my family of 2,85131 staying in dormitory – other”, there was a difference between 2,35920 in favor of living with my family. (P <0.05).

Table 6. One-Way Variance Analysis Findings of Life Satisfaction Scale According to Income Levels of University Students

Residence	Sum of Squares	D.F.	Mean Square	F	Signification
Between Groups	935,597	3	311,866	7,214	, 000 p<0.000 meaningful
Within Groups	23604,346	546	43,231		
Total	24539,944	549			

According to Table 6, it is seen that there are significant differences according to the findings of one-way analysis of variance regarding whether there is a difference in the opinions of university students about life satisfaction according to their income levels ($p < 0.000$ significant).

Table 7. LSD (Least Significant Difference) Test Findings Related to Life Satisfaction Scale According to Income Levels of University Students

Income		Difference Between Means	Importance of Level
less than 10000	Between 10-15000 Som	-1,75600	p<0.05
less than 10000	Between 15-20000 Som	-2,31298*	p<0.05
More than 10000	More than 20000 Som	-3,68430*	p<0.05
Between 10-15000	More than 20000 Som	-1,92830	p<0.05

According to the data in Table 7, there is a difference between the LSD findings regarding whether there is a difference in the opinions of university students about their life satisfaction or not. -20 thousand som ”-2,31298 * 15-20 thousand som in favor,” Less than 10000 som more than 20 thousand som ”-3,68430 * In favor of more than 20 thousand som,” 10-15 thousand som between 20 thousand more than som 1.92830 In favor of more than 20 thousand som, “” was found. ($P < 0.05$).

CONCLUSION AND SUGGESTIONS

Result

In this section, the results of the research are given. However, based on the results of the research, suggestions were given to the employees in the field and to the researchers who may work on this subject in the future. The research is limited to the data obtained from the Personal Information Form and the Satisfaction with Life Scale.

The difference between living with my family and living in a dormitory, in favor of living with my family was observed between the opinions of university students regarding their life satisfaction. There was a difference between “living with my family- living with my friends leh, in favor of living with my family, living with my family-other,, in favor of living with my family, orum staying in the dorm – other –, in favor of living with my family.

According to the findings of whether there is a difference in life satisfaction according to the income of university students, between az 10000 som less than 10-15 thousand som ”between 10-15 thousand som among,“ Less than 10000 som between 15-20 thousand som ”between 15-20 thousand som in favor of som less than 10000 som more than 20 thousand som ”in favor of more than 20 thousand som,” 10-15 thousand som more than 20 thousand som ”in favor of more than 20 thousand som,”

'In many ways I have a life close to ideal', 'My living conditions are excellent', 'My life satisfies me', 'Until now, I have achieved the important things I want in life', 'If I had the chance to live my life again, I would hardly change anything' average of those who were found to be high.

SUGGESTIONS

In future researches, it is thought that measuring the characteristics to be measured with different measurement tools and expanding the questions in the Personal Information Form will be beneficial for the validity and reliability of the research.

When the results of the research are considered, it is thought that the life satisfaction of the individuals is generally high and in this sense, the application of the study in larger and different sample groups will increase the measurability and generalizability of the research results.

In the future research, it is considered that the number of female and male students to be sampled is equal to be carried out with samples from different universities and / or different age groups and it will be beneficial for the reliability and efficiency of the research.

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INVESTIGATION ON MOTIVATION OF ONLINE READING: A CASE STUDY PREPARATORY YEAR STUDENTS

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ABSTRACT

Our knowledge of online reading motivation behavior is primarily based on limited data. The aim of the research was consequently to scrutinize students' motivation behavior toward online reading act. Therefore, this research employed a mixed method approach to satisfy the objectives of the study. Thus, data collection tools from previous research were carefully selected and modified to suit the purpose of the study. Respondents included in this study were randomly selected from the population under examination, the students of PYP at Majmaah University. The students' responses were keyed WARPPLS software. In respect to qualitative data, five students were interviewed to obtain their responses to online reading motivation behavior. The main result was students and their colleagues have a different opinion about online reading. In line with the results of the questionnaire, students' interviews revealed that they are motivated to read online for different purposes such as reading for exam, pleasure or discovering new things. These results offer an overwhelming understanding of the notion of online reading motivation and broaden our knowledge of the factors that might affect students' motivation while reading online.

LIFE-SAVING TECHNOLOGIES IN THE MOUNTAINS – THE ISSUE OF MODERN SOLUTIONS AND EDUCATION OF THE SOCIETY

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INTRODUCTION

According to statistical data, more and more tourists visit the mountains every year. As a result, an increasing number of accidents are recorded. It should be indicated that this is due to numerous causes, therefore the authors undertook the effort to solve the research problem, which is the answer to the question: To what extent and how can technologies support the work of rescuers, whose task is to save human life and health?

LAND CHARACTERISTICS

Consideration should start with the characteristics of the land where life-saving and health-enhancing technologies are used. The region of the Karkonosze Mountains on the Polish side of the border with the Czech Republic attracts over 2 million tourists every year. The Karkonosze Mountains are of alpine character which is featured by a high altitude with high rainfall, high temperature fluctuations and violent winds, where the weather conditions change rapidly and often surprisingly for unprepared and unaware tourists. The Karkonoski Park Narodowy (KPN), which covers most of the Karkonosze Mountains, has been visited in 2015 by – 733,703 tourists, in 2016 – 852,972, 2017 – 839,673, 2018 – 949,534 (Data obtained from Karkonoski Park Narodowy (Eng. the Karkonosze National Park) on the basis of sold entrance tickets). Since 2016, there has been a significant increase in visits to KPN, which is probably related to the government's social programme supporting families. The area of KPN includes over 100 km of tourist trails, including bicycle and horse riding trails. The sleeping accommodations consists of 10 mountain hostels and several huts (Protection plan for Karkonoski Park Narodowy with the seat in the Jelenia Góra and part of the special area of conservation of Karkonosze habitats (area code: plh020006), part of the special area of conservation of Stawy Sobieszowskie (area code: plh020044) and part of the special protection area of Karkonosze birds (area code: plb020007) covering the borders of the park). It is the largest number of hostels located in the national park in Poland.

When analysing the tourist traffic in individual national parks, the density of tourist trails should be considered, measured as a quotient of the length of tourist trails and the total area of the national park. For KPN it amounted to 2.107 2,108 in 2016-2012 and 2,115 from 2014 onwards. In order to measure the tourist traffic in national parks, the so-called tourist traffic intensity index is used, which is a quotient of the number of tourists and the length of tourist trails. This index for the Karkonoski Park Narodowy in the years 2006-2012 amounted to 17,007 persons per km, whereas in 2013 it was lower and amounted to 16,949 persons per km (Wąsik, 2017, p. 134-135). Despite the increase in the number of tourists in national parks observed every year, the index had a decreasing tendency for the Karkonoski Park Narodowy which is related to the development of the network of tourist trails.

However, given the index representing the number of tourists per 1 ha of the park, it should be noted that its highest values were also recorded in the Karkonoski Park Narodowy (358 persons per 1 ha). The above indexes indirectly indicate potential conditions for accidents related to excessive number of tourists staying on the tourist

trail at the same time, which has a direct impact on the need to ensure safety in this area (Nitkiewicz-Jankowska, 2012, p. 519-520).

Among the visitors to the Karkonosze at the beginning of the 21st century, who planned to stay there for leisure (62% of the total number of respondents), the most preferred was to stay in the area for four days (25%) and three days (22%), most often during the so-called long weekends and holidays. A one-day visit represents only 19% of tourists, mainly from nearby towns. Among 38% of respondents who planned their stay in weeks, they planned it mainly during the holiday season. The majority of respondents are people with secondary education (52%). Higher education is held by 41% of respondents, while only 7% of tourists have a basic and vocational education. Thus, people visiting mountains should have perceptions of potential threats in the mountains and the ability to predict them (Wieniawska, 2003, p. 537-544)

Among those who came to the Karkonosze Mountains, a 3-day stay in the Karkonosze dominated, of which 37% – 3–4 days, and 30% – longer than 4 days. Two-day stay prevailed among 25 percent of respondents, and every tenth tourist declared a one-day stay without accommodation. The most frequently mentioned attractions in the vicinity of Karpacz and Szklarska Poreba were at the same time the most popular facilities and places located in the top parts of the mountains. For Karpacz, 90% of respondents indicated Śnieżka – the highest point of the Karkonosze Mountains (Rogowski, 2015. p. 155-156). In 2015, 458,576 entries to Śnieżka and 852,325 crossings were recorded, interpreted as the actual tourist traffic load. The highest load (56%) occurred during the summer (480,008), lower (20%) during the spring (173,839) and autumn (16%; 140,013), while the lowest (7%) during the winter (58,465). In May, the highest maximum number of daily entrances was observed, amounting to about 7,000, which is a result of the long weekend in May (national holidays). Assuming that entries took place only during the day, an average number of entries of 464 persons per hour and about 8 persons per minute can be identified (Rogowski, 2018, p. 110-115). There is no doubt that the Karkonosze Mountains are mountains that are frequently visited by tourists. It is usually a short 2- 3-day break in mountain resorts, which aim is to quickly reach the highest parts of the mountains (Śnieżka, Śnieżne Kotły) without any special training or equipment. This is usually done by using a ski lift to save time. The misleading height of the mountains, easy access, the desire to quickly gain attractive points located in the highest parts of the mountains under the pressure of a short stay and lack of knowledge about the variability of weather conditions cause that the seemingly easy and pleasant trip turns into a rescue operation.

In the years 2013 – 2018 the number of rescue incidents of the Karkonosze Mountain Volunteer Rescue Service increased significantly from 381 to 515. GOPR operation statistics do not include ski accidents in organized ski areas. The most common causes of calling the rescue services in the Karkonosze Mountains include confusion caused by exhaustion, limb injuries (sprains, dislocations, frostbite), injuries during sports and recreation activities, diseases (cardiological problems, diabetes), viper bites, heatstroke or hypothermia (Information obtained during the interview with Karkonosze Mountain Volunteer Search and Rescue (GOPR)).

Table. Data concerning rescue intervention in the Karkonosze Mountains.

Year	Number of rescue incidents	Number of operations and search expeditions	Fatal accidents
2013	381	330	1
2014	242	200	3
2015	413	318	2
2016	473	372	-
2017	529	461	4
2018	515	457	5

Source: Statistical data obtained from the Karkonosze Mountain Volunteer Search and Rescue (GOPR).

CASE STUDY

On 10 June 2015 at 12:49 a.m. a rescuer on duty in the GOPR Headquarters in Jelenia Góra received a report about an incident in the area of an radio mast on the top of the Śnieżne Kotły. From the interview conducted by the rescuer who was a dispatcher, the injured person was a thirteen-year-old German citizen, who had a significant cardiologic disorder and felt strong dyspnoea. Two rescue teams were dispatched to the scene of the event. One by road and the other by air, using a Police helicopter, which at that time was operating in this area. Due to the deteriorating condition of the injured person, the Medical Air Rescue team (Lotnicze Pogotowie Ratunkowe LPR)– HEMS from Wrocław was also to the scene of the event. About 20 minutes after the call, the first rescue team arrived at the place. The team dismounted from the helicopter and secured the victim until the arrival of the LPR-HEMS specialist rescue helicopter.

On 06 June 2015 at 3:47 pm GOPR Headquarters in Jelenia Góra received a report of an accident on the green trail between Mokre Rozdroże and Śnieżne Kotły. The GOPR Rescue Team from Szklarska Poreba went to the scene of the event. Due to the difficult mountain terrain, the HEMS-LPR helicopter was deployed. The second rescue team started to prepare the helicopter at the airport for the evacuation operations using rope techniques. After arriving at the scene of the event, the rescuers provided qualified first aid and prepared the injured person for evacuation on stretchers, which after 8 minutes was undertaken by the helicopter of the Medical Air Rescue using a climbing technique of the so-called long rope. Then, the injured person was transported by helicopter to the hospital in Jelenia Góra.

On 12 March 2016, in the evening hours, GOPR rescuers conducted search and rescue operations for two tourists on the Czarny Grzbiet at the foot of Śnieżka Mountain. The tourists, using navigation in their mobile phones, turned off the trail and lost their way on the main ridge of the Karkonosze Mountains. After dark, the rescuers managed to precisely trace them using the "Ratunek" (Rescue) application in their mobile phones and get them back safely from the mountains using telephone communication. 20 GOPR rescuers were involved in the operation, which took 5 hours.

THE RATUNEK APPLICATION – NEW TECHNOLOGY (NEW SOLUTIONS)

For a few years now, an increased intensity of people staying in the Polish mountains has been observed. The statistics show there is also more and more accidents in the mountains. This is due to many reasons, but mainly to a lack of knowledge about the mountains in which tourists are staying and a lack of skills needed for mountain

trips. If a negative event or accident occurs, the most important thing is to provide information about where the injured person is and what happened. On this basis, the rescuers will know what kind of forces and resources are needed to help the injured persons. According to expert reports (TOPR (Tatra Volunteer Search and Rescue) and GOPR rescuers) it often happens that tourists do not have the sense of direction, do not know how to assess the risk with changing weather, do not know how to behave in an emergency situation, are not properly prepared for hiking in the mountains. It should also be noted that tourists usually know the emergency number for emergency services in the mountains, however, the problem lies in the accuracy of information transmission. Due to the fact that many cases of incompetent transmission of information have been reported, particularly concerning incorrect locations, measures have been taken to eliminate such problems. It was necessary to find out what needs to be done to change the current state of the situation. Of course, the basic issue is to educate the society, however, it is a necessary but long process. Therefore, a technological solution has been developed in order to support the identification of the injured person's location. This solution is the RATUNEK application, which has been positively assessed by GOPR and TOPR and has become a part of the rescue system used by the above-mentioned services.

This application is free of charge, very easy to use and, above all, increases safety in the mountains. This solution increases the safety of people in the mountains. The design of this tool is well thought-out and eliminates many problems that may occur when using the emergency notification system operating in Poland. The above issues will be discussed later in this article. Consideration should begin with an answer to the question: Why is it worth to have the application installed in your phone?

The most important reason is the possibility of a quick and accurate location of the injured person. The application is integrated with the emergency number. Operating this tool consists of selecting the application on your phone, then selecting the "MOUNTAIN" option and pressing it 3 times. The question arises: *Why 3 times?* It is protection against uncontrolled selection of the application, which prevents blocking of the emergency line. Mobile phone companies do not offer such protection, which leads to the situation where around 40% of 112 calls are not related to any emergency, but for example constitute the so called "dead calls". As a consequence, the emergency line is blocked, which unreasonably burdens the rescue notification system, and thus reduces the level of rapid response of rescue teams. Another important issue concerning the application is the fact that after selecting the "MOUNTAIN" option 3 times, the phone sends data about the location of the caller with the accuracy of 3 meters. There is no need for verbal contact, the location is provided by a text message. If the injured person cannot make verbal contact, then it is possible to make contact by text message. In the field research conducted in the mountains, it was observed that the location is given with an accuracy of a few metres, which, according to experts, is sufficient to quickly find the person sending the message.

The application is available in Polish mountains (from the Sudetes to the Bieszczady Mountains), it also works in border areas provided that the phone is roaming mode. If a person uses roaming while staying on the territory of the Republic of Poland and calls for help by means of an application, the help will be provided by the Polish rescue services, and if the person is staying on the territory of a neighbouring country, then the rescuers of the neighbouring country will forward the notification to the Polish rescuers. Consideration should also be given to the situation where there will be no reception or the reception will be impaired, then the phone will still try to send the message. It should be remembered, however, that the rescue operation will be started when a conversation or communication takes place via text message exchange. The prerequisite for the operation of the application is

to enable GPS, which will be asked by the system every time. It is also worth remembering to charge the battery before going to the mountains, which is a necessary and basic condition for the Ratunek application to work and, consequently, to increase the safety in the mountains. If a connection is made, a text message is sent to the rescuers with the following information: location (coordinates), percentage of battery charge, medical record book.

A medical record book allows you to include all the important information that a medical rescue worker should know. It significantly shortens the time of interviewing the injured person or, in case of lack of verbal capabilities, provides the rescuers with information. Only medical rescue workers know the data included in the medical record book, at the moment of connection.

The application can be installed on mobile phones. Every tourist should ensure that their phone is equipped with this application. However, if it happens that the tourist does not have the Ratunek application installed in their phone, it is possible to install it in the mountains. Often when GOPR and TOPR rescuers cannot obtain information from the injured person regarding their location, they send them a link to download the Ratunek application via text message and ask for its installation. One of the most important issues is the fact that the downloaded file is small in size so that despite the low battery and low temperatures it is possible to download and install it within a few minutes. According to information from mountain rescuers, they quite frequently send a link to the injured person, who download the file without any problems and install it on their mobile phone. Then, just as often, they manage to help them get off the mountain without sending a rescue team into the field. The rescuers know the mountains area very well. If they also know the exact location of the injured person, which is possible with the help of the Ratunek application, in principle, numerous operations of this type are successful. This is also possible because the Ratunek application allows for tracking people who are moving and who are being escorted from the mountains. Experts rate this type of technological support very high.

So far, the considerations have been carried out in relation to the group of healthy people. The Ratunek application also provides assistance for deaf people. Experts say, however, that usually when people with disabilities walk in the mountains, are usually accompanied by carers. However, this does not change the fact that it is also necessary to provide for a situation where a person with disabilities can receive help, e.g. the carer will not be able to call for help for various reasons.

In conclusion, the Ratunek application is an application that solves various problems appearing in the mountains. It made it possible to provide help to many injured persons in a short time by telephone. It provided an additional opportunity to dispose of GOPR or TOPR forces and resources. The features offered by the Ratunek application include: quick localization with an accuracy of 3m, knowledge about the injured person (medical record book), maintaining constant contact with the injured person, information about the battery status, sending text messages to the injured person, sending a link to download the application via text message.

EDUCATION OF THE SOCIETY

Behavioural education in the mountains is not provided in schools within the developed curriculum. Education in this field is provided by the Mountain Volunteer Search and Rescue. It is implemented in different age groups and at different levels of advancement. With regard to children, GOPR rescuers provide knowledge about safety in the mountains through talks with elements of short exercises. However, such classes take place at the request of the headmasters of educational institutions or class teachers. In most cases, children living in mountain areas are the main beneficiaries of these activities. It should be emphasized that there is a great interest in this type of issues in these regions. The situation is different with regard to children who live further away from the mountains. There

is little interest in education in this area. This may be due to many reasons, one of them may be e.g. distance, lack of access to the GOPR headquarters, lack of possibility for rescuers to come to school, lack of willingness to conduct classes in this area. In the opinion of experts, the issues of mountain behaviour should be taught in primary school. Every child should have knowledge of how to prepare for mountain walking and how to behave in an emergency situation. As statistical data and various cases show, people from all regions of Poland, including children, travel to the mountains. It should therefore be recognised that the mountains are not an area exploited only by tourists living around them.

Therefore, it is important to know what can save lives in the mountains, including: weather, equipment, clothing, food and drink, map, reason in the mountains. An important skill is also field orientation and technological support in the form of the Ratunek application. With regard to the latter element, it should be noted that there are many promotional campaigns for this application, yet it still cannot be said that it is widely known among tourists who often spend their holidays in the mountains.

CONCLUSIONS

In the conclusion of the content of the article it should be noted that safety in the mountains depends primarily on the skills of behavior in the mountains. This skill consists of knowledge and experience. Despite the above, it is also important to have applications that help to navigate the place where the tourist (injured person) is located. Such an application, which is accepted by the services providing aid in the mountains, is the Ratunek application. Mountain and Tatra Volunteer Search and Rescue rescuers after five years of using it assess it as very helpful in saving lives and human health.

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REFLECTIONS ON THE USE OF LESSON STUDY TO IMPROVE MATHEMATICS AND SCIENCE INSTRUCTION IN THE FREE STATE PROVINCE

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ABSTRACT

Mathematics and science competence is important for socioeconomic development, as a result, it is imperative for a country to measure and monitor the performance of its learners in these key subjects in order to assess the wealth of the educational system. Performance in mathematics and science is part of the human development strategy in South Africa. However, there is a growing concern with South Africa's performance in mathematics and science. Very few learners are graduating from school with high quality passes in both subjects in order to enter university. As evidenced in the Trends in International Mathematics and Science Study (TIMSS) 2015, South Africa is one of the lower performers of the 39 participating countries. Although South Africa is still one of the lower performing TIMSS countries, from 2003 to 2015 the country has shown the largest positive improvement of all participating countries in mathematics though the pace of this change is too slow. Therefore, plenty has been said and done to address this challenge. Various intervention strategies have been suggested, developed and implemented. Such interventions include among others, Japanese lesson study. Lesson study was initially developed in Japan in the beginning of the 20th century with the goal of continually improving the quality and effectiveness of the experiences that the teachers provide to their students. Using a qualitative case study design, this research attempts to address the question of how the conditions, the experiences and the outcomes of mathematics and science learning in schools can be changed using the case of the lesson study project that the researcher was involved in for a good five years. To collect the necessary data, the researcher had interview conversations with the mathematics and science teachers who participated in the lesson study project. The collected data was then transcribed, coded and categorised in themes. The participants signed the consent form to demonstrate their willingness to participate in the study. The findings of this research reveal that each stage of the lesson study cycle presents a slightly different set of opportunities for the professional development of mathematics and science teachers. The researcher concludes that more research on how teachers learn from teacher-led professional development is necessary.

**RESPONSIVE OR ADAPTIVE EDUCATIONAL MOBILE WEBSITES: THE
IMPACT OF DIFFERENT DESIGNS ON STUDENTS' PREFERENCES AT JOUF
UNIVERSITY – SAUDI ARABIA**

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ABSTRACT

The current research aimed to develop & compare between two different learning mobile websites designs, which are responsive versus adaptive. The best design amongst them is determined in terms of learners' preferences. To conduct this, the researcher formulated a preference level test (PLT) and installed it on both websites. 84 undergraduate students participated in the main experiment. They were divided into two experimental groups; each group consisted of 42 students. The first group used the responsive website (RW), while the second group used the adaptive website (AW). The results showed the superiority of the second group in the PLT with a statistically significant difference. The research recommended the necessity of raising awareness about the importance of mobile learning, as well as the adoption of effective designs, which enhancing the students' level of preference.

SAUDI TEACHERS' PERCEPTIONS REGARDING ADOPTING DIGITAL GAMES IN TEACHING PRACTICE

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ABSTRACT

This study applied a qualitative approach to shed light on computer teachers' perception of video games and the barriers toward integrating these games into their teaching. The data were gathered through face-to-face interviews with 22 Saudi teachers from the Eastern Province of Saudi Arabia. The results show that teachers in Saudi schools hold a positive attitude toward adopting video games and they realize the importance of adopting new technologies; however, they do not use them for teaching purposes. As far as barriers to adopting video game are concerned, lack of facilitating conditions, low awareness of the potential for video games in learning, and the lack of video games that are suited to Saudi peculiarities and curricula are the most perceived barriers among teachers.

INTRODUCTION

Nowadays students have become part of a “digital generation” (Van Eck, 2006); they already know how to use different technologies and computer applications. They are looking for fun and enjoyable ways to learn that may be harder to achieve in traditional schools (Van Eck, 2006). One way to make the learning process more enjoyable and engaging is to adopt video games in teaching and learning (Su & Cheng, 2013; Papadakis, 2018). Digital games have become very prevalent among children and youth, and they spend a considerable amount of time using them (Subrahmanyam & Greenfield, 2008). Several studies have demonstrated the importance of using video games to improve students' engagement, academic achievement, motivation, and critical thinking (Eseryel, Law, Ifenthaler, Ge, & Miller, 2014; Su, & Cheng, 2013; Tham, & Tham, 2014; Tokac, Novak, & Thompson, 2019; Watson, Yang, & Ruggiero, 2013). Since the popularity of video games among 21st generation's lives and the potential benefits of integrating them in teaching, Saudi educational system might employ this technique for teaching and learning (Alqurashi & Williams, 2017). However, it is confounding that teachers do not embrace video games in their teaching practices (Papadakis, 2018, Papadakis & Kalogiannakis, 2017). For the purpose of this study, the researchers seek to highlight the Saudi teachers' perceptions towards video games and also highlight the most common barriers in Saudi educational system that limits of the role of using such tools. At this stage of the research, a video game is defined as “a game played by electronically manipulating images displayed on a television screen” (Video Game, 2019, p.1).

LITERATURE

In the 21st century, well-designed games can be used as a medium to foster learning. Dikkers (2015) indicated that teachers adopting new media determined the degree to which it gets used and if the games are one such medium, then “it stands to reason that some of those games (media if adopted by teachers) can be effective and powerful learning experiences” (p.10). He also stated that well-designed games, if employed as media by teachers, “can tell powerful stories, challenge the mind, and convey the thinking of the designers” (p.10).

The relative importance of using digital games in teaching derives from their key role in enhancing students' motivation. Motivation is a crucial factor that affects learning outcomes (Asgari & Kaufman, 2009). Students in traditional classrooms have lower motivation than students in digital game-based learning classes (Prensky, 2007; Papadakis, 2018). Asgari and Kaufman (2009) stated that using games plays a significant role in making the learning process enjoyable and more engaging and this, in turn, increases students' motivation. According to Tokac et al. (2019), students who used video games for learning had better achievement and more motivation than their counterparts in traditional classrooms. According to Papadakis and Kalogiannakis (2017) and Tham and Tham (2014), game-based learning can be utilized as an efficient pedagogical approach to motivate and engage students; however, it is important to ensure that the selected educational game enriches students' experiences, increases student motivation, and immerses students in learning.

In addition, using video games in teaching can improve students' achievements and establish a positive attitude toward curricula (Papadakis, 2018). In software engineering classes, students achieved deeper learning when they used 3D game-based learning systems compared to students that used traditional methods (Su & Cheng 2013, Tokac et al., 2019). The researchers attributed this learning improvement to the students' enhanced motivation and immersion in the learning activities when using 3D game-based learning systems. The findings showed high satisfaction and confidence rates for students, as well as improved learner curiosity and immersion in learning activities (Su & Cheng, 2013).

Furthermore, using video games supports other 21st-century learning skills, such as creativity and problem-solving. Video games spark learners' creativity and give them the opportunity to find and organize information, solve problems, and evaluate solutions (Miller & Doering, 2014; Hwang, Hung, & Chen, 2014; Prensky, 2007). According to Squire (2005), digital games offer complex holistic problems for players, and this, in turn, increases the players' creativity and problem-solving skills. Moreover, players in digital games are active participants, while readers or viewers are passive observers (MediaJuice, 2014). The role of readers or viewers is just watching; they cannot make any decisions that will change the ending. In a game, the ending is a reward, particularly when the player reaches the desired goals (MediaJuice, 2014).

Educational video games have a significant impact on students' learning attitudes and achievements regardless of their age or gender. Cheng, Lou, Kuo, and Shih (2013) investigated the ability of elementary school students to accept and use digital game-based learning (DGBL) in their learning environment. The results of this investigation showed that using DGBL is suitable for both genders. In addition, the 4th-grade students' "perceived ease of use," "perceived usefulness," "attitudes toward use," and "intention to use" revealed high correlations.

In addition, Akinsola and Animasahun (2007) highlighted the impact of using a simulation-game environment on the achievements and attitudes of high school students regarding math courses. They found that students had poor achievement when using traditional teaching approaches. Using the simulation-game environment increased the students' achievement and led to a positive attitude regarding math subjects.

At the college level, using DGBL for learning can also improve students' achievement. To illustrate this, Afari, Aldridge, Fraser, and Khine (2013) conducted a study to highlight students' perceptions toward mathematics by using video games at the college level in UAE. The results showed that students were involved in these experiences and such learning tools had a significant positive impact on their math enjoyment, academic efficacy, and achieved learning outcomes.

Although using educational video games could play a vital role in motivating students (Papastergiou, 2009; Papadakis, 2018) and improving students' performance (Su & Cheng, 2013), the adoption of video games for learning has not been prevalent in schools as of yet (Alquarshi, 2016, Koh, Yeo, Wadhwa, & Lim, 2011). The lack of use of educational video games in classrooms is due to the presence of obstacles and challenges. According to Baek (2008), there are six factors that prevent teachers from using educational digital games in their classrooms. The main difficulty teachers indicated was the inflexibility of some subjects or curricula. It is hard to find a game that is suitable for such lesson objectives. The potential negative effects of video games on students' vision and behavior constitute another challenge preventing teachers from using video games. Furthermore, some teachers avoid using video games because some students are not yet ready to deal with video games. Some teachers feel they do not have enough supportive materials, such as reference materials. Moreover, time constraints do not allow teachers to use games. Having a busy, fixed schedule and a heavy curriculum constrains the use of video games. Lastly, schools have limited budgets, therefore they cannot provide the requirements for using educational video games, such as computers and connectivity.

Wu (2015) divided the difficulties that hinder the adoption of video games into internal and external difficulties. The internal difficulties were composed of the lack of self-efficacy, the difficulty of assessing student learning, and the difficulty of choosing video games that were suitable for the subject matter. The external challenges included inconsistency between the use of digital games and the curricula, the negative perceptions some administrators had about DGBL, the lack of facilitating technology and professional development, short class periods, and the poor quality of the digital games that existed in the market.

THE PURPOSE OF THE STUDY

The main purpose of this qualitative study was to identify Saudi teachers' perceptions regarding adopting video games for learning. It investigated the barriers that concern teachers regarding the adoption of DGBL in Eastern Province schools in Saudi Arabia.

THE SIGNIFICANCE OF THE STUDY

This study will enrich the Saudi educational research field. There has been little research thus far examining the barriers to adopting game-based learning in classrooms (Alqurashi, 2016). This study could benefit teachers, school leaders, and policymakers. As far as teachers are concerned, this study is the teachers' voice toward school leaders and policymakers. It presents the obstacles toward the adoption of digital game-based learning in classrooms. Participation in this study may also help teachers in conducting their own research. In addition, interviewing teachers may help them evaluate their current teaching practices.

Furthermore, this study might help policymakers identify the main reasons that prevent Saudi teachers from using digital games in classrooms, allowing them to take actions that will increase the incorporation of educational video games in classrooms. These actions may include the allocation of funds or the creation of policies.

This study will play an important role in raising school leaders' awareness regarding adopting digital games in teaching and revealing to what extent their teachers perceive its benefits for learning. Thus, school leaders should take actions such as arranging teacher training to enhance the adoption of DGBL.

RESEARCH QUESTIONS

This study attempts to address the following questions:

- A. What are teachers' perceptions regarding using video games for educational purposes?
- B. What are the barriers to the adoption of digital games in Saudi schools from Saudi teachers' perspectives?

METHODOLOGY

Research Design

This was an exploratory study aimed at identifying Saudi teachers' perceptions of adopting video games for learning as well as revealing the difficulties teachers might face when they intend to embrace video games in their teaching.

Instrument and Data Collection

The interview questions were self-designed based on the literature. Then the questions were modified by four experts in the field. A pilot test was conducted in order to validate the research instrument. The researchers conducted an interview with two participants from the target population. After this interview, the researchers made some changes to the interview questions. The final version of the interview contained eleven questions. The researchers used a one-to-one structured interview. The researchers used the Arabic language to conduct the interviews, as per the participants' preference. Each interview lasted for 10–20 minutes.

Sample

The population of this study was gathered from Saudi teachers in public Eastern Province schools in Saudi Arabia. All the subjects were males 25–50 years old. The researchers used a convenience sample combined with snowball sampling. This study included 22 Saudi teachers in the Eastern Province of Saudi Arabia during the 2018–2019 academic year. These teachers taught computer courses in middle and high schools. No personally identifiable information (like respondents' names, house address, or ages) was collected, as per some participants' requests.

Data Analysis Procedures

All interviews were transcribed using InqScribe software. Then the researchers read through each interview transcript separately and highlighted the most significant information in order to divide the transcript into information segments that were related to the first research question. The researchers coded these segments using in vivo codes, codes from the social sciences, and/or codes from the researchers that best described these segments. The researchers then read separately through each interview transcript and highlighted the most significant information in order to divide the transcript into information segments related to the second research question. These segments were then coded by the researchers using in vivo, social studies, and/or researcher-sourced codes that best described the information segments. A number of codes were identified. Similar codes were then grouped and categorized into three themes.

The Validity of the Results

After the researchers finished coding the data and coming up with three themes, they needed to confirm that these themes and results were accurate and corresponded to the participant's intentions. They used member checking to establish credibility. The researchers emailed the theme table and findings to the participants to test the accuracy and credibility of the data and received confirmations from all participants. They also emailed the codes to a friend who spoke both English and Arabic language to double-check the translation.

FINDINGS AND DISCUSSION

To answer the first question, what are the teachers' perceptions about using video games for educational purposes, the researchers analyzed the interviewees' responses to the first three interview questions, which were:

- A. What do you think about using games in general to support your teaching?
- B. What is your opinion about using digital games (i.e., *Minecraft*) as a teaching and learning tool?
- C. Do you think teachers and school leaders believe in the importance of using video games for educational purposes?

Generally speaking, all participants agreed that video games were useful for enhancing student learning and enriching the learning environment. Video games can be useful for learning since students today are part of the digital generation and they are already involved in the world of digital games. According to participants, nowadays a large number of Saudi students use video games on their tablets, computers, smartphones, or game consoles; thus, why don't teachers leverage this for the benefit of students learning? Indeed, adopting video games is considered a smart move by teachers to reach students where they already are, as was said by participant A.

Participants stated that many potentials could be associated with using video games. To illustrate this, according to the participants, adopting video games in teaching could make the learning environment more enjoyable, practical, interactive, and competitive than a traditional learning environment and consequently make students more engaged, immersed, and thrilled to achieve better learning.

According to participant E, "using digital video games can assist teachers to draw students' attention and consolidate information in students' minds, unlike lecturing." Further, participant B stated that "there is no question that video games can play a vital role in fostering 21st century learning skills such as problem-solving, creativity, and collaboration," as well as "video games simulate what students' might face in their real lives," as stated by participant K. Participant G indicated that "Adopting video games could assist teachers to explain sophisticated topics and also students might acquire some implicit skills that are implied in some well-designed games." Participant U affirmed the role of video games in teaching programming concepts; he said, "video games such as scratch video games for learning purpose helps students learn program commands, logical sequence of programs, information structure, problem-solving, and teamwork skills in an enjoyable way." Although all the interviewees perceived the benefits of integrating video games into teaching, interestingly, none of them had ever used them in their teaching. This result is consistent with Noraddin and Kian's (2014) study, which found that teachers in Malaysia had a positive attitude toward the use of video games to support their teaching; however, more than 70% of participants had never used video games for educational purposes. Further, in a Saudi context, Alquarshis' (2016) reported that Saudi teachers had positive attitudes toward using video games to enhance students' motivation, engagement, thinking skills, and achievements. Noraddin and Kian (2014) also found that teachers held favorable attitudes. However, Alquarshi (2016) could not confirm that video games could improve teaching strategies or teacher performance.

With respect to the respondents' colleagues' and administrators' beliefs about using video games for learning as reported by the interviewees, the majority of respondents (19 out of 22) stated that their colleagues and administrators had not absorbed the notion of using of video games for educational purposes yet. One of the interviewees stated that "using digital game might make the educational process unserious and waste students time without educational benefits"; another stated that "integrating video game in teaching can be a more distraction of students than attraction." According to the interviewees, there are some teachers who realize the benefit of using video games for learning; however, they are a little worried about the possible negative consequences that might be associated with using video games, such as addiction and distraction. This result is in conflict with a study conducted by Noraddin and Kian (2014). Noraddin and Kian concluded that the teaching discipline had no impact on teachers' attitudes toward adopting video games in their teaching.

Five participants attributed this lack of awareness of the significance of video games to the dominance of traditional teaching methods in Saudi classrooms. Some teachers and school leaders are not familiar with millennial and Z

generation needs and expectations. Those teachers have been taught the traditional methods and resist any changes that conflict with their personal beliefs. Another reason for not seeing the importance of digital games is that “some leaders think video games are not serious and they can be only used for fun,” as stated by participant J.

In order to answer the second research question regarding barriers that could prevent teachers from adopting video games in their teaching, three major themes were identified based on the participants’ answers. The biggest concerns about the adoption of video games revolved around three fundamental factors—facilitating resources, lack of awareness, and game issues.

The First Theme: Lack of facilitating conditions

The first theme is the lack of facilitating conditions. “Facilitating conditions are defined as the degree to which an individual believes that an organizational and technical infrastructure exists to support use of the system” (Venkatesh, Morris, Davis & Davis, 2003, p.453). There are many conditions that could facilitate the integration of digital games in Saudi classrooms. Based on the participants’ responses, this theme included two main codes—facilitating technology and facilitating resources.

Facilitating technology illustrated that schools have to be equipped with the necessary technologies to use digital games, such as internet connectivity, computers, and tablets. This result is in agreement with other studies (Alquarshi, 2016; Baek, 2008, Wu, 2015). Based on the participants’ responses, there was a consensus that their schools are not equipped to adopt video games. The schools needed a lot of development in terms of internet connectivity, computers, video games, and technical support. One participant said, “There are some computers in schools and the number of these computers does not exceed 20 computers. However, each classroom has approximately 30 students.” Another teacher reported that “the computers that are currently used in schools are not able to run digital games because running some digital games required availability of specific features, such as screens with high resolution and computer with big ram size.” In addition to the lack of computers in the lab, ten participants mentioned that the schools didn’t have adequate access to the internet to take advantage of the full potential of adopting video games, such as communication and collaboration. This result is in agreement with other studies’ findings (Alqurashi, 2016; Beak, 2008; Koh et al., 2011; Wu, 2015).

Time formed another challenge for the teachers. Interviewees mentioned that the duration of each lesson in Saudi schools is 45 minutes, and this short time is not enough to employ video games, especially when the curricula are heavy. Koh et al. (2011) concluded that having insufficient time to embrace video games in the curriculum was the greatest obstacle that impeded Singapore teachers from integrating video games into teaching. This result is in agreement with the results found by Wu (2015) and Alquarshi (2016).

The second code was facilitating resources. These included the materials, plans, policies, and manuals that are required to incorporate digital games effectively in classrooms. This result is in agreement with other studies’ findings (Alqurashi, 2016; Beak, 2008; Koh et al., 2011). In Saudi classrooms, there are neither mechanisms nor policies for the adoption of video games, as some participants mentioned. Participant Q stated that “The biggest issue we have in Saudi Arabia regarding using educational digital games is the absence of planning.” Other teachers said, “If Saudi Ministry of education would provide simple manuals about how to use video games, the number of teachers who used digital games in classrooms definitely will grow.” Some participants mentioned the importance of having specific policies tailored for adopting video games in classrooms when they talked about the possibility of addiction, bullying, blackmail, and misbehavior. Having clear policies from the educational authorities is a significant factor that affects the use of video games in the curriculum (Koh et al., 2011).

Facilitating resources also included financial and technical support, which are considered other obstacles to the adoption of video games by Saudi teachers. The interviewees stated that there are neither adequate financial allocation for the use of educational games nor adequate technical support to provide assistance for teachers who want to use and subscribe to educational video games. This finding is consistent with prior studies that found financial issues to be a significant factor that prevents teachers from integrating video games into teaching (Alqurashi, 2016; Wu, 2015). According to Watson, Yang, and Ruggiero (2013, p.236), “Teachers should be provided more technical assistance and financial support for purchasing computers and suitable games.”

The Second Theme: Lack of awareness

According to the participants, school leaders and teachers need to learn about the importance of using digital games in the classroom first and then learn how to use video games effectively to enhance their teaching. This theme included two major codes—lack of awareness and training.

Lack of awareness meant that Saudi teachers and school leaders did not believe that digital games are capable of improving student learning. According to participant C, “many Saudi administrators, particularly school leaders or teachers, are from the old generation, think using digital games is a waste of students time. Teachers can use it only for entertainment, not for education.” Alquarshi (2016) found that a lack of awareness of the benefits of educational video games was a reason not to adopt video games among Saudi teachers. Also, Baek (2008, p. 671) stated that “an effort should be made to raise awareness among teachers and parents of the positive educational benefits of gaming.”

Awareness could be raised by providing professional development regarding the effectiveness and integration of digital games into teaching. According to the participants, some teachers might realize the importance of video games, however, they do not have the required skills to purposefully and effectively introduce them into their teaching. All of the participants indicated that the Saudi Ministry of Education should provide workshops and training for teachers, and consequently they expected the number of Saudi teachers who used video games in classrooms would increase. Participant Q said, “I have met some teachers who are computer illiterate and they do not know how to run computers rather than integrating video games.” This result confirmed Wu (2015) and Alqurashi’s (2016) findings that the lack of professional development was the biggest challenge that prevented teachers from using video games (Alqurashi, 2016).

The third theme: Game Issues

The last theme revolved around different issues related to video games, including language, consistency, and assessing student learning. For example, the majority of well-known video games use English for instructions and interfaces. However, the formal language in Saudi Arabia is Arabic, which means students and teachers who do not understand English will not be able to properly use such games. Participant Q said, “I read about *Minecraft* and I know it is adopted in western country schools because of capacity in supporting student skills. However, my students can't understand English language; therefore, I will not be able to adopt *Minecraft*.” Participant U said, “there are some video games with Arabic interface; however, there are not common among students and are poorly designed.”

Game consistency referred to the alignment between digital video games, the Saudi curricula, and Saudi societal peculiarities. Participants mentioned that many digital games are common among students, but these games can’t serve the curriculum in any way. This finding is supported by previous studies (Alquarshi, 2016; Kirriemuir & McFarlane, 2004; Koh et al., 2011; Watson et al., 2013; Wu, 2015). According to participant C, “there are difficulties related to the games themselves in terms of their relevance to nature and the requirements of educational levels and consistency with what are in Saudi education policy.” In addition, some participants said that some well-designed games conflict with Saudi culture and religion because of certain women, pictures, and music.

The last obstacle that hindered the use of video games by teachers in Saudi Arabia from the interviewees’ perspectives is the difficulty of assessing students’ learning when they play educational video games. This result is in agreement with Wu’s (2015) study. Having an assessment element in the games used in the classroom would assist teachers in monitoring their students’ progression and evaluating their skills (Borji & Khaldi, 2015). This assessment element in games could include criteria such as a progress indicator and player tracking. According to participants B & C, any video game should have an assessment section in order to evaluate the progression of learning that in turn helps students to achieve the learning goals. On the other hand, participant A stated that “teachers need to learn how to measure learning process managed by such tools.”

CONCLUSION

This study aimed to investigate Saudi teachers’—particularly computer teachers’—perceptions of the benefits of using video games in their teaching. The results show that computer teachers perceive the benefits of embracing video games in teaching. However, they stated that their colleagues who teach other subjects had a low awareness of the benefits of using video games for learning. Interestingly, none of the interviewees had ever employed video games for teaching purposes. This study also identified the difficulties that prevent Saudi teachers from adopting video games from computer teachers’ perspectives. These challenges are attributed to the lack of facilitating conditions, low awareness of video games’ potential for learning, and the lack of video games that suit Saudi peculiarities and curricula.

IMPLICATIONS

Saudi educational authorities could begin initiatives to encourage teachers to adopt technological innovation in their teaching, such as video games. The Saudi Ministry of Education could provide incentives for teachers who adopt technological innovations in their teaching.

According to the interviewees, teachers emphasized that policymakers, school leaders, and teachers needed to assemble incorporate guidelines, materials, and plans regarding the implementation of video games for learning. Teachers could suggest a list of video games to be used in each subject based on their experiences, with manuals that showed clear instructions about the method of use, the purpose of use, and the target audience of the game. Further, the Saudi Ministry of Education should enact rules and policies to control the use of video games in classrooms.

According to the interviewees, there are no video games that align with the Saudi community's peculiarities or the prescribed outcomes of the Saudi curricula. As such, the Saudi Ministry of Education could create a partnership with pioneer companies specializing in game design so that the Saudi Ministry could ask for tailored games that aligned with Saudi culture and curricula. Also, there should be teams of specialists in different areas (science, social studies, psychology, and religion) who suggest effective video games teachers may use in the classroom and who evaluate the consistency of the video games with course outcomes and the community's religious, social, and cultural values. From the researchers' perspectives, Saudi authorities should rethink the ability of the current educational system to embrace technological innovations in general and encourage the integration of DGBL in particular.

According to the participants, there are teachers who do not know how to integrate video games effectively into their teaching. In order to use educational video games effectively in Saudi classrooms, the Saudi Ministry of Education should provide courses, training, and workshops for teachers to assist them in selecting, designing, and using effective games. Also, holding seminars and conferences that discuss technological innovations and share successful experiences of adopting video game would remove skeptics' doubts and increase the use of educational games in Saudi schools (Koh et al., 2011). Since there is little research written in Arabic that sheds light on the use of video games for learning, the Saudi Ministry of Education could support researchers in conducting more research to identify technological innovations that might enhance student learning and sharing the results of these studies among teachers.

FUTURE RESEARCH

For future research, the researchers suggest conducting the same study with females only and comparing the results of this study and the future one to better understand the influence of gender. Also, changing the population and conducting studies in different sites using different research methods, such as qualitative or mixed methods, would give us a deeper understanding of these obstacles, and the results would assist the policymakers in overcoming these obstacles.

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SOCIAL AND SCIENCE DEPARTMENTS STUDENTS' BELIEFS ABOUT MATHEMATICS

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ABSTRACT

Educational politics in many industrial countries usually have a strong effect on science, engineering and mathematics. It has special meaning for the education of the Scientific's area especially for mathematics teaching and learning. students' ideas are essential in their learning and problem solving of math. Many mathematics education researchers focus on this subject to make clearer and more powerful the learning and understanding of the course. In this study, the data was obtained from a science department (construction department) and a social department (business department) of a vocational school in Turkey. The quantitative data was analyzed using mean and independent sample t-test for this study. As a basic result of the study that all students' beliefs for math learning and problem solving had significant difference according to their departments.

Keywords: mathematics learning, problem solving belief, vocational school

INTRODUCTION

One of the main characteristic ways of the developments people is to have good problem solver members. Modern and well-designed education systems create these citizens. Mathematics and Science are the basic tools to construct problem solving abilities with which countries gets well-educated students or personals (Ayele, Dadi, 2016; Schoenfeld, 1988; Moe, 2008; Fennema, & Sherman, 1977). In this point, students' idea or beliefs about science especially about mathematics have a powerful effect on the achieving of these lectures. According to many students from all over the world, mathematics known as a difficult lecture and they spend much performance to understand and to achieve this course. Some researches were conducted on the students' belief for mathematics learning and math problem solving, their difficulties with problem solving in math and the main factors on the students' achievement in mathematics (Ayele, Dadi, 2016; Presmeg, 2002; Mapolelo, 2009).

There are classic and universal students' beliefs about mathematics and learning math; Everybody need to use the same solution method for every math problem. To understand mathematics, especially to able to solve math problems need to be very clever. Math problems always have unique right solutions. Mathematics is only a school activity and not transform to the real-life problems. If I will solve the problem, I need to use same solution method that teacher showed in the classroom. If somebody learn or understand to any mathematics subject, so he/she solve math problems very fast or without need much time or without thinking much (Reyes, 1984; Sconfeld, 1992; Ayele, Dadi, 2016). All these beliefs could have more or less negative effect on the students understanding math, their concentration to math lectures and so, their learning mathematics.

As a main way of doing mathematics, problem solving has its special steps that;

- defining problems,
- determining of the reasons,
- finding a solution method,
- applying the solution
- evaluating of the solution

Accomplishing of these steps needs some abilities, backgrounds and beliefs. Each of them has a powerful effect on problem solving but beliefs have natural and psychological effect on students' characters. The concepts "simple problem" and "difficult problem" are directly connected with the student's beliefs (Crosswhite, 1972; Nibbelink, Stockdale, Hoover & Mangru, 1987; Ayele, Dadi, 2016).

In vocational schools especially social program of this school, conceptual understanding and the ability of problem solving usually are low level (Sconfeld, 1992). According to many researcher, two mean reasons of the problem relate to student learning mathematics and the student's beliefs in mathematics (Crosswhite, 1972; Asfaw, Otores, Ayele, & Gebremariam, 2009; Ayele, Dadi, 2016). So, the aim of this paper is to determine vocational school students' beliefs about problem solving in math and mathematics learning. The research questions are as below;

- What is the level of vocational school beliefs about math learning and problem solving?
- Are the male and female students' beliefs about math learning and problem solving same
- Are the construction department (science program) and business department (social program) students' beliefs about math learning and problem solving same

METHOD

This study was conducted with 2 departments which were construction department (science program and business department (social program) at a vocational school in Turkey. The sample was 162 students from construction departments (136 male and 26 female) and 184 students from business departments (61 male and 123 female) and so totally 346 students (197 male and 149 female).

In order to data collection the mathematics belief scale was used that was modified from (Hannula, Kaasila, Laine, & Pehkonen, 2005; Ayele & Dadi, 2016). The scale had two subscales that students' beliefs about math learning and students' beliefs about math problem solving, and every subscale had 8 items, so the math belief scale had totally 16 items. The items for students' beliefs about math learning deal with the effect of group study in math learning, math abilities end memorization. The items for students' belief about math problem solving deal with problem solving methods, math problem solutions, insistent approach in math problem solution, math problem solution without using any formula. Also, the half of the all items were positive and the other half one was negative.

In the math scale the students were requested to complete on a five point Likert Scale: "Strongly agree", "Agree", "Undecided", "Disagree", and "Strongly Disagree", and for the positive items pointed as 5, 4, 3, 2, and 1 respectively; and for the negative items pointed was contrary wised. For the data obtained from the students with the research scale mean and independent t-test analyses were made by the author.

For the content validity and the face validity of the math belief scale, two math education researchers from the author's university were asked to check it. The pilot application of the scale was conducted with 42 students at the same vocational school from the different departments' students of the sample. The Cronbach's Alpha reliability volume of the students' belief about math learning and problem-solving pilot point = .783 and main data = .871; the Cronbach's Alpha reliability volume of the students' belief about math learning pilot point = .796 and main data = .898; the Cronbach's Alpha reliability volume of the students' belief about problem-solving pilot point = .802 and main data = .893.

FINDINGS

- *Students' Beliefs About Mathematics Learning and Problem Solving*

Table 1. Students' beliefs about math learning and problem solving

Beliefs	N	M	SD
Students' beliefs about math learning and problem solving	346	2.96	.71
Students' beliefs about math learning	346	3.03	.76
Students' beliefs about math problem solving	346	2.89	.68

According to table 1, vocational school students' beliefs about math learning and problem solving was neutral level (between 2.5 and 3.4 scores). The level representations are below;

- ✓ very low (strongly negative beliefs): interval from 1.0 to 1.4;
 - ✓ low (negative beliefs): interval from 1.5 to 2.4;
 - ✓ medium (neutral): interval from 2.5 to 3.4;
 - ✓ high (positive beliefs): interval from 3.5 to 4.4;
 - ✓ very high (strongly positive beliefs): interval from 4.5 to 5.0
- *Students' Beliefs about Mathematics Learning and Problem Solving with respect to the departments (The Independent t-test)*

Table 2. Students' Beliefs about Mathematics Learning and Problem Solving with respect to the departments

Beliefs	Department	N	M	SD	SE	df	t	p
Students belief about math learning and problem solving	Construction	162	3.10	.92	.03	344	7.56	.000
	Business	184	2.82	.53	.03			
Students' beliefs about math learning	Construction	162	3.18	1.15	.05	344	6.12	.000
	Business	184	2.87	.91	.04			
Students' beliefs about problem solving	Construction	162	3.05	1.23	.05	344	10.05	.000
	Business	184	2.73	.74	.05			

$p < .05$ (2-tailed)

162 constructor department students which were 46.8% of the all participants to the study and 184 business department students which were 53.2% of the all participants to the study. The hypothesis that there is a significant difference between business department students and construction department students was analyzed with independent sample t-test. According to Table 2, there was significant difference between these two group students' beliefs about math learning and problem solving ($t(344) = 7.56, p < .05$). The mean of construction department students' beliefs about math learning and problem solving was more than the mean of business department students. And, there was significant difference between these two group students' beliefs about math learning ($t(344) = 6.12, p < .05$). The mean of construction department students' beliefs about math learning was more than the mean of business department students. Finally, there was significant difference between these two group students' beliefs about math problem solving ($t(344) = 10.05, p < .05$). The mean of construction department students' beliefs about math problem solving was more than the mean of business department students.

- *Gender Analyze of the Students' Beliefs about Mathematics Learning and Problem Solving*

Table 3. Students' Beliefs about math Learning and Problem Solving with respect to the gender

Beliefs	Gender	N	M	SD	SE	df	t	p
Students belief about math learning and problem solving	Male	197	3.11	.59	.05	344	1.82	.076
	Female	149	2.81	.53	.05			
Students' beliefs about math learning	Male	197	3.17	.89	.06	344	1.17	.125
	Female	149	2.90	.92	.06			
Students' beliefs about problem solving	Male	197	2.99	1.12	.06	344	1.54	.801
	Female	149	2.80	1.20	.07			

197 male students which were 56.9% of the all participants to the study and 149 female students which were 43.1% of the all participants to the study. The hypothesis that there is a significant difference between male students and female students was analyzed with independent sample t-test. According to Table 3, there was not significant difference between these gender group students' beliefs about math learning and problem solving ($t(344) = 1.82, p > .05$). And, there was not significant difference between these gender group students' beliefs about math learning ($t(344) = 1.17, p > .05$). Finally, there was not significant difference between these gender group students' beliefs about math problem solving ($t(344) = 11.54, p > .05$).

- *Students' Beliefs about Mathematics Learning and Mathematics Problem Solving*

Table 4. The analyze of the students' beliefs about math learning and mathematics problem Solving

Beliefs	N	The numbers of students' answers				
		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Students' beliefs about mathematics learning	346	71	156	50	42	27
Students' beliefs about mathematics problem solving	346	46	67	103	89	41

Table 4 that about the Students' Beliefs about math Mathematics learning was closely separated in the section of the scale at "strongly agree", "undecided" and "disagree" levels. The students' beliefs about mathematics learning was the top rated (156) at "agree" level. The students' beliefs about mathematics learning was minimum rated (27) at "strongly disagree" level. The Students' Beliefs about math Mathematics problem solving was closely separated in the section of the scale at "strongly agree", "agree" and "disagree" levels. The Students' beliefs about mathematics problem solving was top rated (103) at "undecided" level. The students' beliefs about mathematics problem solving was the minimum rated (41) at "strongly disagree" level.

- *The Analyze of The Positive Math Learning Items of The Students' Beliefs About Math Learning and Problem-Solving Scale*

Table 5. The analyze of the positive math learning items of the scale (n =346)

Beliefs	N	The numbers of students' answers				
		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Mathematics learning depends to memorize formula	346	34	172	53	61	16
Mathematics learning needs numeric ability	346	107	225	10	3	1
Mathematics is learned with individual studying	346	59	79	98	70	38
Group study is very useful for mathematics learning	346	93	125	46	52	30

According to table 5, Students' Beliefs about Math Learning was piled up "agree" and "strongly agree" level at the positive math learning items of the scale. The student's beliefs about the item that "Mathematics learning needs numeric ability" was the top rated (225) at "agree" level. The student's beliefs about the item that "Mathematics learning needs numeric ability" was the minimum rated (225) at "strongly disagree" level. With a general evaluation, the students' belief that mathematics learning needs memorizing of the math formula, numeric ability and group study. Also, they were "undecided for the item of the scale that "Mathematics is learned with individual studying"

- *The analyze of the Positive problem-solving items in the Students' Beliefs about math Learning and Problem-Solving scale*

Table 6. The analyze of the positive problem-solving items of the scale (n = 346)

Beliefs	N	The numbers of students' answers				
		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
A mathematics problem could be solved with more than one method	346	59	72	98	67	50
A mathematics problem could have more than one true answer	346	33	53	103	85	72
A mathematics problem could be solved without using any math formula	346	76	110	72	71	37
A mathematics problem could be studied until find a solution	346	15	34	125	130	42

Table 6 that about the Students' Beliefs about math Problem-Solving was closely separated to each other in all section of the scale as "strongly agree", "agree", "undecided", "disagree" and "strongly disagree". So, we can say that our students' beliefs didn't focused on a certain point of the scale. The student's beliefs about the item that "A mathematics problem could be solved with more than one method" was the top rated (98) at "undecided" level and the minimum level (50) at "strongly disagree" level. The student's beliefs about the item that "A mathematics problem could have more than one true answer" was the top rated (103) at "undecided" level and the minimum level (33) at "strongly agree" level. The student's beliefs about the item that "A mathematics problem could be solved without using any math formula" was the top rated (110) at "agree" level and the minimum level (37) at "strongly disagree" level. The student's beliefs about the item that "A mathematics problem could be studied until find a solution" was the top rated (130) at "disagree" level and the minimum level (15) at "strongly agree" level. According to table 6, it could be said that math problem solving idea wasn't understood by the students.

RESULT

By the view of the analyze, we can conclude that; the vocational school students' beliefs about math learning and problem solving was neutral level (between 2.5 and 3.4 scores. There was significant difference between business department and constructor department students' beliefs about math learning and problem solving. There wasn't significant difference between male and female students' beliefs about math learning and problem.

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SYMBOLIC VIOLENCE AND MEDIA

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ABSTRACT

Media play a significant role in functioning of symbolic violence and power relations in modern societies. Today, mass media is absolutely crucial and prerequisite to understand the social structure and relations in modern societies and currently mentioned as fourth estate after the legislative, executive and judicial branches as a form of power. Additionally, as one of the main and preeminent important agent of socialisation, mass media substantially contributes to the production and reproduction of social identity, social relations and structure. Bourdieu developed a reflexive sociology to understand the power relations in modern societies with different interrelated theories of symbolic violence, field, habitus, capital to get a deep insight how social stratifications and inequalities are perpetuated and legitimatised. The article concentrates mainly on Bourdieusian theory of symbolic violence and other interrelated theory of field, habitus and capital and their relationships with the mass media in reproduction and legitimation of social structure and relations in modern societies.

Key words: Symbolic violence, field, habitus, capital, media

INTRODUCTION

Pierre Bourdieu is unequivocally one of the most eminent, controversial and prolific sociologists of modern times (Silva & Warde, 2010). Webb, Schirato & Danaher (2008) claim that leading social scientists as Durkheim, Marx Weber, Norbert Elias and Marcel Maus inspired Bourdieu. Works of Marx, Wittgenstein and Pascal have important contribution to Bourdieu's sociological theory. Swartz (1997) states that Bourdieu drew on the several social scientists from a variety of disciplines e.g. philosophy, sociology, anthropology to lay the foundations of his sociology.

Bourdieu (as cited in Swartz, 1997) developed a reflexive sociology to unmask the inequalities and stratification in modern societies with interrelated theories as symbolic violence, habitus, field and capital and applied these theories to different fields and institutions such as state, art, education, media, housing, academy, cultural tastes. He stresses on the role of culture in production and reproduction of social structure and relations and developed the symbolic dimension of power in legitimation of unequal, stratified, historically arbitrary structures in modern societies. Bourdieu (as cited in Jenkins, 2002) attempted to theorise how social order are reproduced through cultural mechanisms and symbolic forms instead of direct and coercive mechanisms in modern societies.

Bourdieu (1990, p. 15) states that "the cycle of life is one of social reproduction in the continuous medium term." Swartz (1997) states that Bourdieusian sociology mainly focuses on cultural and symbolic dimension in social reproduction. Jenkins (2002, p.104) states that Bourdieu systematically grounded the theory of symbolic violence in *Reproduction in Education, Society and Culture* to analyse how educational system of France contributes to legitimation and perpetuation of social structure through symbolic power and violence. Whole work of Bourdieu may be interpreted as "a materialist anthropology of the specific contribution that various forms of symbolic violence reproduces and transforms the structures of domination."

Media consumption in daily life is essential and of the utmost importance in modern societies (Anderson & Witham, 2009) and highly important to understand modern societies (Thompson, 1998). Essentially, media transform the organisation of social life both in space and time by creating new forms of practices and "new modes of exercising power." Therefore, media and its impact must take the central role to grasp the cultural transformations related to the modern societies. Taking the media seriously into consideration provides people to be aware of its serious repercussions on some social and political concerns (Thompson, 1998, p. 4). Bourdieu (1998a) emphasizes the inconspicuous symbolic dimension of media as a form of power to perpetuate and legitimatise the social order. Couldry (2003) expresses that media should be considered as a meta-capital with its capacity to exert power on the power of economic, social and cultural capital.

THEORETICAL BACKGROUND

According to Rey (2007); questioning how reality is constructed in modern societies, Bourdieu has become incontrovertibly one of the leading iconoclastic theoretician of the modern philosophy. Swartz (2010) states that Bourdieusian perspective influenced much work in several fields of social sciences as culture, art, media, education, sociology, stratification, etc.

Bourdieu and Passeron (2000b) developed a discipline on the reproduction of social structures in modern societies. Bourdieu (as cited in Rey, 2007) purposed to develop a scientific sociology to disclose how domination is reproduced and perpetuated in modern societies. He (as cited in Swartz, 1997) tried to explore the role of social and cultural reproduction in terms of power relations between both groups and individuals. Bourdieu's (2000b) sociology proposes a theory of symbolic capital and violence to analyse the connection between symbolic and non-symbolic characteristics of social life. Power requires legitimation and therefore he lays emphasis on symbolic forms of power structures in modern capitalist societies.

For Bourdieu (as cited in Swartz, 2010), all instituted groups struggle symbolically to perpetuate and legitimate social order. Bourdieu (as cited in Burawoy & Holdt, 2012) focuses on the mechanisms of domination and theorised the concepts of "symbolic violence", "cultural capital", "habitus" to explore those mechanisms in social order. Swartz (1997) states that Bourdieu created a sociology of symbolic power and through which concentrated on connections between practice, culture and social structure. Symbolic systems have social consequences and play an important role in the construction of social life and order.

Bourdieu deliberately eschewed the dichotomy of subjectivism/objectivism and agent/structure and created the theories of practice and practical knowledge (Cicourel, 1993). Bourdieu draw on different concepts and theories rather than creating division or exclusion. He claims that quality of being explanatory of any concept and theory is contingent and depends on the phenomena and cases (Görgün Baran, 2017). Concept of habitus is especially important to transcend the division of subject and object, agency and structure in modern social theories (Swartz, 1997).

Swartz (1997) states that Bourdieusian perspective marries constructionist and structuralist perspectives to establish the theory of symbolic power which arises from the problem of the relationship between symbolic representations and social structures. Bourdieu (1990, p. 123) alludes to his discipline as "constructivist structuralism" or "structuralist constructivism". By structuralism, he implies that "there exist, in the social world itself, and not merely in symbolic systems, language, myth, and desires of agents are capable of guiding or constraining their practices and their representation." By constructivism, he implies that "there is social genesis on the one hand of the patterns of perception, thought and action which are constitutive of the habitus, and on the other hand of social structures, and in particular of fields and groups, especially of social classes."

Habitus

According to Webb, Schirato, & Danaher (2008); concept of habitus both specifically and generally establishes and explains practices take place in sociocultural contexts. Swartz (1997) claims that relationships between structures and actors based on the objective structures lead to subjective consequences which compatible with the social world constructed by actors.

Bourdieu (1998b, p. 8) states that "habitus is a generative and unifying principle which retranslates intrinsic and relational characteristics of position into a unitary lifestyle, that is, a unitary set of choices of persons, goods, practices." According to Webb et al. (2008, p. 36); habitus is "partly unconscious "taking in" of rules, values and dispositions." In other words, habitus is the dispositions and values which are acquired culturally. Bourdieu (2011) explains the habitus as following;

The habitus could be considered as a subjective but not individual system of internalized structures, schemes of perception, conception, and action common to all members of the same group or class and constituting the precondition for all objectification and apperception: and the objective coordination of practices and the sharing of a world view could be founded on the perfect impersonality and interchangeability of singular practices and views. (Bourdieu, 2011, p. 86)

The habitus structures objective practices, but it is itself subjective generative principles which are produced by the objective structures in social life (Jenkins, 2002). Habitus provides "a bridge between subjective agency and objective position" (Field, 2008, p. 16). Swartz (1997, p. 212) states that "habitus represents a mediating between practices and structures rather than a structurally determinative construct." According to Bourdieu (2011, p. 79), habitus is constructed during the process of socialisation. Habitus is not constructed through conscious learning, or not ideological imposition, instead it is acquired through practice.

Differences such as goods, practices, and especially manners function in each society in connection with different positions form symbolic systems, “such as the set of the phonemes of a language or the set of distinctive features that form “a mythical system”, in other words, “distinctive signs” (Bourdieu, 1998b, pp. 8-9). “Difference becomes a sign and a sign of distinction ... only if a principle of vision and division is applied to it which, being the product of incorporation of the structure of objective differences is present among all the agents” (Bourdieu, 1998b, p. 9). “The representations of agents” diversified with their “position (and the interest associated with it)” and with their habitus, “as a system of models of perception and appreciation, as cognitive and evaluative structure” which are attained through the permanent experience of a social position. The habitus is summarily “a system of models for the perception and appreciation of practices.”(Bourdieu, 1998b, p. 9). The habitus manufactures practices and representations which exist for classifications, “which are objectively differentiated; but they possess the code, the classificatory models necessary to understand their social meaning.” As a consequence, the habitus insinuates a “sense of one’s place” but also a “sense of other’s place” (Bourdieu, 1990, p. 131).

Habitus is a system of lasting, transposable disposition which, integrating past experiences, functions at every moment as a matrix of perceptions, appreciations, and actions and make possible the achievement of infinitely diversified tasks, thanks to analogical transfers of schemes permitting the solution of similarly shaped problems. (as cited in Swartz, 1997, p. 100)

“Habitus is not innate capacity but habitus is a “structured structure” that drives from the class-specific experiences of socialisation in family and peer groups (as cited in Swartz, 1997, p. 102). Swartz (1997, p. 103) explains that habitus is not the outcome of early socialisation experiences which are internalized outside structures, but instead outcome of internalized “dispositions of broad parameters and boundaries of what is possible or unlikely for a particular group in a stratified social world develop through socialisation.” Swartz (1997, p. 97) states that key idea to understand habitus is that “objective structures have subjective consequences is not compatible with the view that the social world is constructed by individual actors.

Habitus is inclined to reproduce those practices, perceptions, and behaviours congruent with the conditions under which it was manufactured (as cited in Swartz, 1997, p. 103). “Particularly important role played by habitus and its strategies in setting up and perpetuating durable relations of domination is once again an effect of the structure of the field” (Bourdieu, 1998b, p. 131).

Three points Bourdieu (as cited in Webb et al., 2008, p. 38) associates with the concept of habitus; “first, knowledge is always constructed through the habitus, second, we are disposed towards certain attitudes, values or ways of behaving because of the influence exerted by our cultural trajectories, and third, the habitus is always constituted in moments of practice.” In Bourdieu, (as cited in Burawoy & Holdt, 2012, p. 67) “the symbolic violence that works through habitus linked to the broader symbolic order in that the hierarchies of society and the meanings of those hierarchies are stabilised and made normal.”

Field

Bourdieuian social theory is named as *field theory* (Maton, 2008). Swartz (1997, p. 10) states that practices in social life take place in *fields* which is structured. Field, in Bourdieuian sociological perspective, connects the practices of habitus to the structures of power which is stratified in modern societies. Field is a social structure in which habitus operates (Swartz, 1997). Bourdieu (2010, 2018, pp. 40-41) explains field as; “a structured social space, a field of forces, a force field.” Field is occupied by the dominant and the dominated. Long-lasting, and continuous unequal and stratified relationships take place within the field. At the same time, various agents or actors struggle to transform and preserve the field. Individuals compete for relative power for their interest. Bourdieu (as cited in Swartz, 1997, p 104) defines the concept of the field as;

a network, or configuration, of objective relations between positions. These positions are objectively defined, in their existence and in the determinations they impose upon their occupants, agents or institutions, by their present and potential situation in the structure of the distribution of species of power (or capital) whose possession commands access to the specific profits that are at stake in the field, as well as by their objective relation to other positions (domination, subordination, homology, etc.).

According to Jenkins (2000, p. 85); a field is defined as a social domain in which practices, struggles and activities occur to obtain certain resources or interest. According to Swartz (1997, p. 10), “field mediates the relationship between social structure and cultural practice”. Agents produce, circulate and appropriate services, goods, knowledge, competitive position and status, and they struggle to accumulate and monopolise the economic, social, cultural or symbolic capitals in certain fields.

Capital and Forms of Capital

Bourdieu (as cited in Swartz, 1997, p. 74) mentions four forms of capitals: “economic capital (money and property), cultural capital (cultural goods and networks including educational credentials), social capital (acquaintances and networks), and symbolic capital (legitimation)” and their interrelationship to get insight to how inequalities are produced and reproduced within social order in modern societies. Bourdieu (as cited in Field, 2008) claims that “position of agents in social field as determined by the amount and weight of their relative capitals.” He combines different kinds of capitals to understand the roles of capitals in creation and reproduction of inequalities in modern societies.

Swartz (1997, p. 127) states that under certain conditions any capitals in any form can transform into other form of capitals, yet forms of capitals are not reducible to each other. Bourdieu (as cited in Hughes & Blaxter, 2007, p. 108) states that “all forms of capital are accumulated labor and have a capacity to produce and reproduce themselves so that in society people are not equal and everything is not equally possible or impossible.” Bourdieu, (1998b, p. 12) states that “the position occupied in social space, that is, in the structure of the distribution of different kinds of capital, which are also weapons, commands the representations of this space and the position-takings in struggles to conserve or transform it.” Webb et al. (2008) notes that the amount of power agents owns in a field is related to the position of agent in the field, and how much capital in any form they own.

Bourdieu (as cited in Swartz, 1997) mainly focused on the power and domination, however, the concept of capital is not congruous with the Marxian theory of exploitation. Bourdieu broadens the forms of labour (social, symbolic, cultural, religious, etc.) and constitute power resources which can be transformed into one another at certain rates and under certain situations. Bourdieu’s reflexive sociology goes beyond the Marxian perspective to get insight to the inequalities in modern societies with the concepts of capital in different forms (economic, social, cultural and symbolic capital). The most important contribution of Bourdieu to sociology is that interchangeability of economic, social and cultural capital in power relations in modern societies.

Swartz (1997) states that economic capital is the money and properties which an agent possesses in the field. Economic capital can transform into other capitals easily. Bourdieu (1980, p. 252) states that “economic power is first and foremost power to keep economic necessity at arm’s length.” According to Swartz, (1997) social, cultural and symbolic capitals are rooted in economic capital. Social, cultural and symbolic capitals are the ones that is transformed implicitly from economic capital. It can be managed rationally, conserved, transmitted and calculated easily. According to Calhoun (1993) essentially, economic capital is a form of capital which is immediately and directly can be transformed into any kinds of capital such as cultural, social or symbolic one.

Essentially, social capital contributes to reproduction of inequality, yet it is partly and inseparably autonomous from cultural and economic capital. Bourdieu (as cited in Field, 2008, p. 20) propounds that “social capitals the exclusive property of elite; designed to secure their relative position.” Bourdieu and Wacquant (as cited in Field, 2008, p. 17) state that “social capital is the sum of resources, actual or virtual, that accrue to an individual or a group by virtue of possessing a durable network of more or less institutional relationships of mutual acquaintance and recognition.”

Bourdieu (as cited in Swartz, 1997) initially founded the theory of cultural capital during the research to explain the inequalities of students’ achievement and the relation of inequalities with their families with different educational and but similar social backgrounds. Cultural capital accumulated and embodied in the early years of childhood through family members especially parents and other professionals they interacted.

Cultural capital is form of power within the differentiated societies that Bourdieu (as cited in Swartz, 1997, p. 75) conceptualises by extending the logic of economic analysis to apparently non economic product and services. Concept of cultural capital includes a variety of resources such things as “verbal facility, general cultural awareness, aesthetic preferences, information about the school system, and educational credentials.”

The social role of culture is to classify people and thus underwrite a stratified society. He introduces the notion of cultural capital which is possessed by those who have taste and power of discrimination. Discrimination and taste are both apparently natural abilities of the individuals but are actually the products of a specific class and educational system. Culture and the knowledge that is integral to it are replacing economics as a means of differentiating classes. In late capitalism when many members of the subordinate classes are comparatively affluent, money loses its ability to mask class difference and culture moves in to fill the gap (Bourdieu, 1980). To sum up, Unequal distribution of objectified and institutionalized cultural capital in modern societies is the key to inequality and stratification (Swartz (1997).

Bourdieu (as cited in Swartz, 1997, p. 90) initially originated the concept of symbolic capital while working on peasants of Algerian Kabyle society. Agents in the fields do not perceive symbolic capital as a power which legitimates the social order. Bourdieu (1998b, p. 47) states that “symbolic capital is any property (any form of capital whether physical, economic, cultural or social) when it is perceived by social agents endowed with categories of perception which cause them to know it and to recognize it, to give it value”.

Symbolic capital is the form taken by any species of capital whenever it is perceived through categories of perception that are the product of the embodiment of divisions or of oppositions inscribed in the structure of distribution of this species of capital.” (Bourdieu, 1998b, p. 47)

Bourdieu (Swartz, 1997, p. 82) emphasize strongly that “symbolic systems not only provide cognitive and integrative functions but also serve as instrument of domination.” Bourdieu (2017) asserts that cultural practices, symbols and preferences in any field such as, art, dressing and eating habits, religion, literature, philosophy and science, especially language contribute to embodiment of interests and enhancement of social distinctions.

Bourdieu (2000a) claims that any form of capital to some and different extent tends to function as symbolic capital. All forms of capital have symbolic effects which is acquired explicitly and practically by agents in any field. Habitus is symbolically created and produced in accordance with the structure of field. Any form of capital becomes symbolic one when it is recognised or misrecognised as a power, potential or capacity. To sum up, any form of capital come to existence and works as symbolic one when relationships inside habitus produce dispositions or recognition to regard it as a power.

Symbolic Power

The most substantial contribution of Bourdieu to modern perspective about power is the concepts “*symbolic power, violence and capital*” as a form of power which makes the stratified social order legitimate. In sociological perspective, power refers to any potential or ability to influence others and exists in several different forms. It can be used by individuals or groups within formal and informal social institution and can originate from “persuasion, charisma, law, political activism, and coercion” (Anderson & Witham, 2009, p. 322). According to Thompson (1998); power exists in four forms; political, coercive, economic and symbolic power. Symbolic power is of great importance in all social life, in spite of its invisibility and inconspicuousness. Bourdieu (2003) lay emphasis on symbolic power which necessitates recognition, and works only with accompliceship of its victims.

In Bourdieusian perspective, power is analysed in three different ways: First, power considered as valued resources such as different forms of economic, social and cultural capital. Second, power considered as specific domain of struggle (fields). Third, power considered as legitimation through symbolic power, violence and capital (Swartz 2010). Words or symbols are not single-handed power but functions as power when they have potential for legitimacy. According to Bourdieu (2001), symbolic power determines the relationship between those who wield and those who undergo it and produces or reproduces social relations and order. Symbolic power contributes to legitimacy of political and economic power but it is not reduced to them.

Bourdieu (1990, p. 138) explains the concept of symbolic power;

is a power of creating things with words. It is only true, that is, adequate to things, that a description can create things. In this sense, symbolic power is a power of consecration or revelation, a power to conceal or reveal things which are already there.

Jenkin (2002) states that naming and categorisation process of language is vital in the construction of social reality. According to Bourdieu (as cited in Swartz, 1997, p. 83); symbolic systems are “structuring structures” which work as mechanisms or tools used to understand and construct the social world. In this sense, different modes of knowledge such as language, art, science, etc. represent the social world in order to be understood, made sense of, therefore “exercise a cognitive function.” Bourdieu (2003) claims that language structures worldview of individuals in social order, consequently establishes and constructs the social world.

According to Bourdieu (2003), language is an inextricable element of the struggles within the social structure in terms of culture and its reproduction process which contributes substantially to reproduction of the traditional social order. Swartz (1997, p. 87) claims that symbolic representations have political effects. They hierarchically identify social structures and thus legitimise social distinctions. Mental structure is acquired via the binary logic and impacts our cognitive capabilities, thus produces a certain kind of map of social distinctions. Moreover, social distinctions are structured and adopted by “the polarity logic of cognitive process.” Symbolic systems becomes a form of “vertical classification”, through which “cognitive logic of polarity” and “social exclusion and inclusion” is connected and established.

Power relations establish the structure of social space through reproduction and reinforcement. In other words, not a deliberate propaganda but symbolic imposition legitimates the social order. Social agents apply symbolic systems which are produced in objective structures. On this account, objective structures of the social world is regarded as self-evident and does not require to be justified and legitimised. Social inequalities and stratifications in any field are perpetuated and legitimised through more by symbolic power than physical power (Bourdieu, 1990).

Symbolic Violence

Bourdieu states (1998b, p. 133) that "... symbolic violence is the gentle, disguised form of violence." This form of violence takes place when it is not possible to exercise overt violence. People may misunderstand or minimize the effect of concept of symbolic violence by comparison with physical violence because the concept involves the word of symbolic and it is presumably considered as "spiritual" and it does not have real consequences and effects.

The theory of symbolic violence attempts to explain that inequalities and domination in societies are always reproduced, perpetuated and legitimised through symbolic representation and activities. The origin of the concept of symbolic violence dates back to the work of Plato "*Republic*". He lays emphasis on the fundamental propositions derived from metaphysical systems which imply political perspective of society and organize civic life. Plato stresses the important role of art, moral symbolic systems, philosophical or political values to name a few. Symbolic systems are important in this term to constitute the social world. Any form of domination is reproduced and legitimised through symbolic capital which transforms into power to legitimate the other forms of capitals in modern capitalist societies (Swartz, 1997).

According to Quema (2015); symbolic representations construct and produce individuals' perception of the social world. Bourdieu (2003, p. 168) defines the symbolic violence as "the power to impose (or even to inculcate) the arbitrary instruments of knowledge and expressions (taxonomies) of social reality - but instruments whose arbitrary nature is not realized as such." Bourdieu (1998b, p. 127) states that it seems gentle and exists in a form of "invisible trust, obligation, personal loyalty, hospitality, gifts, debts, piety, in a word, of all the virtues honoured by the ethic of honour, presents itself as the most economical mode of domination..."

Bourdieu and Passeron (2000b) theorised symbolic violence in their work *Reproduction in Education, Society and Culture* in that it is enunciated that;

Every power to exert symbolic power, i.e. every power which manages to impose meanings and to impose them as legitimate by concealing the power relations which are the basis of its force, adds its own specifically symbolic force to those power relations. (2000b, p.4)

In Bourdieusian perspective, symbolic violence is a power or potential to impose certain symbolic systems to comprehend and adapt to the social world in invisible and taken-for-granted forms (Swartz, 1997). Rey (2007) states that those who dominate the society impose arbitrary systems and forms of meaning of social order through symbolic violence, which make those who are dominated misrecognise and see it natural. Symbolic violence can be exercised with the unwitting complicity of those who are suffered from it. Bourdieu (2001, p. 171) states that "symbolic power is exerted only with the collaboration of those who undergo it because they help to construct it as such."

Symbolic violence is the imposition of symbolic systems and their meanings on social groups or classes in such a way that they see it as legitimate. Invisible legitimacy disguises the power relations, thereby allowing symbolic violence to be effective. By accepting the imposition as legitimate, cultural symbolic systems systematically reproduce power relations in modern societies. The process works through misrecognition which makes power relations such a form that makes them legitimate in the eyes of those who are undergo symbolic violence rather than perceiving as what it objectively is (Jenkins, 2002). According to Kraus (1993), the strength of symbolic violence results from its inconspicuousness or invisibility.

Symbolic violence works when habitus as a subjective structure and objective structure correspond to each other. Congruity between subjective structures and objective structures originate the power of symbolic violence which constructs the habitus of agents in any field of struggle in modern societies (Kraus, 1993).

To overcome the symbolic violence, social agents need to be conscious of social institutions such as family, school, media, religion which construct the unequal and stratified social order in modern societies (Bourdieu, 2001). According to Quema (2015), symbolic violence takes place at the level of practical knowledge-to put it differently, the social agents occupy in any field put beliefs and structuring principles into practice and thus support and approve the rules and structures which are socially needed to be legitimised.

Media and Symbolic Violence

According to Thompson (1998); symbolic forms which are mediated by media does not only shape our sense of past but also creates individuals' sense of the world and sense of individuals' place within the social world. Media products enable individuals make sense of experienced events, observe others, concisely learn about a world which is beyond our daily encounters. Today, our sense of world is so profoundly shaped by media products that images and expectations acquired through the media exposure predominate our real experiences. Similarly, Bourdieu (1998a) argues that individuals exposed to television products are imposed to see the world from a rather narrow and mainstream political perspective as a consequence of cultural production.

“Ultimately television, which claims to record reality, creates it instead” (Bourdieu, 1998a, p.22). The theory of symbolic violence proposes that all contents and practices produced in the cultural sphere are historically arbitrary and unsubstantiated (LiPuma, 1993). Bourdieu (2011) claims that all cultural systems are constructed historically by human being and derived from the practices to the interest of certain social groups and contribute to legitimation of unequal power relations in modern societies. Cultural commodities furthermore function ideologically, reproduce and perpetuate the social order and the relations of domination through symbolic violence which is concealed and inconspicuous (Bourdieu, 1998b). Media texts inarguably perform ideologically to reproduce social structure implicitly (Fairclough, 1995; Berger, 1991).

Media manufacturers who produce cultural content have symbolic power to present the things and lead people believe what is presented, to reveal and conceal the practices of both the natural and social world. Consequently, they bring things into fact through symbolic power which is generally wielded for the benefit of those who dominates the social order (Bourdieu, 1990). Dominant classes hide their domination behind the divisions in the cultural sphere by the virtue of symbolic power (Bourdieu, 2017). Individuals do not realise the power of television to hide by showing, which becomes very effective symbolic violence to perpetuate and legitimatise the social order (Bourdieu, 1998).

Bourdieu (1998) claims that domain of media is complex and outside the range of ordinary people in any society. Television is an effective media tool to reproduce and perpetuate power relations inconspicuously while entertaining people (Shanahan & Morgan 2004). According to Fiske (1987), media discourses enable individuals make sense of social practices and order. Fairclough (1995) claims that similar banal and unvarying genres and formats of television programs such as news, soap operas, reality shows, tabloids construct and naturalise social and personal identities and relations to a certain extent.

Media contents are symbolic and cultural commodities which are manufactured in the culture industry and vulnerable to profit oriented pressure within the industrial market (Fairclough, 1995). Adorno & Horkheimer (2002) asserts that mass media have substantial and destructive impact on the mass population. Media contents are not anymore presented as an art instead utilised as an ideological tool to legitimise nonsense commodities which are purposefully manufactured. Culture industry is restrained to produce content in massive amount and standard way and relinquish the authenticity of work relevant to society.

The concept of *habitus* sheds light on that consumer taste or preferences in any field such as art, television programmes, music, etc., are not only subjective level choice but also it is resulted from social circumstances by the virtue of individual's habitus (Laughey, 2007). Cultural differences in any society generally functions as a means which generates symbolic power which maintains and reproduces social order. Through their habitus, individuals produce and perpetuate the social order and structure with their choices and taste in cultural fields including media contents (Bourdieu, 2017). Habitus structures and naturalises symbolic and cultural differences and each habitus provides certain way to see, perceive and comprehend the social world, to put it differently a “*distinctive mode of cultural consumption.*” (Lee, 1993, p. 45). Pierre Bourdieu (2000) claims that symbolical goods in cultural field functions as tool to reproduce and perpetuate the social order and establish class relations. According to Bourdieu (2017), the power originates in the process of production of social differences which are presumably in several forms such as social, symbolic, economic or cultural. The media is also a field that constitutes social distinction and strategies of class control and closely influences the social field (Myles, 2010).

Field theory is also related to media and cultural consumption. As any field, media have also autonomous structure with a hierarchy of positions which restricts, regulates and reproduces cultural commodities in certain types and methods. Field of media, which produces cultural commodities, has certain dispositions which correspond to habitus, through which producers adopt and shape what to be produced and eventually consumed (Bourdieu, 1993). Economic and social constrains structure the media and cultural production in practice, thus corresponding habitus of the field of cultural production is prone to mean that average media consumers are predisposed to similar products of the same producers (Laughey, 2007).

Bourdieu (1998a), in his work of *On Television*, sheds light on the symbolic violence and mechanisms which leads to it, specifically on the field of television journalism. He tries to show in depth-analysis how journalistic field produces and imposes the mass audiences certain worldview with its invisible structure. According to Bourdieu; television is significantly dangerous for many areas of cultural production; art, science, literature, philosophy to name a few, on the contrary it does not have any threat to political life.

In modern media, controlling the instruments of production limits the professionals who appear on journalistic field on television in terms of time and topic which is usually imposed by those instruments, which leads to symbolic violence and structures the media content to a great extent. Mostly those professionals who appear on television does not worry about these control instruments rather they desire to be seen on the television screens. Limitation of the time of programs leads to an invisible censorship. Moreover, professionals in journalistic field censor themselves due to job security because of limited capacity to employ those professionals. This lack of job security also forces the journalistic professionals to political conformity (Bourdieu, 1998a).

Journalistic professionals are subject to self-censorship resulting from economic pressure because television is profit-making institution which needs the ads of companies and subsidies of government, which forces the owners of the media institution in the sense that what is on screens of television. These invisible mechanism leads to censorship of media owners, ultimately journalistic professionals to make television a means for establishing and maintaining the symbolic order which originates from symbolic violence (Bourdieu, 1998a).

According to Bourdieu (1998a); sensationalism on screens, such as sex, blood, crime, etc., is attractive but also turns attention of audiences from important issues and takes up the precious time instead turning important issues. The time spent before screen on worthless and kitschy programs is substantially important in reality because most of the population in society get the news and information on social world from television, thereby becoming the main determinant of worldview of great majority on outer world. Bourdieu uses the metaphor of “eyeglasses” to explain the symbolic power of television which determines what audiences see or do not see. Also, television has symbolic power to exaggerate the importance of certain events or vice versa, thus create, show and bring the social world into existence.

television paradoxically can hide by showing, That is, it can hide things by showing something other than what would be shown if television did what it’s supposed to do, provide information. Or by showing what has to be shown, but in a such as way that it isn’t really shown, or is turned into something insignificant; or by constructing it in a such a way that it takes on a meaning that has nothing at all to do with reality. (Bourdieu, 1988a, p.19)

Television has also the making of political danger with its capacity to make people believe that they see on the screen, which is called *reality effect*. Through this effect, television has power to mobilize groups and create ideas and images by constructing the social reality. This power may lead to arouse negative feeling on audiences such as racism, chauvinism, xenophobia, etc. Television imposes both in local and global struggles to see the world a certain divided way, thereby creating social divisions to mobilise groups as a result of symbolic power and violence (Bourdieu, 1998a).

CONCLUSION

People in almost all societies exchange production, information and symbolic content. Media have possible effects both on individual and social level, which is crucial to understand the modern societies. Mass communication produces practices which are not physical but suitable for individuals in different spaces. New media influences and transforms the structure of societies and therefore functions a new mode of power which does not require to share the same space and time with audiences (Thompson, 1998). Couldry (2003) claims that in Bourdieusian perspective, media is presumably considered as a meta capital which has also power to exercise on the power of other forms of capitals; economic, social and cultural one.

In order to understand the inequalities and stratifications in modern societies, Bourdieu (as cited in Swartz, 1997) originated a reflexive sociology with concepts of field, capital, habitus, symbolic capital, power and violence in order to transcend the dichotomy of “objectivism and subjectivism”, “agent and structure” and “theory and empiricism.” According to Bourdieu (2001), the dominated or subordinated unconsciously act in accordance with the principles and worldview established by the dominants groups in society. Unequal and arbitrary social order is constructed historically and arbitrary through symbolic violence by different social institutions such as mass media, educational system, family and so on. According to Yair (2009); Bourdieu exerted himself and strived for elucidating how symbolic violence unwittingly reproduces, perpetuates and legitimatises the unequal and stratified social order with complicity of the dominated.

Bourdieu (1998b, p.20) states that “we know that to name is to show, create, to bring into existence. And words can do a lot of damage.” Rey (2007, p. 56) states that “only where there is distinction can there be domination.” Being aware of symbolic violence which is exercised in any field is substantial for individuals in a society because it is the source of distinctions and division among individuals and social groups. Bourdieu (2000a) states that any kind of domination has all the time a symbolic dimension.

Bourdieu (1990, p. 137) states that “to change the world, one has to change the ways of making the world, that is, the vision of the world and the practical operations by which groups are produced and reproduced.” According to Bourdieu (2001), elicitation and revealing of symbolic violence through a scientific analysis has presumably two opposite social effects. Either it may reinforce the any form of domination when findings support or converge with the discourse of the dominant order, or it may help to eliminate the dominant order by mobilising the those who are dominated. According to Swartz (1997); Bourdieusian sociology is an instrument in order to be able to resist and fight against symbolic violence which is obscured and inconspicuous.

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THE AFFORDANCE AND CHALLENGES OF IMPLEMENTING A MASSIVE OPEN ONLINE COURSE IN (KISWAHILI (KMOOC) IN EAST AFRICA

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ABSTRACT

MOOCs can be used to connect learners and initiate a sense of community online, which is an essential socio-cultural aspect of learning a language. The paper explores the opportunities afforded by the Massive Open Online Courses (MOOC) to support the offering of Kiswahili (kMOOC), for both local and international students, and the challenges associated with implementing it. The significant development of Kiswahili as a formal language beyond the geographical delineations of East African motivates explorations of novel ways to study the development and sustainability of this language. Research reported in this paper is part of a research programme exploring the value and utilisation of a Massive Open Online Course to support the learning and internationalisation of Kiswahili (kMOOC). kMOOC is a collaborative a research program at the State University of Zanzibar, Zanzibar and the University of Otago, New Zealand, prospectively looking into students' perspectives of the opportunities MOOCs offer in supporting the teaching and learning of Kiswahili language online. The paper seeks to identify opportunities afforded by kMOOC as a platform for reclaiming Kiswahili as a digital national heritage. kMOOC is viewed as an innovation to enhance global recognition of this growing language in East Africa and beyond, and the initiative could be utilised as a platform for the conservation of linguistic heritage.

THE ASSESSMENT OF E-BOOK LEARNING WITH ACCEPTANCE LEVEL AND INFLUENCE OF TERTIARY STUDY IN TERTIARY EDUCATION

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ABSTRACT

In the 21st century, the internet is common for everyone. With advanced technology, people would like to take advantages from electronic world. In our daily life, many activities have launched electronic mode instead of traditional methods, e-commerce is one of the examples that replace the physical store style. Comparing with the earlier year, the environment of education has reformed a lot. There is a trend in which involving more electronic versions of learning materials. One of the changing tools is the e-book and it becomes more significant in tertiary education. More and more universities have encouraged students to adopt e-book in replacing traditional books. Moreover, the university campus is proactive to motivate students using the e-book. They have built the e-book system for students to search certain data and read the e-book materials. In order to find out the perception of students on using the e-book, this project conducts a survey which distributed to students who are receiving or received tertiary education. The questionnaires aim to observe the acceptance level of the e-book and the experience of using the e-book, also to discover on what extent e-book influence students' learning.

To examine the perception of students on using the e-book, some hypothesizes from the Technology Acceptance Model (TAM) and the Unified Theory of Acceptancy and Use Technology (UTAUT) have set to support the result. A new research model has been developed by combining some factors in TAM and UTAUT including the performance expectancy of the e-book, the effort expectancy of the e-book, the social influence of e-book, the facilitating conditions of e-book and behavioral intention. The four basic elements from UTAUT have been a critical influence of technology expectancy. Moreover, a new element has been added to evaluate the compatibility of e-book whether an acceptance tool for e-learning. The final part to prove the success of e-book in e-learning is the behavioral or usage intention of the e-book from TAM which is an important factor to support in this model. In this project, the final result would be to what extent that students in tertiary education recognize the e-book as part of their learning method. Also, to summarize all the collected data and information to give some suggestion on improving the e-book environment in higher education.

INTRODUCTION

Before technology advance, teaching activities are by the manual and physical method. For example, using traditional books to teach students or a blackboard is provided at school for the teacher to write down the knowledge during teaching. However, as technology has improved a lot in the 21st century, many countries have introduced e-learning environment to the educational field including Hong Kong. Especially for university students, e-books are one of the learning methods recently.

The definition of e-book is to make traditional book becomes digital version that available users to read it online through electronic devices (Annand, 2008). There are some arguments exist that whether an e-book is suitable for learning although it has lots of advantages. There are still many challenges that need to face in e-book industry such as the standard quality of e-book, missing a proper technology to access the e-book and not enough post-service or service support when having difficulties on reading e-book (Diaz, 2003). The acceptance of the e-book had been affected by those problems.

When focusing on tertiary education, online learning is a common method nowadays especially for long distance learning in some educational institutes (Simpson, 1988). The university is hard to determine the suitable format for

students whereas the improper version of e-book launch on campus would influence the acceptance level on e-book among students, as well as the e-learning. It is one of the barriers that implanting e-book learning in higher education. The growth of e-book has been a significant influence towards university's students since it provides more chance for students to get access to the e-book system (Shelburne, 2009). The attitude of students to use-book would probably have influenced by this growth. Therefore, to find out the perceptions of students in tertiary education, some theory and model has been applied to discover the finding.

For evaluating the reception level of a new technology, Technology Acceptance Model (TAM) can be used to assess the behavioral of users (Davis & Venkatesh, 1996). Another theory is the Unified Theory of Acceptance and Use of Technology (UTAUT) which could be applied in this project for evaluating the acceptance degree of the usage in a technology (Workman, 2014). It contains different aspects for constructing the model. The questions in survey are mainly designed in these two models. For collecting certain data to conclude the acceptance level of e-book in e-learning of tertiary educations. Also, the findings would be discussed and to illustrate the following questions of this study. The questions of this study are:

1. To evaluate between the compatibility of e-book and the technological acceptance level in e-learning of tertiary education
2. The reasons of acceptance / unacceptance of e-book in e-learning of tertiary education
3. The possible suggestions on adopting e-book learning in tertiary education

THE STUDY

What is E-book?

An electronic book is a kind of reading material in digital form. Similar to the conventional book, the e-book can consist of word and photo, and animation which physical book cannot. Media to read it requires computers or equivalent electronic devices only (Gardiner, Eileen and Ronald G. Musto., 2010).E-books not only refer to an electronic version of a printed book (Brewster and Bruce, 2010), but they can also be electronic version only. Such that viewer must use an e-reader to read.The increasing popularity of e-books is due to fewer prices than printed book, more user-friendly, and a larger pool of titles selection (Bhardwaj, D., 2015).

History of E-book

Several e-book pioneers were agreed in today, such as Ángela Ruiz Roblesf patented the device in 1949, which idea was to reduce the number of books to be carried to school (Lallanilla M., 2014).And the first e-book is recognized as the "Index Thomisticus", this book was prepared by Roberto Busa since 1949 until the 1970s (Priego, E., 2011). Later on in 1971, Michael s. Hart created his first e-document, by inputting the United States Declaration of Independence in the computer, whose intention was to make ease to download and view on devices (Flood A., 2011).

Advantages & Disadvantages of using e-book over printed books

The size of printed books no doubt is bigger and heavier than an e-book reader in terms of the page, and not to mention a single e-book reader can contain a lot of e-books without enlargement. The e-book can adopt different environmental situation for the reader to read for that device with the light source. Text scale can also be adjusted as reader need, and may possible changing font as well. Addition software may be applied for text-to-speech function, which aids reader needs (Harris, C., 2009).In respect to production, the traditional book likely to use more raw materials to produce (Goleman, D., 2010), in other views, printed books cost more than e-books. The production rate of the e-book is not applicable, as it can be "produce" or back-up in no time, the copy can be downloaded without additional cost.

Privacy for the reader may be an issue, as from identity and preference, to what page reader is reading and how long the reader finish the reading can be known in some circumstance (Richards, N., 2015). Other cons of e-book included it cannot be an object itself, some people like to touch it, smell it, hold it, etc. such that, e-books are not targeted to those who want a physical affair with the book (Queenan, J. (2012). There is a possibility that e-book together with e-book reader being stolen, and files can be deleted or lost in some case. The digital rights are another issues e-book are facing at the moment (Hiltzi, M. (2016).

Technologies used in E-book

The e-book is different from the traditional book. It need an application to operate it. Also, readers need to use their device to get delivery of e-book.

1. Hardware

Nowadays, people would access the e-book through the internet. But at the beginning of e-book, the producer can only provide the e-book to someone who demands many reference substances. As the technology advance, producers desire to get more general public aware the e-book. Therefore, producers have improved the e-book device that can download the reading and lighter machine to access the e-book information. It is more convenient compared than the original machine (Thomson Multimedia, 2000). NuvoMedia Rocket eBook is one of the examples.

2. Software

For software aspect, it is for those readers who did not own an e-book device or machine. They can access e-book information by using their personal devices like phone, computer and laptop. By using software aspect of e-book access, readers can adjust the scale of the information with the keyboard (Lynch, 2001). There are two type of Microsoft Reader for downloading materials without any charge online (Shiratuddin N., MLandoni M., Gibb F. & Hassan S. 2013). People who are using the desktop or laptop, they are able to encrypt the e-books from Amazon.com or BarnesandNoble.com. Also, they can encrypt the e-books from the website which provides electronic version. For people who are using Pocket PC devices, they are only allowed to access unencrypted information from e-books (Shiratuddin N., MLandoni M., Gibb F. & Hassan S. 2013). Moreover, the electronic version of e-book also can be found it doc, XML and HTML (McKnight and Dearnley, 2003).

Theory used in evaluation the acceptance of e-book

1. The technology acceptance model (TAM)

This is a model developed by Davis in 1989. It is mainly for the technology aspect of external and internal factors that affect the behavior of users. This model is used to predict the acceptance level of using a new technology in a reliable method (Warshaw, 1989). Perceived Usefulness (PU) means the new technology can achieve the certain objective and Perceived Ease of Use (PEOU) means the level of using technology effort (Davis, 1989). These two variables are used to explain the intention to use in the model.

2. Theory of reasoned action (TRA)

Theory of reasoned action (TRA) was introduced by Fishbein in 1996. The theory used to evaluate human behavior from social psychology aspect (Conner, Kirk, Cade, & Barrett, 2001) and can be supported the estimation of different social behaviors (van den Putte, 1991). It is mainly finding out the attitude of interviewee on e-book.

3. The unified theory of acceptance and use of technology (UTAUT)

The unified theory of acceptance and use of technology (UTAUT) was established by Venkatesh in 2003. UTAUT has combined the technology acceptance model (TAM) and other analysis acceptance models. The model divided into two main aspects to evaluation the user behavior. One is the personal background and habit, another is the attitude of the technology.

DEVELOPMENT OF HYPOTHESIS

Technological expectancy

Base on the Unified Theory of Acceptance and Use of Technology (UTAUT), there are four basic factors included the performance expectancy, effort expectancy, social influence, and facilitating conditions (Venkatesh et al., 2003). Technological expectancy means the perspective of controlling the technology with the social influence (Talyor & Todd, 1995). The hypothesis of technological expectancy is as follow:

- H2. The positive influence of technological expectancy towards the behavioral intention

By referring the UTAUT model, some factors involve in this project and its hypotheses are important to indicate respective relationship with technological expectancy. The hypotheses of technological expectancy and these four elements are as follow:

- Ha. The positive influence of performance expectancy towards technological expectancy
- Hb. The positive influence of effort expectancy towards technological expectancy
- Hc. The positive influence of social influence towards technological expectancy
- Hd. The positive influence of facilitating conditions towards technological expectancy

2.4.2 E-book Compatibility

The compatibility of e-book mean the experiences of interviewee when using e-book as eLearning tool, including whether interviewee consider the e-book as a learning method. They are believed to have close relationship in eLearning system (Johnson, 1999). For the hypotheses of e-book compatibility, have been recognized that having positive influenced towards technological expectancy and behavioral conditions. Here are the hypotheses:

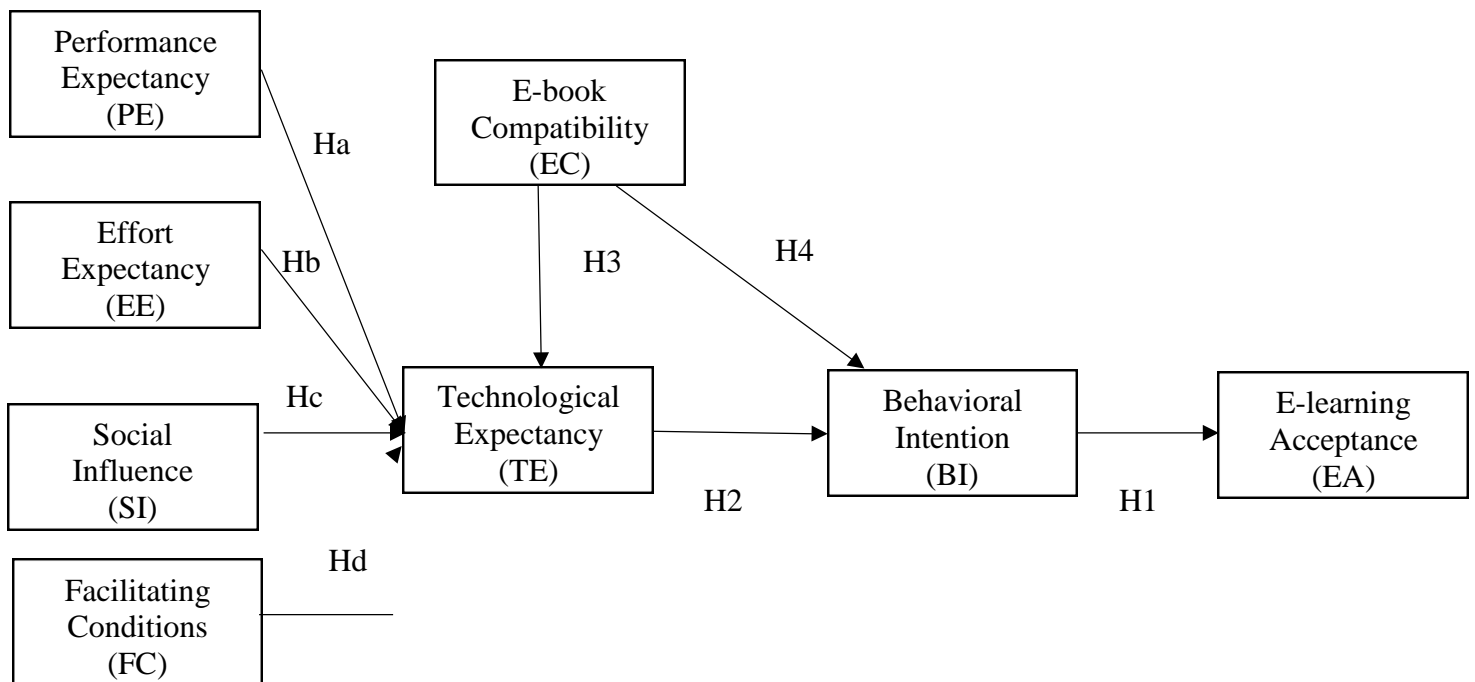
- H3. The positive influence of e-book compatibility towards technological expectancy
- H4. The positive influence of e-book compatibility towards behavioral conditions

2.4.3 Behavioral Intention

The behavioral intention is another element to influence the acceptance level in eLearning. It is used to motivate a user to use in the eLearning system (Park, 2009). Also, the acceptance level on eLearning is directly influenced by behavioral intention (Hardgarave et al., 2003). As a result, there is a relationship between behavioral intention and e-learning acceptance, I propose the hypothesis as follow:

- H1. The positive influence of behavioral intention towards e-learning acceptance

Figure1. The new combined research model



FINDINGS

In this research project, the data collection method is mainly by web-based questionnaires. Web-based questionnaire tends to be easier than paper-based questionnaire in data collection and data organization (Tuft, 1997). Also, to test the reliable of the collected data is important before start analyzing the data (Field, 2013). To evaluate the collected data whether it is valid and reliable for analyzing the result. Principle Component Analysis (PCA) and Reliability analysis would be applied in this project.

A. Population and Sample

In this project, 250 copies of questionnaires were distributed and only 239 copies were filled and returned. Among those 239 copies, there is some disagree sample that was uncompleted, data irrelevant, and other reasons. Therefore, useful questionnaires collected were 213 copies which contained complete information and relevant data for further analyzation.

To summarize, nearly half of the interviewees are male, owned 48.4%. The remaining 51.6% are female. Among those people, only one of them is under 18 years old, the majorities are from 18-25 years old, 19 people age from 26-30, and the remaining two people are greater than 30 years old. In respect to their education institute, around 56% are from CityU, HKU, UST and BU students reply number are less than 2% respectively, 6% of them are CUHK student, less than 8% study in PolyU, only two students from LU, more than 4% are from EdUHK, less than 4% study in HKSYU, 15% are studying or graduated from others institution in Hong Kong. A large percent of interviewees are studying or obtained Bachelor Degree. Data of their year of studies, 4% of people from Year 1, 11% students studying Year 2, 12% of them are from Year 3, most of them are studying Year 4 and there are 45% of them, 16% of interviewees obtained their qualification, the remaining 12% of interviewees are for other reason such as above year 4 etc. Among those 213 interviewees, less than 10% study in Business, 7% in Art/Social Science/Education, 58.2% in Science and Engineering, more than 2% study in Creative Media, and remaining 22% study in other major. 90% of interviewees studying or studied in full time, 9% of them study in part-time mode, and remaining 1% as well as 1 person is an exchange student. In the area of their computer usage, by assessing their computer skills from 1 to 7 where 1 is the least, no one rate themselves 1 or 2, respective 3% rated themselves 3 or 4, 39% interviewees rated 5, there are 46% people rated 6, and around 10% rated 7 to say they are master in computer usage. While asking about the number of computer device(s) they owned, 31% declared they have just 1 device, the majority owned two devices and occupied 42%, 20% of them have up to three devices, and 4% of interviewees are having more than 3 devices at the moment of the interview.

B. Data Analysis & Findings

There are 31 questions from the questionnaire about the acceptance of e-book in different aspects, which is a summary of descriptive statistics in these 31 items. It is the most important part of analysis the hypothesis. Also, this part is an evidence to support the combined research model. The structure of table can be divided into two parts. The left-hand side is the questions had been asked from interviewers in the questionnaire. On the right-hand side, there are five main elements to calculate the result including the total number of collection, mean, standard deviation, variance, and skewness. In this part, the question set in a 1 to 7 scale which provide to respondents for choosing the most suitable level of responding questions. (1 is unlikely for agreement level, 4 is neutral, 7 is absolutely in agreement level).

Table 1. Descriptive statistics of question 18 - 48

Descriptive Statistics							
Questions	N	Mean		Std. Deviation	Variance	Skewness	
	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic	Std. Error
18) The operation of e- book is easy for me.	213	4.53	.111	1.621	2.628	-3.42	.167
19) I am familiar with using e-book.	213	3.83	.125	1.830	3.349	.094	.167
20) E-book has a clear guideline for using it.	213	3.62	.117	1.710	2.924	.297	.167
21) It is easy to learn how to use e-book.	213	4.09	.118	1.727	2.982	.114	.167
22) I can get assist and support easily when using e-book.	213	3.60	.121	1.763	3.110	.339	.167
23) E-book is easy to control it. (E.g. turn to next page, close it and etc.)	213	4.59	.124	1.806	3.262	-.499	.167
24) Most of my mobile device can help me easily to access e-book.	213	4.38	.115	1.672	2.794	-4.12	.167
25) E-book is more reliable.	213	4.57	.103	1.508	2.274	-.603	.167
26) Usually, I can obtain the most updated information from e- Book.	213	3.51	.102	1.491	2.223	.456	.167
27) I think e-book is more convenient.	213	3.62	.114	1.671	2.792	.139	.167
28) E-book is a useful tool for my learning.	213	4.52	.114	1.661	2.760	-.498	.167
29) E-book can help me to achieve my study purpose.	213	4.20	.116	4.693	2.867	-.019	.167
30) E-book is helpful to finish my task earlier.	213	4.78	.111	1.626	2.644	-.562	.167
31) E-book has improved my learning outcomes.	213	4.20	.111	1.613	2.602	-.284	.167
32) I can obtain more knowledge and information from e-book.	213	4.31	.119	1.737	3.019	-.673	.167
33) E-book always helps me to solve the difficulties of study.	213	4.29	.127	1.848	3.415	-.588	.167

34) If I use e-book, I can get a higher opportunity to gain a better grade or GPA.	213	3.59	.113	1.653	2.733	.210	.167
35) E-book is suitable for my current learning style.	213	4.21	.115	1.678	2.816	-.246	.167
36) E-book is the most suitable learning tools.	213	4.01	.117	1.702	2.896	-.113	.167
37) I think e-book makes study more efficient.	213	4.05	.111	1.623	2.634	-.138	.167
38) I am getting along well with e-book.	213	3.47	.106	1.544	2.383	.538	.167
39) My study has involved with e-book.	213	4.13	.112	1.628	2.649	-.226	.167
40) I think e-book attract me to study.	213	3.60	.105	1.528	2.336	.208	.167
41) I got recommend from my friends to use e- book.	213	4.12	.119	1.736	3.013	-.315	.167
42) My professors or tutors suggest me to use e-book.	213	4.41	.116	1.690	2.856	-.258	.167
43) I think that my surrounding people are support me to use e-book.	213	4.04	.101	1.473	2.168	.096	.167
44) I think e-book helps better in my study than traditional method.	213	4.14	.119	1.731	2.996	-.218	.167
45) I think e-book is cheaper comparing with using traditional book.	213	4.76	.115	1.672	2.796	-.575	.167
46) I think I will use more e-book during my university life.	213	4.36	.119	1.733	3.004	-.667	.167
47) I will continue to use e-book.	213	4.62	.117	1.711	2.927	-.338	.167
48) I will suggest my friends or classmates to use e-book.	213	4.28	.100	1.464	2.145	-.354	.167

Hypothesis Testing

The Pearson's correlation coefficient (r) is used in nowadays software packages for curve fitting and displaying data. It can be used to evaluate the internal relationship among the data values (Hall, 2015). While experimental errors are commonly included by applying χ^2 function (Lyons, 1998). The correlation coefficient is used to determine the relationship between two variables. The range from the formula between -1 to +1. The closest value to positive one means a strongly positive relationship between two variables. In opposite, the closest value to negative one means a strongly negative relationship between two variables. If the value is 0, there is no relationship. Moreover, the 2-tailed should be less than 0.05, otherwise no correlation between variables.

Relationship between all factors*Relationship between PE and TE*

		TE	PE
TE	Pearson Correlation	1	.952**
	Sig. (2-tailed)		.000
N		213	213
PE	Pearson Correlation	.952**	1
	Sig. (2-tailed)	.000	
N		213	213
**. Correlation is significant at the 0.001 level (2-tailed)			

Table 2. Correlations table between PE and TE

In this table 2, it reflects the relationship between performance expectancy (PE) and technological expectancy (TE). The value of Pearson's correlation coefficient is 0.952 while the t-test check of significant value is smaller than 0.05. It means the two variables PE and TE belong in significant correlated statistically. Also, the result shows the relationship between PE and TE is in a strongly positive relationship condition. As a result, H_a . The positive influence of performance expectancy towards technological expectancy can be supported the hypothesis in the new combined researched model.

Relationship between EE and TE

		TE	EE
TE	Pearson Correlation	1	.862**
	Sig. (2-tailed)		.000
N		213	213
EE	Pearson Correlation	.862**	1
	Sig. (2-tailed)	.000	
N		213	213
**. Correlation is significant at the 0.001 level (2-tailed)			

Table 3. Correlations table between EE and TE

In this table 3, it reflects the relationship between effort expectancy (EE) and technological expectancy (TE). The value of Pearson's correlation coefficient is 0.862 while the t-test check of significant value is smaller than 0.05. It means the two variables EE and TE belong in significant correlated statistically. Also, the result shows the relationship between EE and TE is in a strongly positive relationship condition. As a result, Hb. The positive influence of effort expectancy towards technological expectancy can be supported the hypothesis in the new combined researched model.

Relationship between SI and TE

		TE	SI
TE	Pearson Correlation	1	.858**
	Sig. (2-tailed)		.000
	N	213	213
SI	Pearson Correlation	.858**	1
	Sig. (2-tailed)	.000	
	N	213	213
**. Correlation is significant at the 0.001 level (2-tailed)			

Table 4. Correlations table between SI and TE

In this table 4, it reflects the relationship between social influence (SI) and technological expectancy (TE). The value of Pearson's correlation coefficient is 0.858 while the t-test check of significant value is smaller than 0.05. It means the two variables SI and TE belong in significant correlated statistically. Also, the result shows the relationship between SI and TE is in a strongly positive relationship condition. As a result, Hc. The positive influence of social influence towards technological expectancy can be supported the hypothesis in the new combined researched model.

Relationship between FC and TE

		TE	FC
TE	Pearson Correlation	1	.818**
	Sig. (2-tailed)		.000
	N	213	213
FC	Pearson Correlation	.818**	1
	Sig. (2-tailed)	.000	
	N	213	213
**. Correlation is significant at the 0.001 level (2-tailed)			

Table 5. Correlations table between FC and TE

In this table 5, it reflects the relationship between facilitating conditions (FC) and technological expectancy (TE). The value of Pearson's correlation coefficient is 0.818 while the t-test check of significant value is smaller than 0.05. It means the two variables FC and TE belong in significant correlated statistically. Also, the result shows the relationship between FC and TE is in a strongly positive relationship condition. As a result, Hd. The positive influence of facilitating conditions towards technological expectancy can be supported the hypothesis in the new combined researched model.

Relationship between BI and EA

		BI	EA
BI	Pearson Correlation	1	.945**
	Sig. (2-tailed)		.000
	Sum of Squares and Cross – products	472.260	372.887
	Covariance	2.228	1.759
N	213	213	
EA	Pearson Correlation	.945**	1
	Sig. (2-tailed)	.000	
	Sum of Squares and Cross – products	372.887	329.367
	Covariance	1.759	1.554
N	213	213	
**. Correlation is significant at the 0.001 level (2-tailed)			

Table 6. Correlations table between BI and EA

In this table 6, it reflects the relationship between behavioral intention (BI) and e-learning acceptance (EA). The value of Pearson's correlation coefficient is 0.945 while the t-test check of significant value is smaller than 0.05. It means the two variables BI and EA belong in significant correlated statistically. Also, the result shows the relationship between BI and EA is in a strongly relationship condition. As a result, **H1. The positive influence of behavioral intention towards e-learning acceptance** can be supported the hypothesis in the new combined researched model.

Relationship between TE and BI

		TE	BI
TE	Pearson Correlation	1	.902**
	Sig. (2-tailed)		.000
	N	213	213
BI	Pearson Correlation	.902**	1
	Sig. (2-tailed)	.000	
	N	213	213
**. Correlation is significant at the 0.001 level (2-tailed)			

Table 7. Correlations table between TE and BI

In this table 7, it reflects the relationship between technological expectancy (TE) and behavioral intention (BI). The value of Pearson's correlation coefficient is 0.902 while the t-test check of significant value is smaller than 0.05. It means the two variables TE and BI are belonged in significant correlated statistically. Also, the result shows the relationship between TE and BI is in a strongly positive relationship condition. As a result, **H2. The positive influence of technological expectancy towards behavioral intention** can be supported the hypothesis in new combined researched model.

Relationship between EC and TE

		EC	TE
EC	Pearson Correlation	1	.887**
	Sig. (2-tailed)		.000
N		213	213
TE	Pearson Correlation	.887**	1
	Sig. (2-tailed)	.000	
N		213	213
**. Correlation is significant at the 0.001 level (2-tailed)			

Table 8. Correlations table between EC and TE

In this table 8, it reflects the relationship between e-book compatibility (EC) and technological expectancy (TE). The value of Pearson's correlation coefficient is 0.887 while the t-test check of significant value is smaller than 0.05. It means the two variables EC and TE belong in significant correlated statistically. Also, the result shows the relationship between EC and TE is in a strongly positive relationship condition. As a result, **H3. The positive influence of e-book compatibility towards technological expectancy** can be supported the hypothesis in the new combined researched model.

Relationship between EC and BI

		EC	BI
EC	Pearson Correlation	1	.892*
	Sig. (2-tailed)		.000
N		213	213
BI	Pearson Correlation	.892**	1
	Sig. (2-tailed)	.000	
N		213	213
**. Correlation is significant at the 0.001 level (2-tailed)			

Table 9. Correlations table between EC and BI

In this table 9, it reflects the relationship between of e-book compatibility (EC) and behavioral intention (BI). The value of Pearson's correlation coefficient is 0.892 while the t-test check of significant value is smaller than 0.05. It means the two variables EC and BI belong in significant correlated statistically. Also, the result shows the relationship between EC and BI is in a strongly positive relationship condition. As a result, **H4. The positive influence of e-book compatibility towards behavioral conditions** can be supported the hypothesis in the new combined researched model.

Relationship in new combined research model

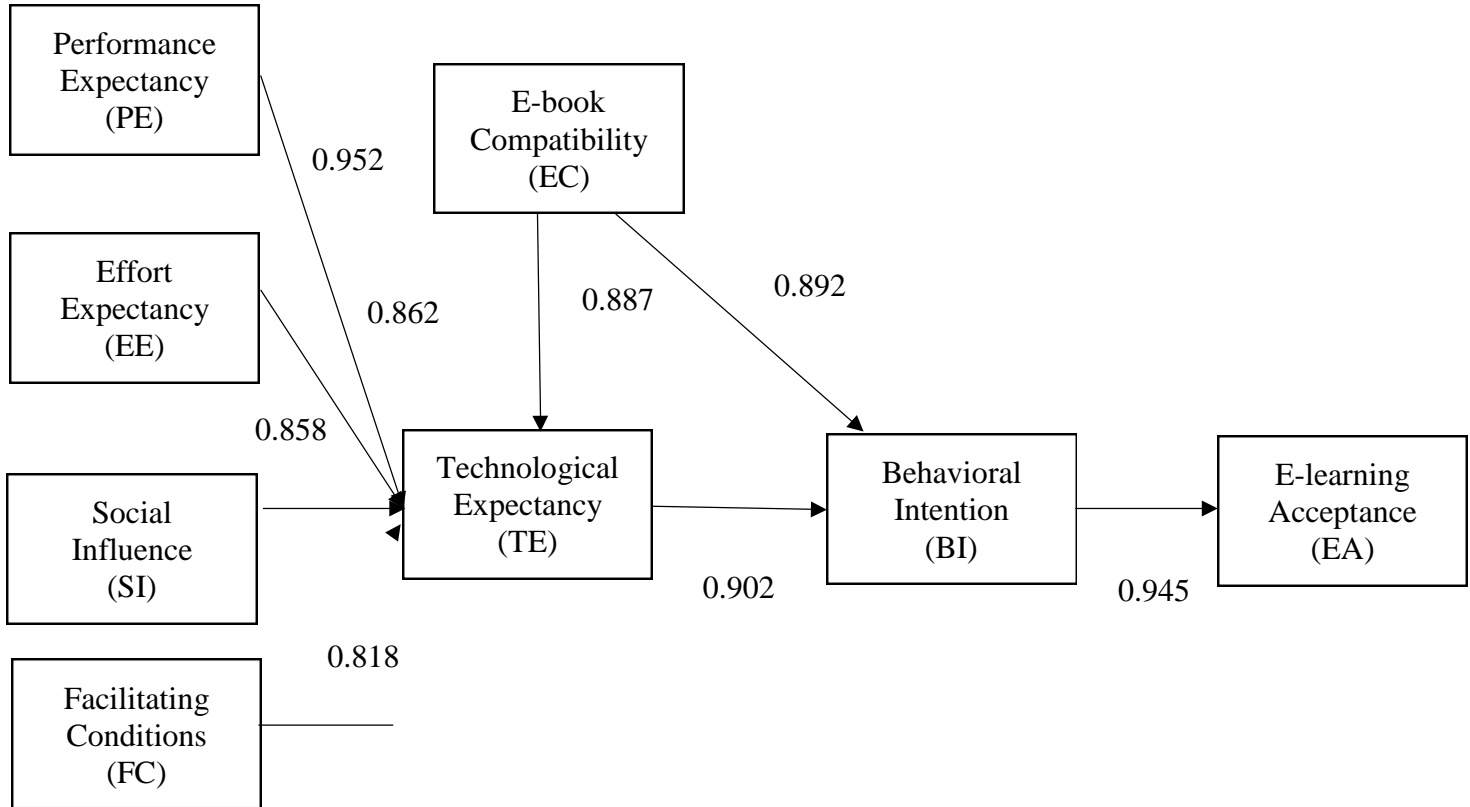


Figure 2. Result of the new combined research model

Discussion of the founding

Discussion all factor in the new combined research model

The factors in the new combined research model can be divided into three main groups which are the Technological Expectancy (TE), E-book Compatibility (EC) and the Behavioral Intention (BI). Firstly, the TE contains four elements including Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI) and Facilitating Conditions (FC). The mean value of them are 4.27, 4.04, 4.19 and 4.02 respectively. The overall performance of TE is just slightly higher than the neutral which is just little agreement level on TE among all respondents. Also, the standard deviation (SD) of them are 1.45, 1.45, 1.49 and 1.23 respectively. The standard deviation of overall performance on TE is a little large which means the agreement level of TE exists a large extent between different individuals. For EC factor in the new combined research model, the overall means of EC is 3.92 and the standard deviation value is 1.34. The overall means reflects interviewees are not satisfy on the compatibility of e-book, especially the items 4 and 6 which are under neutral range. This reflects slightly disagreement on EC among all respondents. Also, there is a large range of SD which means the opinions of EC exists a large extent between different individuals. For BI factor, the overall mean is 4.43 which is the highest value among all factor. It reflects individuals may have intention to continue on using e- book but they have some complaints on other factor. But the overall standard deviation of BI has the largest differences,

the value is 1.67. It can conclude the BI of e-book in eLearning has the largest argument on agreement level between individuals.

Discussion relationship between PE, EE, SI, FC and TE

The construction of TE is based on PE, EE, SI and FC as mentioned in 2.4.1. The hypotheses of them is each factor (PE, EE, SI & FC) has positive influence towards TE. By observing the results of correlations between them. The value of correlations between PE and TE is 0.952, EE and TE is 0.862, SI and TE is 0.858 and FC and TE is 0.818. The relationship FC and TE has the smaller relationship but still is a strongly positive relationship. The facilitating conditions of e-book may affect by the technology used in e-book or other technical problems. As a result, FC is the lowest value among those four elements as the role of FC reflects the existence resource to support students in eLearning (Razak, 2014). The SI and EE factor have a similar value that can conclude that they have similar influence towards TE. SI can be a significant influence of an individual to determine the value or belief (Venkatesh et al., 2003). Therefore, the social influence can be changed the acceptance level of e-book in eLearning. For EE, the software technology used in e-book would be the significant influence towards TE (Subramanian, 1994).

The highest value among them is PE which means the performance when using e-book is positively influence towards TE. The PE is the motivation for an individual to use a technology (Terzis, 2011).

Discussion relationship between EC, TE and BI

For EC and TE, they are both influence towards BI in the new combined research model. The value of corrections between EC and TE is 0.887, EC and BI 0.892. The relationship between them has a similar value which can support hypotheses H3 and H4. Also, the correlations value of TE and BI 0.902. The TE has a slightly stronger relationship among in these three factors.

A study of e-learning states that the founding of BI is significant in order to make the success in e-learning system (Navani, 2016). Also, the founding indicates the updated or enhance of the tools may possible to increase the relationship between EC and BI.

Discussion relationship between BI and EA

The value of correlations between BI and EA is 0.945 which is a higher value of the new combined research model. They have a strongly relationship for an individual to accept e-book in eLearning. The increasing of BI would probably increase the acceptance in eLearning (Chen, 2011).

Final concluding remarks

This study aims to find out acceptance level of e-book consentaneousness relationship with technology tools for e-learning in tertiary education. By adopting questionnaire method, the collected data can be used to prove the hypothesis in the new combined research model which is designed from the TRA and UTAUT model. These two theories always used to evaluate the acceptance of a technology.

Since this project only focus on students who are receiving or received from higher education. Therefore, the questionnaire only distributes to tertiary educational students and the range of the project narrows the scope that can more concentrate to analyze the finding. The validation and reliable of collected data are evaluated by PCA and reliability analysis.

To summarize, there are eight elements in the new combined research model which is used to support the hypothesis of this project. The assumption of this study is those factors have closely relationship and would have positive influence towards e-learning acceptance in sequence. The measurement of relationship between each factor by calculating the Pearson correlation coefficient. To support the results of hypothesis, the value of correlation must be positive and it is better to have stronger relationship between them. Here are the summary table of supported hypotheses:

HYPOTHESES	RESULTS
Ha. The positive influence of performance expectancy towards technological expectancy	Supported
Hb. The positive influence of effort expectancy towards technological expectancy	Supported
Hc. The positive influence of social influence towards technological expectancy	Supported
Hd. The positive influence of facilitating conditions towards technological expectancy	Supported
H1. The positive influence of behavioral intention towards e-learning acceptance	Supported
H2. The positive influence of technological expectancy towards behavioral intention	Supported
H3. The positive influence of e-book compatibility towards technological expectancy	Supported
H4. The positive influence of e-book compatibility towards behavioral conditions	Supported

Table 10. The results of hypotheses

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THE EDUCATION FOR SECURITY: CULTURAL OR TECHNOLOGICAL PROBLEM?

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ABSTRACT

In the globalizing world, the security of individual people and the population depends more and more on the one hand on technological information transmission devices and the quality of devices protecting against natural and military threats. On the other hand, non-military threats, including cultural conflict, are becoming more and more serious. The so-called intercultural dialogue is a necessary way to alleviate cultural conflict, but it is not enough. The goal of intercultural dialogue should not be cultural unification, but the creation of a global community that preserves the diversity of local cultures. However, it is not enough to provide information in cyberspace in the implementation of this objective, but education is necessary, focused on both familiarity and respect for one's own culture as well as cultures of other populations. The basis of this education should be shaping the universalist ethics of interpersonal relationships, allowing to understand cultural otherness, as well as understanding and cooperation in spite of this otherness.

Ethics in the classical approach is a derivative of anthropology, that is, the most general assumptions about human being. The content of these assumptions influences the dominant culture in a given population. Thus, the problem of cultural dialogue ultimately boils down to the dialogue of people and populations in a different way of perceiving themselves and the so-called strangers. On the other hand, the ontical and cultural layer is the basis of personal security in the psychological and social as well as instrumental and defense layers.

Although the modern communication network in cyberspace serves to standardize cultural patterns, for peace on a global scale it is much more important to shape respect for otherness and coexistence of different cultures. The search for a universal basis, despite this diversity, may come from both the ancient culture of China, medieval Europe etc.

The next step in the unification of not only the cultural but also the psycho-physical equipment are the technological actions implementing the ideology of transhumanism. Undeniable achievements of new technologies should first of all serve the individual in updating his aspirations and abilities and communities in preserving their cultural identity, and not lead to commercialization of the degree of participation and domination of particular groups in the global community. All the more so the system of ethical values should control commercial goals.

The ever-faster variability and technologicalization of living conditions of each communities is conducive to justifying the thesis about the need to monitor the effects of this ethical norms changeability and to replace them with standardized norms and operating procedures. Such a conclusion, however, raises serious concerns about totalitarian goals and the emergence of new conflicts on a global scale between groups competing for the model of cultural unification and for access to global monitoring of the state of this unification.

Key words: intercultural conflict, globalization, network society, transhumanism

INTRODUCTION

Human security and structural security will be the subject of consideration. Human security is the state and process of protecting a given population from threats. Structural security is the state and process of all kinds of activities and their tangible and intangible effects, as a result of which the need for human security is met and natural risks are minimized. The security structure includes all technical infrastructure, as well as organizational, legal and public order one.

In the considerations of human security, as it is understood in the *Human Development Report*¹, all actions in the field of structural security should satisfy all human needs². The *Report* clearly underlines the necessity of efforts of the entire international community to free all human populations from the scourge of hunger, material poverty, epidemics of disease, all kinds of violence, destructive consequences of environmental contamination, economic exploitation, behavioral and physiological addictions. In addition to all military activities, that cause physical violence, so-called *soft violence* is no less threatening. It occurs most often in the form of so-called *symbolic power* (symbolic violence) or *structural violence*³. Its purpose is cultural uprooting, ideologization, social exclusion, forcing consumer needs, making media connections dependent, etc.

¹ *Human Development Report 1994*, UNDP, New York/Oxford, Oxford Univ. Press, 1994.

² *Ibidem*, ch. 1-2.

³ Pierre Bourdieu, *Distinction. A Social Critique of the Judgment of Taste*, trans. R. Nice, Cambridge MA, Harvard Univ. Press, 1984; Johan Galtung, *Violence, Peace, and Peace Research*, „Journal of

An eloquent argument in favor of addressing the needs of individual human populations, raised in the *Human Security Gateway* report⁴, is to show 100 times more human losses, incurred as a consequence of wars than in direct armed clashes.

Both the humanities, social, cultural, legal and informational sciences as well as economic, biomedical, technical, and military ones are involved in the consideration of human and structural security. However, the addressee of all research and resulting safety activities is a person, not only perceived as a member of a larger community, but as every individual person. Therefore, human security should apply to both the community (*societal security*⁵) as well as individual human (*personal safety*⁶).

It is necessary to distinguish societal security and social security from personal safety because in many contemporary societies, which as a whole have a high level of social and structural security, a significant part of its members feel excluded, alienated, depressed and they are suffering from all kinds of behavioral and physiological addictions⁷.

Because security science is multidisciplinary and transdisciplinary, the goal of education for security has to be "a dialogue" (of which the so-called intercultural dialogue is one of the components). This dialogue should take place mainly between subjective and objective approach to personal safety. In the present and future projects of human bionization and the globalization of life on Earth, the rapidly progressing convergence of biophysical and technical disciplines⁸ should go hand in hand with the development of humanities, which allow to determine the ontical, cultural and psychophysical condition of human existence. If this scope of research is dominated by the unreflective use of more and more modern technological solutions, entering not only the security structure, but also the psychophysical and social constitution of man, it threatens him and individual populations with ever stronger objectification and dependence on the global technology and information structure⁹.

In the further part of the discussion, an attention will be paid to intercultural dialogue¹⁰. In this dialogue, however, it would be a matter of working out an agreement between populations that differ in terms of morals, as well as between the so-called a natural man and a transhuman. Preparation for such a dialogue should be one of the important elements of education for security.

Personal safety and cultural rooting

Personal safety is

"the state felt by a particular man in which he is a) capable of realizing his own goals in agreement with other people and in harmony with the natural environment, b) he feels fulfilled in his relations with other people, c) is able to defend himself in the event of occurrence of threats."¹¹.

Peace Research", 1969, 6(3), p. 167–191; Anayika Chopra, *Structural Violence*, „International Journal of Multidisciplinary Approach & Studies", 2014, 1(4), p. 19–23.

⁴ *Human Security Report 2005 and 2009*, ed. UN's Human Security Center, New York, Oxford Univ. Press, 2006 and 2011.

⁵ *Societal security* is neither the same with *human security* nor *social security*.

⁶ Teresa Grabińska, *Bezpieczeństwo personalne. Koncepcja trzech warstw (Personal safety. Concept of three layers)*, Wrocław, Wydawnictwo AWL, 2019.

⁷ For the first time, Karen Horney drew attention to this in the study of American society, in: eadem, *Neurotic Personality of Our Time*, New York, Norton Comp., 1937.

⁸ Cf. *Convergence. Fascilitating Transdisciplinary Integration of Life Science, Physical Science, Engineering, and Beyond*, ed. National Research Council of the National Academies, Washington D.C., The National Academic Press, 2014.

⁹ Teresa Grabińska, *Personal Safety in the Light of Transhumanistic Ideology*, „Security Dimensions. International & National Studies", 2016, 19, p. 76-90; eadem, *Bezpieczeństwo osoby i wspólnoty. Ochrona bytu osobowego w obliczu ideologii i praktyki transhumanizmu*, (*Security of the person and community. Protection of personal existence in the face of the ideology and practice of transhumanism*), Wrocław, Wydawnictwo AWL, 2018

¹⁰ The term *culture* is here widely understood as it is defined by Alfred L. Kroeber in: idem, *Anthropology*, New York, Harcourt, Brace and Comp., 1948, p. 253. „[C]ulture might be defined as all the activities and non-physical products of human personalities that are not automatically reflex and instinctive.” Cf. the valuable comparative study of *culture*'s definitions in: Robert Boroch, *Kultura w systematyce Alfreda L. Kroebera i Clyde'a Kluckhohna (Culture in the systematics of Alfred L. Kroeber and Clyde Kluckhohn)*, Warszawa, BEL Studio Sp. z o.o., 2013.

¹¹ T. Grabińska, *Bezpieczeństwo personalne...*, op. cit., ch. II.2.

Respectively to these three characteristics of personal safety one can distinguish three layers of it – ontical-cultural (O-C), psychological-societal (P-S) and instrumental-defensive (I-D). The three layers should correspond with each other, while the level of mutual interaction (assuming the normal state of the physiology of a given person) depends primarily on cultural endowment of a human being, that is on O-C layer which contains a message about who a man is and what are the norms of human relation to other people, as well as to the natural and technological environment (and possibly supernatural beings).

Each human being is the heir of two basic emoluments: biological and cultural. Both of these types of inheritance are passed on by the ancestors. The biological message is subject to the hard laws of genetics, while the cultural message is sensitive to signals flowing from the outside. The latter either develop a human being or destroy it. The models of representatives of different cultures (i.e. of various O-C layers, such as Taoist or Aristotle's man) have usually difficulties with: communicating, establishing interpersonal relations, building a community together. Such relationships belong to P-S layer, and their quality determines the state of personal safety in a culturally diverse community. In order to increase the level of personal safety in this layer, as well as in I-D layer, an intercultural dialogue is necessary. I-D layer predisposes to the defense of others, not only in relation to the biological determinants (life, health), but also cultural ones (which sometimes require the tribute from life or health).

These are the basic conditions for intercultural dialogue.

1. A high degree of awareness of one's culture and its impact on the P-S layer.
2. A high degree of knowledge of the culture of the *Other* and its impact on the P-S layer.
3. Getting rid of the valuation of one's own and the *Other's* culture for the purpose of comparing them with each other and respecting cultural differences.
4. Getting rid of dominating your own culture of the *Other's* culture.
5. Skilful matching of own and the *Other's* cultural dispositions in order to co-exist and creatively develop the community.

The five points mentioned above create a positive declaration, while their implementation, as history and present show, encounters numerous obstacles. There are many causes of them, e.g. the eternal desire to control others and to overcome others (also from their own cultural circle). The appropriate shape of the O-C layer and its transmission through the P-S and I-D layers are able to create of an external security structure in the form of appropriate intangible devices (such as law or organization) and tangible ones (as e.g. protecting against hunger and disease).

The personalists would question the content of point 3. They would say that respect for another person is not enough, because a more intense emotional relationship is needed with another human being, i.e. philosophically understood love. Only then cultural differences cease to divide, when the *personalist norm* applies. It "in its negative aspect, states that the person is the kind of good which does not admit of use and cannot be treated as an object of use and as such the means to an end. In its positive form the *personalist norm* confirms this: 'the person is a good towards which the only proper and adequate attitude is love' "¹². Unfortunately, the *personalist norm* has not an universal culture extent. Its references can be found most often in the local range only: family, tribal groups or sometimes national groups.

So, how should education to safety look like to ensure the safety of the individual and groups in the culturally different environment? According to the first two of the five points the cultural education is necessary. Next, since not in all cultures the universality of the *personalist norm* is recognized, the other three conditions of intercultural dialogue could be attempted to be implemented by instilling a norm which is complementary to philosophically understood love, namely to educate to make yourself responsible for yourself and others.

The ethical norm of responsibility is, however, a concept that causes philosophical problems¹³. One of the most important is the relationship of responsibility to subjectivity. Emmanuel Levinas pointed to the basic difficulty in this respect and claimed that subjectivity is not ontical¹⁴. The subjectivity is more primordial than responsibility.

¹² Karol Wojtyła in his *Love and Responsibility*, trans. H.T. Willets, London, Collins, 1981, ch. I.1.6. brought out the love commandment from the *personalist norm*. Cf. William E. May, *Karol Wojtyła's 'Love and Responsibility': A Summary*, www.christendom-awake.org/pages/may/summaryoftl&r.html [21.07.2019].

¹³ Cf. e.g. Roman Ingarden, *Man and Value*, trans. A. Szylewicz, Muenchen, Philosophia Verlag, 1983; Hans Jonas, *The imperative of responsibility. In search of an ethics for the technological age*, trans. H. Jonas and D. Herr, Chicago/London, The Univ. of Chicago Press, 1984; Georg Picht, *The concept of responsibility*, trans. W. Davis, „Religion”, 1998, 28(2), p. 185–203.

¹⁴ Emmanuel Levinas, *Otherwise than Being or Beyond Essence*, trans. A. Lingis, Dordrecht/Boston/London, Kluwer Academic Publ., 1991; idem, *Outside the Subject*, trans. by M.B. Smith, Stanford CA, Stanford Univ. Press, 1993

The basis of philosophical anthropology in the form of a hylemorphic being is not insufficient to define subjectivity on the basis of ethics (such as Aristotelian one¹⁵). The indifference and sensitivity to the *Other* determine the responsibility for him and precede the presence of the *Other* in the act of every human being consciousness as well as the decision-making. In this light, the origin of responsibility for the *Other* takes on a transcendental character, which, for example, has a theological dimension in the *personalist norm*.

Nevertheless, this over-philosophical subjectivity which determines responsibility for the *Other* is shaped in the process of education by inculcating ethical standards in a manner close to that proposed by contemporary personalists¹⁶. Therefore, education for safety should include such moral education, which primarily makes sensitive to the *Other* in such a way as if he was a guarantor of personal identity. Finding patterns of such education in different cultures is a weighty task of modern times. Only then it will be possible to create a dialogue of cultures and increase the level of personal safety of every human being.

Personal safety in the face of the cyborgization of the human being and the technologization of life environment

The soft threats of personal safety, that come from the collision of different cultures, occurred in different human societies, within thousands of years. The new soft threats, however, appear in the contemporary, more and more technologically advanced world. Developing dynamically connected technologies of genetics, robotics, computer science and nanophysics (GRIN) together with the accompanying development of transhumanism ideology¹⁷ determine a new field of global responsibility ethics. In order for this development to strengthen and not to lower the level of personal safety (as well as structural security) such an education is needed which would bring closer both the positive and negative effects of the increasingly widespread human bionisation and the progressive technologization of social relations. The development of new technologies brings two serious threats.

First of all, the development of GRIN technology is stimulated by the need for fast commercialization of new achievements. The commercialization which is not subordinated to ethical valuation can bring undesirable effects of cultural eradication, the de-naturalisation of the human body function, and the making technical interpersonal contacts. This process threatens with a progressive loss of subjectivity, understood in personalist way or as by Levinas.

Secondly, the ideology of transhumanism accompanying the development of GRIN technology introduces the universal relativization of norms. The species norm of the organism, including the human one, is undermined in the direction of the rapid evolution of the bionic and cyborg transhuman to the ideal of the supernatural being, i.e. the posthuman¹⁸. Since biological norm itself is questioned, the more over cultural subjectivity as well as the cultural identity of the transhuman are questioned. Ethical norms cease to have any meaning now¹⁹, not only because they are replaced by technical standards, but because the posthuman is to become not only mentally but also physically an element of the global information network self-optimizing as a whole and in its individual fragments.

To prevent the implementation of catastrophic scenarios it is necessary to preserve the subjectivity in the increasingly common coupling of man with the device of technology. Then, according to Levinas' message, the

¹⁵ In Aristotle's ethics, every human act requires the temperance measured by responsibility for the effects of the act. Apparently the responsibility for the *Other* is evident in the important Aristotelian virtue of courage (bravery). Cf. Aristotle, *Nicomachean Ethics*, trans. W.D. Ross, Oxford, Oxford Univ. Press, 2009, Book III.

¹⁶ Cf. e.g. Gabriel Marcel, *Being and Having*, trans. K. Farrer, Westminster UK, Dacre Press, 1949; Jacques Maritain, *Neuf leçons sur les notions premières de la philosophie morale*, Paris, Pierre Téqui, 1951; Emmanuel Mounier, *Personalism*, trans. Ph. Mairet, New York, Routledge & Kegan Paul Ltd., 2010; K. Wojtyła, *Love and Responsibility*, op. cit., ch. III; idem, *The Acting Person*, trans. A. Potocki, Boston, Reidel, 1979, part 3., ch. IV.5-7; Robert Speamann, *Persons. The Difference between 'Someone' and 'Something'*, trans. O. O'Donovan, New York/Oxford, Oxford Univ. Press, 2006.

¹⁷ Roberto Manzocco, *Transhumanism – Engineering the Human Condition. History, Philosophy and Current Status*, Cham, Springer Nature Switzerland AG, 2019; T. Grabińska, *Personal Safety*, op. cit.; eadem, *Bezpieczeństwo osoby i wspólnoty*, op. cit.

¹⁸ Francesca Ferrando, *Philosophical Posthumanism*, London/New York/Oxford/New Delhi/Sydney, Bloomsbury Academic, 2019; David Cecchetto, *Humanesis. Sound and Technological Posthumanism*, Minneapolis/London, Univ. of Minnesota Press, 2013

¹⁹ Nick Bostrom, *Transhumanist Values*, „Review of Contemporary Philosophy”, 2005, 4(1-2), p. 87-101; *The Ethics of Human Enhancement. Understanding the Debate*, ed. S. Clarke et al., Oxford, Oxford Univ. Press, 2016.

dissemination of new technologies will be marked by responsibility for the personal safety and structural security of the global community.

In the summary – the answer to the title question

The modern world is subject to two parallel and mutually stimulating processes, i.e. globalization and technologization²⁰. The course and consequences of them should be considered together. If globalization were consistently harmonize the living conditions of individual populations, while maintaining only the current level of technology participation in the life of a particular man and community, the personal and social security would pose serious challenges such as those concerning the intercultural dialogue and the preservation of cultural identities or personal subjectivity in the present virtual world.

Uniforming the culture, as shaped in the network, transforming the process of cognition into the process of gathering information and manipulating of it, making the interpersonal relations more and more not real, appearing a new type of dependence on participation in the virtual world are just some of the already now visible problems. The manner and scope of their solutions translate into ensuring of personal safety (e.g. subjectivity, cultural identity, versatility of social communication, mental and physical health) and structural security (e.g. protection of human rights in the form of legal regulations in cyberspace, protection of diversity cultural heritage – especially intangible, responsibility for the decision-making and the independence of individual communities, protection of life and tangible structure).

The rapid development of GRIN technology and the ongoing process of virtualizing the relationship of man with the human environment and tangible and intangible infrastructure already requires shaping appropriate attitudes of existence in cyberspace. Not only military threats with the use of new technologies are real, but also non-military threats aimed at enslaving human consciousness with sophisticated information transfer in virtual space. This is not only the impact of traditional propaganda on consciousness, but the seemingly interactive creation of one's own subjectivity, soon being amplified by a remote influence on the nervous system. To prevent the new enslavement it is necessary to shape the system of values, and thus the foundations of ethics. If you appeal to Levinas, it is necessary to protect human subjectivity, and this should first and foremost be the goal of the ethics of responsibility in education for security.

The structural security is determined by an objective state of tangible and non-intangible devices that protect both individual human beings and whole populations, not only human, but also the environment of animate and inanimate nature. If the protection is to have a global scope, then the need for comprehensive education in the use of technologies and trends in technology development arises. However, learning how to handle procedures in a technologized environment can only help in the efficient operation of the products of technology. It is not enough, however, to protect human subjectivity in an ever closer coupling of man with a technical device, up to the ideal of human-machine interface (HMI). The creation and use of technology only then will serve the man when he makes the effort to create standards of behavior in a new environment, protecting subjectivity and its rich cultural dimension. This task can be performed as part of the ethics of responsibility as in the Levinas' proposal or in personalist ethics²¹ based on the *personalist norm*.

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²⁰ Robert A. Schultz, *Information Technology and Ethics of Globalization: Transnational Issues and Implications*, Hershey/New York, International Science Reference, 2010.

²¹ Anna Strhan, *Levinas, Subjectivity, Education. Towards an Ethics of Radical Responsibility*, Malden MA/ Chichester/Oxford, Wiley-Blackwell, 2012; David Brooks, *Personalism: The Philosophy We Need*, <https://www.nytimes.com/.../personalism-philosophy-collectivism-fragmentation.html> [21.07.2019].

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THE IMPACT OF THE PHENOMENON OF IMMIGRATION IN POLAND ON CHANGES IN EDUCATION FOR SECURITY

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ABSTRACT:

This article concerns the problems mentioned in the title by analysing the Polish education system for security, with the aim to answer the question whether it meets the expectations in a situation of migrant crisis and related dysfunctions. The issue forced the necessity to emphasize the problem area of the education system for security in Poland, contemporary threats including illegal migration and its impact on a rise in crime. The threats faced by a person require (from him/her) constant exploration and learning about how to act when they occur. We should not underestimate the risks that have not existed yet or existed a long time ago, as it is possible to prepare for them and thus to ensure the security for the general public, a group or an individual. Education in this field becomes a guarantee of the above. Scientific exploration of the problem area indicates the essence of human awareness of the consequences of risks. Currently, security education is provided at school by means of the projects undertaken by individual services, guards and the army, as well as by means of associations and non-governmental organizations. There are many activities for security education, but no education system for security, which will comprehensively cover all social groups in the Republic of Poland, is noticed. The migrant crisis which started in 2015 and was initiated by the Middle East conflicts, and then – the opening of borders by Germany for refugees fleeing from the acts of war in September 2015, has caused a mass influx of migrants to various EU countries. This situation has increased the observed level of cultural diversity and more clearly outlined the social challenges, also for education.

INTRODUCTION

The presentation of the subject matter indicated in the title requires a certain consistency in the presentation of issues concerning both the security education and the problem of migration. There is no doubt that it is necessary to refer to the development of the mechanisms that have contributed to the current, so-called migrant crisis in Europe.

Migration processes can be either controlled or uncontrolled. They can have both positive and negative impact on society. They can pose a threat in themselves and initiate dysfunctional phenomena as well. At the national level, the tool for controlling the migration process is its migration policy, provided that its solutions are updated in the face of new threats. The effectiveness of undertaken control activities of the migration process not only requires a constant diagnosis of the phenomenon, but also the activation of such preventive processes as e.g. education.

The current situation, which is referred to as the "migration crisis," is the result of a set of political, legal and social factors. It may be concluded that it is a result of the obligations adopted by the EU States. In 1990, the European Union adopted the Dublin Regulation as amended in 2003 and 2014. The provisions of the Regulation outlined the Member States' liability rules for conducting proceedings for the refugee status. Other obligations concerned, inter alia, the establishment of a common asylum system. Since 2001, a number of legal acts have been adopted imposing on Member States the obligation to adapt and unify asylum legislation, and to create equal standards for the reception of refugees throughout the Community. The directive, stipulating minimum standards (such as access to housing, health care and education) for the reception of asylum seekers that must be ensured in the EU Member States, has also been ratified.

However, the common asylum system does not imply uniformity. Therefore, there are still significant differences between the EU States – both in terms of the refugees' protection and the reception conditions. In 1991, the Council of Europe received the Report on "Stosunki między wspólnotami i międzyetniczne w Euro-pie" (concerning the relations between communities and interethnic relations in Europe – translator's note), which proposed a set of actions aimed at neutralising the potential risks arising from the non-European population growth in individual Community Members States. These included: development of a multicultural society, possible actions to implement integration programmes by the central and local governments of individual states, and suggestions to amend national legislation aimed at guaranteeing equal opportunities for immigrants and condemning

all forms of discrimination. In addition, the Council Directive on the establishment of a general framework for equal treatment in employment and occupation (November 2000) was adopted, and, above all, the Council Decision laying down the Community Action Plan to Combat Discrimination for the period 2001-2006 and the Council Directive on the principle of equal treatment between persons irrespective of racial or ethnic origin (the so-called Race Directive, June 2000). The latter document implements the principle of equal treatment between persons irrespective of racial or ethnic origin and includes, beyond the issues concerning the work situation, all other aspects of racial or ethnic discrimination. Another act to be highlighted is the Council Directive 2003/109/EC of 25 November 2003 concerning the status of third-country nationals who are long-term residents. According to its contents:

The EU Member States should continue to be subject to the obligation to give minors access to the education system under conditions similar to those set out for nationals of these Member States. (15) The concept of study grants in the field of vocational training does not cover measures financed under social assistance systems. In addition, the access to study grants may depend on whether the person applying for such a grant meets their own conditions for obtaining long-term resident status. When providing study grants, the Member States may take into account the fact that Union citizens may benefit from the same advantage in their country of origin.

STATISTICS

Statistical data shows that there are currently 25 million refugees in the world. In 2014, 216 054 people arrived in Europe via the Mediterranean Sea. The following year was special – as many as 1 015 078 refugees and immigrants arrived by this route. In the next following year that number decreased almost threefold to 362 753 people, whereas for the eleven months of 2017 only 157 767 people arrived. In total, 28 Member States of the European Union (with a population of more than 500 million people) have received 1.75 million refugees.

According to the reached agreements regarding the discussions of the European Council, the Member States will receive 60.000 refugees from Africa and the Middle East (40.000 refugees from Greece and Italy and 20.000 from refugee camps outside the Union) in total. However, it has been decided that the decision on how many people will be sent to each country are to be made on the basis of declarations by governments. Poland has announced that within two years it will receive 2 000 refugees – 1 100 people from Italy and Greece and 900 people from refugee camps located outside the EU (11 287 people calculated with the Juncker' algorithm). These are prognoses for the future.

Since 1992, Poland has started receiving refugees without any significant changes in their national structure. (Mazuś, 2015, p.16) These are mainly arrivals from the Caucasus (Chechnya, Georgia), Ukraine and Belarus. There were two waves of the inflow of Georgians to Poland in 2009 and 2012. 2014, in turn, was characterized by the high level of arrivals from Ukraine. The number of arrivals of people from the Middle East (Iraq, Afghanistan, and especially Syria) was quite infinitesimal at that time, reaching at most several hundred people. This national structure is likely to change within 2 years.

In 2016, 4 502 applications for international protection were filed in the Republic of Poland. There were 12 321 persons covered by those applications, which is a number comparable to the previous year, when 12 325 persons applied for protection (4 927 applications). The largest group of persons applying for international protection were citizens of the Russian Federation – 8 994 persons (about 73% of the total number) in 2016. The second largest group of foreigners were Ukrainian nationals – 1 306 persons (about 11% of the total number). Furthermore, the most frequent applicants for international protection were Tajik nationals – 882 persons, Armenian nationals – 344 persons and Georgian nationals – 124 persons. The analysis of the above data shows that in 2016, in comparison to the previous year, the nationalities of foreigners applying for international protection in the Republic of Poland did not change. However, the percentage share of persons coming from the Russian Federation increased from about 65% to 73% of the total number, and the number of foreigners coming from Ukraine decreased – from about 19% to 11% of the total number. The number of foreigners coming from Tajikistan (541 persons in 2015) and Armenia (195 persons in 2015) has increased, whereas the number of Georgian nationals has decreased (394 persons in 2015). Last year, decisions were issued in cases involving 11 997 applicants for international protection in 2016 and earlier.

In the first half of 2017, 99 persons were granted refugee status in Poland. Another 183 persons were granted subsidiary protection. Negative decisions with a refusal of the residence were received by 1.3 thousand persons, and 1.6 thousand of the proceedings were discontinued. In Poland, international protection was granted mainly to nationals of Ukraine (170 persons), Russia (43), Syria (19), Tajikistan (11) and Belarus (5). According to the Office for Foreigners, 93% of the foreigners applying for the refugee status came from the former Soviet Union countries, mainly from Russia, Ukraine, Tajikistan, Kyrgyzstan, Armenia, Georgia and Belarus.

EDUCATION

The above statistics indicate that societies are and will be increasingly multicultural, creating a complex and diverse process of social interaction and social change. Education plays an important role in this respect. In the context of migration, education aimed at integration of immigrants into the society as well as security education, as a rule concerning Polish nationals, is important.

Given the above, as part of integration policy, equal opportunities for immigrants should be ensured. This is possible by removing legal barriers to education access, housing, work, health care, etc. and by combating discrimination, in particular by developing and implementing anti-discrimination legislation. The mere fact of the possibility for equal opportunities does not, however, determine that it will be used. Depending on the individual approach, the immigrant can choose between acting in accordance with their values and dissociating themselves from their own values. It may be a compromise adoption of existing norms and values or their rejection, which may result in social marginalisation in the new home country. The latter approach is also reflected in the phenomenon of migrant crime, which has undergone not only qualitative but also quantitative changes in recent years. This problem is compounded by the fact that Poland, as part of the modern world, cannot be alienated from a clash of civilisations. This is also due to the fact that the main factor conditioning this comparison is the phenomenon of intercultural migration, i.e. the growing number of immigrants belonging to other civilisations. (Błaszczczyńska, 2010) Given that Poland coexists in the context of the so-called "Western civilisation." The fear of a 'cultural route' resulting from the reception of refugees is exacerbated by the fact that we do not have neither a full overview nor the scale of the phenomenon, nor orientation in our possible obligations as a result of this fact.

This is why education is so important, both for the integration of immigrants into the society and for the security needs in the strict sense of the word.

As the representatives of the doctrine emphasise, Poland, in terms of multicultural approach in curricula (in the field of pre-school education and compulsory education) belongs to the countries taking into account cultural diversity in the context of the international social and economic situation, and becomes an area of shaping European identity. This approach has responded to a growing number of immigrants in our country. This has led to more and more widespread educational activities – those aimed at integrating immigrants into the society as well as those aimed at influencing security. As regards integration policy, the provisions indicate that children who are not Polish nationals may benefit from education and care in both state nursery schools, primary schools and lower secondary schools on the same conditions as Polish nationals. All categories of immigrants' children (children of immigrant workers, immigrants of Polish descent, permanent immigrants entitled to settle in Poland and to permanent residence, immigrants with refugee status) who attend state Polish schools (mainstream), are set as the objective of specialised programmes and assistance projects aimed at providing them with school-based support. The immigrants' children who are subject to compulsory education (aged 7-16 – primary and lower secondary education) and who do not speak / do not sufficiently speak the Polish language to participate in the school classes, have the right to receive additional, free of charge Polish language classes. An immigrant's child, who is subject to compulsory education, has the right to participate in additional classes on the language and culture of their country of origin, organised by diplomatic units or by, located in Poland, cultural organisations of their country. (Torowska, 2016, pp.461-476) Education aimed at integration works best in relation to the controlled migration, when all mechanisms of migrant policy function.

On the other hand, the necessity to provide security education is conditioned by its real impact on the level of security. The analysis of security components and types of threats allows to distinguish several main areas under the framework of security education. These include: education for political security, education for military security, education for psychosocial security and education for ecological security. (Grabowska-Lepczak, Tryboń Kwiatkowski, 2011, p. 183)

The situation of the migrant crisis, in which we are dealing with legal and illegal migration, has created new challenges for security education. It should be considered in a multi-stage and multifaceted way, because it is a long-term process and dependent on many components. (Wiechetek, 2017, p. 127) It is "a system of teaching and educational activities created by the family, school, mass media, state institutions, social organisations and associations, which are responsible for disseminating ideas, values, knowledge and skills that are directly relevant for maintaining security." (Prońko, Wiśniewski, Wojtuszek, 2006, p. 164) The presentation of this aforementioned system requires, as a first step, a reference to documents providing the national security. *The National Security Strategy of the Republic of Poland* and the *White Paper on National Security of the Republic of Poland* are of particular importance, which is capable of obtaining a full view on security education in the national perspective. They are the ones that shape the direction of the basic assumptions of educational programmes concentrated on the activities aimed at improving security-related knowledge and skills. The objective of the *White Paper on*

National Security of the Republic of Poland from 2013 translates into a mission set before the security education which comes down to "(...) deepening of knowledge and public awareness about the security of Poland and the Polish people."

The most systematised deepening of knowledge and public awareness regarding security takes place under the education system. The school subject *security education* is compulsory, thus every student must participate in the classes. Regardless education in the discussed area in primary schools, the institutes dealing with the activities related to security education are universities. They provide education at the level of bachelor's and master's degrees in such fields of study as national security, domestic security or public security.

The existing core curriculum, established in 2017 among the suggested assumptions, addresses such issues as "(...) adaptation to the changing threats of the modern world (including terrorist ones), facilitating the learning of theory by students through its reduction, providing the students with an authentic opportunity for practical exercises regarding life-saving." (Raczak, 2017, p. 3) Educational activities related to security and defining them as a collection of "(...) diverse pedagogical interactions undertaken by various institutions, (...) on ad hoc and constant basis towards different social groups. The main task of these (...) institutions is to provide people with such competencies that will allow them to function effectively in a dynamic (...) reality, and thus, they will be the cause of a real increase in the sense of security for an individual, societies and communities." (Gawroński, 2013, p. 95) The relations between the elements of this system are also important. That is why, although there are many entities involved in security education, they do not constitute a coherent system, as they do not have a permanent and structured cooperation. The definition of educational activities related to security and defining them as a collection of "(...) diverse pedagogical interactions undertaken by various institutions, (...) on ad hoc and constant basis towards different social groups. The main task of these (...) institutions is to provide people with such competencies that will allow them to function effectively in a dynamic (...) reality, and thus, they will be the cause of a real increase in the sense of security for an individual, societies and communities." (Gawroński, 2013, p. 95) The relations between the elements of this system are also important. That is why, although there are many entities involved in security education, they do not constitute a coherent system, as they do not have a permanent and structured cooperation. Consistent security system as well as individual knowledge and skills of individual units are the most important guarantee for the state's sense of security. Only when a stable security situation is ensured can we talk about the possibility of the country's development in other areas. Consistent security system as well as individual knowledge and skills of individual units are the most important guarantee for the state's sense of security. Only when a stable security situation is ensured can we talk about the possibility of the country's development in other areas. "Raising public awareness of the understanding of security threats and the development of competences that in a deliberate and rational manner react to them, is a priority."

CONCLUSIONS

The question which does not have a clear answer is when security education should start. Since minors are very often the victims of crime and various types of crisis situations, according to the saying "*As the twig is bent, so is the tree inclined*," security education should start as early as possible. "The scale of the risks and the degree of concern about them make it necessary to start education in this area as early as possible; to tell young people about the risks and to teach them how to cope with them from an early age." (Słoma, 2009) Unfortunately, it is not entirely clear when a young person is able to acquire knowledge of this field in such a way it will bring satisfactory results.

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THE THOUGHTS OF UNIVERSITY STUDENTS ABOUT PARTICIPATION OF THE EUROPEAN UNION AND THE BOLOGNA EDUCATION PROCESS

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ABSTRACT

The aim of this study is to determine and evaluate what university students think about the European Union and Bologna Education Process. The research includes 632 female and 608 male 1240 students in various faculties of the University of Ondokuz Mayıs University. The research was conducted in quantitative screening method. The data were obtained by a 5-point Likert-type scale developed by the researcher. At the end of the study, students' perspectives on European Union and Bologna Education Process were evaluated according to one-way analysis of variance, t-test, LSD test and percentage values according to the personal characteristics of the participants. According to the findings of the research, the positive opinions of the students were determined about participation in European Union and Bologna process. While there is no difference of opinion between the students according to their age and class, differences of opinion have been determined according to the faculties they study.

THE USAGE OF E-LEARNING INSTRUCTIONAL TECHNOLOGIES IN HIGHER EDUCATION INSTITUTIONS IN THE UNITED ARAB EMIRATES (UAE)

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ABSTRACT

Higher education institutions in the UAE are increasingly incorporating e-learning programs into their curriculum. The large investment spent on these learning systems does not match the slow rate of adoption of e-learning among the faculty of these higher education institutions in the UAE. This autoethnographic study aimed to investigate and identify the factors that affect the adoption of e-learning systems among the faculty in higher education institutions in the UAE. The diffusion of innovation theory was used as a theoretical model and as a lens to guide this autoethnographic study. The purpose of this study was to identify the factors that positively affect the rate of adoption of Blackboard Learn among the faculty of the Computer Information Sciences and how the faculty measured that success. A qualitative autoethnographic research methodology was used and data was collected from personal reflections presented in my personal experiences and from my own recall of discussions with colleague. The findings revealed that the Computer Information Sciences faculty use the four variables of the diffusion of innovation theory to determine the rate of adoption of new e-learning initiatives and to measure their success. This study confirmed the importance of relative advantages, communication channels, time and social system in the diffusion of e-learning. It also revealed the need to increase the level of some attributes of these variables to increase the adoption rate of Blackboard Learn.

TOPLUMSAL EĞİTİMDE KURAN-I KERİM'İN ROLÜ

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ÖZET

İnsanları kendine kul olarak yarattığını bize bildiren Allah (cc), insanların bütünüyle oluşan toplumun da kendi isteği doğrultusunda yaşamasını ve bu gayeye uygun bir şekilde bir düzen inşa etmesini doğal bir sonuç olarak şart koşmaktadır. Nitekim Allah (cc) bu düzenin oluşması için gerekli olan evrensel kuralları Kuran-ı Kerim'in rehberliğinde kullarına bildirmiştir.

Bu kuralların hayatın hangi alanıyla ilgilendiği irdelendiğinde içtimai, iktisadi, ahlaki, siyasi ve dahi birçok meselenin, Kuran-ı Kerim tarafından mevzu bahis edildiği görülmektedir. Fakat Kuran-ı Kerim bu meseleleri mevzu bahis ederken tek bir kişiyi ya da bir kesimi kendine muhatap kabul etmemekte aksine toplumun tümüne seslenmektedir.

Anahtar Kavramlar: Vahiy, Ahlak, Adalet, İyilik, Toplum

GİRİŞ

Kuran-ı Kerim'in önderliğinde toplumsal bir eğitim sürecinden bahsedecek olduğumuz zaman karşımıza birinci husus olarak insanın yaratılış gayesinin ne olduğunun öğretilmesi çıkmaktadır.¹ Zira toplumun temel yapı taşı olan oluşturan insanı Kuran-ı Kerim'in istediği doğrultuda yetiştirmek istiyorsak ilk olarak ona, yaratılış amacının ne olduğunu öğretme zorunluluğu ortaya çıkmaktadır.² Nitekim yaratılma sebebinin ne olduğunun farkında olan bir kimse bu sebebin sonucuna uygun bir yaşam sürme eğiliminde olacak ve kendisiyle birlikte aynı doğrultuda bir yaşam sürmeye çaba sarfeden diğer insanlarla beraber Kuran-ı Kerim'in emir ve yasaklarına uygun bir yaşam biçimi koyabilme kapasitesini kendisinde bulacak ve bunun sonucu olarak da ideal bir toplum inşa etme imkanı ortaya çıkacaktır.

Yaratılış gayesinin Allah'a (cc) kulluk olduğunun farkında olan bir toplum ise hayatın farklı alanlarını ilgilendiren meselelerini de Kuran-ı Kerim'in önderliğinde şekillendirecek ve bu çerçevenin dışında kalan davranışları ve yaklaşımları benimsemeyecektir.

Kuran-ı Kerim, muhatap konumunda olan insanın ve mensubu olduğu toplumun hayatını şekillendirirken pek tabii olarak ahlak, ibadet, gündelik yaşam, savaş ve barış durumu, iktisadi hayat, idari ve sosyolojik yapı gibi meselelere büyük önem vermekte ve toplumsal düzeni aşağıda da değineceğimiz üzere genel olarak bu meseleler etrafında inşa etmektedir.

AHLAK EĞİTİMİ

Kişinin ahlaki normları olmadan hayatın geneliyle alakalı takınacak olduğu herhangi bir tavrın zararsız olmama ihtimali yok denecek kadar azdır. Zira ahlaki normlara sahip olmayan bir kişinin ve bir bütün olarak bakıldığında da bir toplum ahlaksız bir toplum olacak bu da sonuç olarak haksızlıkların kol gezdiği adaletin yok olduğu bir tablo karşımıza çıkaracaktır. Bütün bu sonuçlardan kaçınmak için ahlakın kişiler ve toplum nezdinde kabul edilebilir olması yani evrensel olması gerekmektedir. Bu evrenselliği yakalamak için yol belirleyici olarak

¹ el-Beyyine 98/5

² İbn-i Kesîr, Tefsîru'l-Kurani'l-Azim, Daru'l-Kutubi'l-İlmiyye, Beyrut. (1998). V, s. 255

Kuran-ı Kerim'i kendimize rehber olarak alınmalı ve onun önderliğinde evrensel ahlaki normlar ortaya konulmalıdır.

Kuran-ı Kerim merkezli bir ahlaki düzenin oluşması için belli başlı meselelerle birlikte normalde ufak ayrıntılar gibi görülecek durumlarda da Kuran-ı Kerim'in rehberliğini başvurulmalı ve onun emir yasaklarının yanında tavsiyelerine de riayet edilmelidir. Zira bu yaklaşım biçimi toplumu ahlaki bireylerin çoğunlukta olduğu bir toplum haline getirecek ve Allah'ın emir ve yasaklarına uygun bir yaşam sürmek için uygun bir ortam oluşturulmuş olacaktır. Nihayetinde Allah'ın kendisini kulluk etsin diye yarattığının farkında olan insan mensubu olduğu toplumu da bu doğrultuda değiştirmeye çaba sarf edecek ve bu süreç içinde de mutluluğu elde etme imkanına sahip olmaktadır.³

ADALET ALGISI

Ahlaki bir toplumun bireylerinde olması gereken özelliklerin başına adalet kavramının yerleştirilmesinde bir beis gözükmemektedir. Kuran-ı Kerim'de 28 defa geçen adalet⁴ kavramını zihnine Kuran-ı Kerim'in emir ve yasaklarına göre oturtmamış bir toplumun vahye uygun bir ahlaki normlara sahip bir hayat inşa etmeleri uzak bir ihtimal olarak kalmaktadır. Adaletsizliğin hüküm sürdüğü bir toplumda bir süre sonra kimse ahlak kurallarına uymayacak ve bu da Kuran-ı Kerim'in inşa etmeye çalıştığı toplumun daha ortaya çıkmadan yok olması sonucunu getirecektir. Nitekim Allah (cc), bize toplum bazında herhangi bir mesele hakkında bir karar verirken adaletle önem göstermemizi emrederek⁵, adaletin toplum düzenine etkisini ortaya koymaktadır.

DOĞRU SÖZLÜ OLMA

“Bir şeyin objektif gerçekliği hak bunun aslına uygun olarak anlatılması sıdk kavramıyla ifade edilir. Hak doğrunun nesnel yanı, sıdk ise sözün nesnel doğruya uygunluğudur.”⁶ Adaletli bir toplumun bireylerinin kendilerinde barındırması gereken ve Kuran-ı Kerim'in bu noktada emrettiği bir diğer husus olarak karşımıza doğru sözlü olma zorunluluğu ortaya çıkmaktadır.⁷ Allah, iman eden kullarına doğru sözlü olmalarını emretmekte ve bu hususta kendisinden korkmaları gerektiğini bildirmektedir. Zira doğru sözlü olma hasletini kendisinde barındırmayanlar kendilerinin dahi akıllarına gelmeyecek konularda yalana başvurabilir ve kendileri de dahil olmak üzere çevrelerindeki insanları da yanıltma ahlaksızlığını göstermektedir. Doğru sözlü olmayıp yalana başvuran kimseler ise toplumun düzenini bozan bozguncular konumuna düşmekte ve Kuran-ı Kerim tarafından da cezalandırılacakları kendilerine bildirilmektedir.⁸

AFFEDİCİ OLMA

Ahlaki bir toplumun ortak özellikleri olarak adaletli olmakla birlikte zikrettiğimiz doğru sözlü olmanın yanında, Kuran-ı Kerim'in rehberliğine ve öğreticiliğine kendilerini teslim eden kimselerin bir diğer özelliği olarak karşımıza affedici olmaları çıkmaktadır. Öyle ki Kuran-ı Kerim affedici olmayı, kişi ne kadar zor durumda olursa olsun öncelemekte ve bunun ne derece önemli bir haslet olduğunu ortaya koymaktadır.⁹ Kuran-ı Kerim, zor durumda da olsa kendilerine karşı yapılan bir kötülüğü affeden insanları takva sahipleri olarak nitelendirmekte ve onları yüceltmektedir. Zira Kuran-ı Kerim'in de bize bildirdiği üzere asıl bağışlayıcı olan Allaktan (cc) başka kimse

³ Farabi, Kitabu't-Tenbih Ala Sebili's-Saade, Tahkik Cafer Ali Yasin, Daru'l-Menahil, Beyrut. (1987). s. 49.

⁴ Muhammed Fuad Abdu'l-Baki, el-Mu'cemu'l-Müfehres li Elfaz'l-Kur'ani'l-Kerim, Daru'l- Hadis, Kahire 2001, s. 550-551.

⁵ En-Nisa 4/58

⁶ Mustafa Çağrı, “Sıdk”, DİA, TDV Yayınları, İstanbul 2009, c. XXXVII, s. 98.

⁷ El-Ahzab, 33/70

⁸ El-Ahzab, 33/71

⁹ Ali İmran, 3/134

değildir. Bunun bilincin de olan bir toplumun da affedici yönünün ağır basması doğal bir sonuç olarak ortaya çıkmaktadır.

EMİR VE YASAKLARA UYGUN BİR YAŞAM

Kuran-ı Kerim merkezli bir ahlak anlayışına sahip bir toplumun sahip olduğu hasletlerden birisi de pek tabii olarak Allah'ın emir ve yasaklarına uygun bir hayat sürmeleridir ki bu da Allah'ın (cc) insanları kendisine sadece kulluk etmeleri için yarattığını bildirdiği ayetin¹⁰ amacına uygun bir yaşamı karşımıza çıkartmaktadır. Allah'ın (cc) emir ve yasaklarına uygun bir hayat süren toplum, O'nun dışında herhangi başka bir otorite kabul etmeyecek ve hayata dair karşılaştığı bütün meselelere yaklaşımını ilahi emir ve yasaklara göre tanzim edecektir. Fakat öncelikle dikkat edilmesi gereken bir husus vardır ki o da Allah'ın (cc) emir ve yasaklarına uygun yaşayan bir toplumun ancak Kuran-ı Kerim'in rehberliğinde inşa edilen ahlaki normlar zemininde inşa edilmesi mümkün gözükmektedir. Ahlaki erdemleri kendisinde barındırıp Allah'ın (cc) emir ve yasaklarına göre bir sistem içinde yaşayan toplum bu şekilde adaleti tesis etme imkanını kendisinde çok daha rahat bir şekilde bulabilecektir. Nitekim bir biriyle zincirleme etki gösteren bu unsurların herhangi biri halkadan çıktığında aradaki bağ kopacak ve Kuran-ı Kerim'in rehberliğinde ahlaklı bir toplum inşa etme çabası pek tabii olarak başarısızlıkla sonuçlanacaktır. Nitekim Kuran-ı Kerim'in emir ve yasaklarına dair ayetler incelendiğinde bu emir ve yasakların ahlaki boyutlarının da olduğu apaçık bir şekilde ortaya çıkmaktadır.¹¹ Dolayısıyla Kuran-ı Kerim bu emir ve yasakları insanlara bildirirken mahiyeti bakımından ahlaki erdemlere sahip bir toplum inşa etme çabası göstermekte ve muhatabı olan insanları bu doğrultuda bilgilendirmek suretiyle de eğitime amacını da gerçekleştirmektedir.

AİLE DÜZENİ

Kuran-ı Kerim emir ve yasaklamaları suretiyle ahlaklı bir toplum inşa ederken, toplumun temel yapı taşı olan aile kurumunu da es geçmemektedir. Bu kurum içinde de ahlakın ön planda tutulması gerekliliğinden bahsederken eşler arasında haksızlık yapılmamaya özen gösterilmesi gerektiğini bildirmekte ve erkeklerin eşlerine, hakları olan mehirlerini gönül rızasıyla vermelerini emretmektedir.¹² Nitekim adaletin hakkıyla tesis edilmediği bir aile kurumunun, parçası olduğu topluma adalet duygusu gelişmiş ahlaki normlar kişiliğinde yer edinmiş bireyler yetiştirmesi pek tabii olarak mümkün gözükmemektedir. Bu yüzdendir ki Kuran-ı Kerim aile içinde adaletin tesisine dönük pek çok yerde¹³ vurguda bulunmakta ve muhataplarına bu anlamda nasıl davranmaları gerektiğini öğretmektedir. Nitekim Kuran-ı Kerim'in de bize öğrettiği gibi aile mutluluk ve sevginin tesis edildiği bir ortam olmalı¹⁴ ve bu unsurların tesisi için çaba sarf edilmelidir. Pek tabii olarak adaletin tesis edilmediği ve iyiliğin ön planda olmadığı bir ailede sevgi ve muhabbetin varlığından bahsetmek mümkün olmamakta bu da yapı taşlarında bozukluk olan bir toplum ortaya koymaktadır. Birbirine sevgi ve saygı beslemeyen bireylerin de aynı toplumda yaşadıkları bireylere saygı ve sevgi çerçevesinde muamelede bulunması uzak bir ihtimal olarak karşımıza çıkmaktadır. Kaldı ki birbirlerine iyilik, güzellik, sevgi ve muhabbetle muamelede bulunmayan kimselerin dışarıya karşı bu hasletleri gösterir pozisyonda olmaları onların ancak yapmacılığından kaynaklanacak bu da Kuran-ı Kerim rehberliğinde bir toplum inşasını başarısız kılacaktır.

ANNE BABAYA İTAAT

Aile ortamındaki ahlak eğitiminde Kuran-ı Kerim'in değindiği bir diğer önemli husus ise kişinin anne ve babasına itaat etmesi ve onlara öf bile dememesi meselesidir.¹⁵ Öyle ki Allah (cc), anne ve babaya itaati kendisine kullukla aynı ayette ardı sıra zikretmekte ve hemen akabinde her ikisini de of bile denmemesini emretmektedir.

¹⁰ el-Beyyine 98/5

¹¹ El-Bakara, 2/83-84

¹² En-Nisa, 4/3-4

¹³ En-Nur, 24/22, el-Ahzab 33/55

¹⁴ Er-Rum, 30/21

¹⁵ El-İsra, 17/23-25

Bununla da sınırlı kalmayan emir onlara karşı güzel sözle muamelede bulunması gerektiğini insana bildirmektedir. Devamındaki ayette de görüldüğü üzere her ikisine de merhamet ile muamelede bulunma hususunda muhataba bu konuda rabbine dua etmesi emredilmektedir. Anne babaya karşı iyilikle davranan kişinin günahlarının bağışlanacağını bildiren Allah (cc) bu hitabıyla insanı eğitmektedir. Kişinin anne babasına itaati noktasındaki sınırı ise Allah (cc); kendisine karşı anne ve babanın çocuklarını isyana teşvik etmesine koymaktadır.¹⁶ Aile içinde anne babaya davranma biçiminin sınırlarının çizildiği bu ayetlerden de anlaşılacağı üzere, toplumsal ahlakın ve eğitimin temel yapı taşı olarak karşımıza çıkan aile içindeki yansıması bu surette şekillenmektedir. Nitekim anne babasına, eşlerine ve çocuklarına iyi davranmayan bir kimsenin mensubu olduğu topluma olumlu yönde bir katkı sağlaması pek tabii olarak mümkün gözükmemektedir.

Aile içindeki sevgi ve saygının tesisi, eşlerin birbirlerine iyi davranmaları ve çocukların anne ve babalarına itaat noktasında rablerinin emirlerine karşı gelmemelerinin sonucu olarak toplum, huzuru elde etmiş olmakta ve adaletin tesisi anlamında önemli bir mesafe kat edilmiş olmaktadır.

Ahlaklı bir toplumun parçası olarak kendini Kuran-ı Kerim'in rehberliğinde eğiten ve geliştiren insan, Kuran-ı Kerim'in emri olması ve bu erdemlere sahip olma hasebiyle yaptığı iyilikleri başa kakmayan¹⁷ bununla övünmeyen ve alçak gönüllü¹⁸ olan bir karakter ortaya koymalıdır ki bu suretle mensubu olduğu dinin inşa etmeyi hedeflediği iyi bir kul ve bir birey olabilme dairesine girebilme imkanını kendinde bulacaktır. Başkalarına karşı yapmış olduğu iyilikleri ve bu minvalde gerçekleştirdiği bütün amelleri sadece Allah'ın (cc) rızasını gözeterek gerçekleştiren ahlaklı birey bu suretle mensubu olduğu toplumun Kuran-ı Kerim rehberliğinde eğitimine de katkıda bulunmuş olacak ve ideal bir toplum inşasında üstüne düşen görevi hakkıyla yerine getirmiş olacaktır. Başa kakmamakla birlikte alçakgönüllü bir birey olmayı kendinde gerçekleştirebilen bu kimseler öyle bir duruma gelmektedirler ki kendilerine kötü bir söz söylendiğinde bile tevazu göstererek yapılan bu kötülüğün seviyesine inmeme ve Allah'ın (cc) övgüsüne mazhar olmaktadır.

ALLAH'A (CC) KULLUK

Bu kimselerin diğer bir özellikleri olarak karşımıza, onların vakitlerinin çoğunu Allah'a (cc) kulluk ve taatle geçirmeleri çıkmaktadır. Öyle ki bu insanlar hem yaptıkları iyilikleri başa kakmamak hem tevazu göstererek hem de vakitlerini cehennem azabından korunmak için Allah'a (cc) yalvararak geçirmek suretiyle buldukları ortamı ve mensubu oldukları toplumu temizlemekte ve etraflarına ancak iyilikleri dokunmaktadır. Bu suretle kişinin ideal bir toplumun parçası olduğu kabulünden yola çıkıldığında kendisinde sadece vahye dayalı ahlaki erdemleri barındırmakla kalmamalı üzerine düşen kulluk vazifesini de eksiksiz bir şekilde yerine getirmelidir. Nitekim Allah'la (cc) irtibatında bozukluk olan bir kimsenin ailesine, çevresine ve mensubu olduğu topluma faydalı bir birey olduğunu iddia etmek pek de gerçekçi olmayacak bir yaklaşım olarak gözükmemektedir. Zira Allah (cc), her ne kadar iyi işler yaptığını iddia etseler de iman etmeyen kimselerin imanının boşa gideceğini bize Kuran-ı Kerim'de apaçık bir şekilde bildirmektedir.¹⁹

SOSYAL İLİŞKİLER

İdeal bir toplumun eğitiminin vahiy merkezli olması gerekliliğinden hareket edildiğinde yaşamın her alanında vahye paralel bir düzen inşa etme zorunluluğu ortaya çıkmaktadır. Buradan hareketle toplumun hayatını şekillendiren en önemli hususlar arasında bireylerin birbirlerine karşı olan ilişkilerin de mahiyetinin nasıl olması gerektiğine dair sorulması muhtemel soruların cevaplanması gerekecektir. Bunların başında ahlak ve adaletten bahsettikten sonra kişilerin maddi anlamdaki harcamalarına da değinme zorunluluğu ortaya çıkmaktadır. Zira

¹⁶ El-Ankebut, 29/8

¹⁷ El-Müddessir, 74/6, el-Bakara, 2/264

¹⁸ El-Furkan, 25/63

¹⁹ El-Kehf, 18/103-106

kendisi refah seviyesi yüksek bir yaşam sürerken yanındaki insanın ne şartlar altında yaşadığından haberi olmayan bir toplumdan ideal bir toplum olarak bahsetmek doğru olmayacaktır. Pek tabiidir ki ideal olan bir olgu her anlamda ideali yakalamalıdır ki kendisi herkesçe kabul edilebilir olan kriterler bakımından da ideal olarak kabul edilebilir olmaktadır. Bu noktada kişinin yanındaki insanların durumundan haberdar olması ve bu noktadaki harcamaları hususunda cimrilik etmemesi gerekmektedir.²⁰ Öyle ki Allah'ın (cc) kendilerine vermiş oldukları malları harcama konusunda gösterecek oldukları cimrilik hem mensubu oldukları toplumun çıkarlarına uyum göstermeyecek hem de karşılıklarına bir kötülük olarak dönecek bir amel olarak çıkacaktır. Bu sebeptendir ki kişiler ve genel anlamda da ideallik iddiasında bulunan bir toplum, Allah'ın (cc) kendilerine vermiş olduğu mallardan cimrilik etmeden infak etmelidir. Zira ancak bu şekilde mallarının kendilerine bir faydası olduğunu görebileceklerdir.²¹

Dünya hayatının geçici olması ve bir imtihandan ibaret olmasının farkında olan erdemli insanlar ve bu insanların bütünü oluşturduğu ideal toplum, Allah'ın (cc) kendilerine vermiş olduklarıyla yetinmeleri gerektiğinin²² bilincinde olmakta bununla birlikte de başkasının sahip olduğu nimetlere göz dikmeden çalışmaları gerektiğini de bilmektedirler. Zira burada dikkat edilmesi gereken önemli bir ayrıntı; kişinin, elindekiyle yetinmekten kastın başkaca bir mal edinmekten kaçınmak olarak algılama ihtimalidir. Zira bu algı biçimi Allah'ın (cc) kullarından istemiş olduğu gerektiğinde düşmanla savaşıma durumu ve düşmana karşı koymak için gücün her türlüşünden kendilerini hazırlamalarının istenmesi durumuna²³ ters düşmektedir. Nitekim siyasi ve iktisadi anlamda yetersiz bir toplum ne kadar erdem sahibi olursa olsun Allah'ın (cc) dinini yayma ve vahiy temelli bir toplum inşası hususunda yetersiz olarak görülecektir. Bu yüzdendir ki Allah (cc) kendisine iman eden kullarının elde etmiş oldukları malları Allah yolunda infak etme noktasında teşvik etmektedir.²⁴

BİRLİK VE BERABERLİK

Malın infakıyla birlikte ideal bir toplum olma gayesi güden insanların bir diğer dikkat etmesi gereken husus ise çevrelerindeki insanları görmezden gelmemeleri onların ellerinden tutmaları ve bir toplum olarak birlik ve beraberlik içinde hareket etmeleridir.²⁵ Nitekim bir zincir en zayıf halkası kadar güçlü olarak addedilmektedir. Hal böyle iken içinde zayıf ve başıboş kimselerin bulunduğu bir toplum da içinde bulunan en güçlü ve kendi başının çaresine bakabilen insanlara kıyasla değerlendirilmeyeceği de açıktır. Bu yüzdendir ki vahiy, kendisine muhatap kabul ettiği insanlara, çevrelerindeki yetimler gibi yardıma muhtaç kimselere el vermeleri gerektiğini söylemektedir.²⁶

Allah'ın (cc) kulları olarak insanların birbirlerine karşı yardımlaşmasının bir boyutunu da pek tabii olarak maddi meseleler oluşturmaktadır. Zira insanın kendi geçimini sağladığı ve çalışmasının karşılığını aldığı eşya genel olarak madeni değeri olan metaller veya kağıt para olarak karşımıza çıkmaktadır. Dönem, dönem ortaya konan çabanın karşılığı olarak verilen maddenin şekli şemali değişse de ticari olarak değeri hiçbir zaman ortadan kalkmamaktadır. Hal böyle iken birbirlerine destek olması gereken insanların maddi anlamda da birbirlerini gözetmeleri gerekmektedir. Nitekim bir kısım insanlar paralarını iyi idare edip ticari veya başka alanlardaki başarıları sonucunda kendilerine fazlasıyla yetecek para biriktirme imkanı yakalayabilmekteyken bir kısım insanlarda ise bunun tam tersi bir durum görülebilmektedir. Maddi anlamda bir sıkışıklığa düşmüş bu kimselerin diğer geri kalan kesim tarafından sıkışıklıktan kurtarılması gerekmektedir. Zira maddi sıkışıklığa düşmüş bu kimselerin sıkıntıları giderilmediği takdirde toplumsal bazda iktisadi bir dengesizliğin ortaya çıkması durumu söz konusu olabilmektedir. O yüzdendir ki Kuran-ı Kerim borç verme hakkında geniş açıklamalarda bulunmakta ve borç

²⁰ Ali İmran, 3/180

²¹ El-Ahzab, 33/17

²² Taha, 20/131

²³ El-Enfal, 8/60

²⁴ El-Bakara, 2/261

²⁵ Ali İmran, 3/28

²⁶ El-Bakara, 2/220

alıp verme meselesini etraflıca ele almaktadır.²⁷ Borç verildikten sonra ise, borçlu olan kişiye ödeyeceği vakte kadar kolaylık tanınması istenmekle birlikte borcun silinmesi durumunda ise bunun borcu veren kişi açısından güzel bir sadaka olacağı ve bu durumun kendisi için daha hayırlı olduğu bildirilmektedir.²⁸ Aynı şekilde karşılıksız olarak verilen paranın ise Allah'a (cc) verilmiş güzel borç olarak değerlendirilmesi de söz konusudur. Zira borçlu olan kimsenin borcunun ödenmesi Kuran-ı Kerim tarafından yüksek erdem içeren bir davranış olarak karşımıza çıkmaktadır.²⁹

EMANETE RİAYET ETME

İdeal bir toplum inşa etme çabası içinde olan bir topluluğun en önemli özelliklerinden birisi de pek tabii olarak kendisine emanet olarak bırakılan eşyaya ihanet etmeden onu gözü gibi koruması ve kollamasıdır.³⁰ Emanetlerin korunması meselesi ciddi bir mesele olduğundan dolayıdır ki Kuran-ı Kerim tarafından bunların korunması işinin ehil olan kimselere verilmesi gerektiğinin vurgulandığı görülmektedir.³¹ Nitekim bu işe ehil olmayan kimselere emanet olarak bir eşyanın bırakılması, emanete bir hanel gelmesi ihtimalini ortaya çıkarmakta bu da kişiler arasında dolayısıyla da toplum nezdinde bir kargaşa ortamının oluşmasına zemin yaratabilmektedir. Emanete riayet edenler de bu ağır yükün bir mükafatı olarak Allah (cc) tarafından cennetle müjdelenebilir.³² Buradan da anlaşılacağı üzere emanete riayet edip etmemenin ehemmiyetine dair toplumsal bazda sebep sonuç ilişkisi mahiyetinde bir eğitim verilmekte ve ideal bir toplum oluşturma anlamında emanet meselesi vahiy kanalıyla akıllara nakşedilmektedir.

İletişimdeki yumuşaklık, insanların birbirlerine karşı olan yumuşak söylemleri ve güzel konuşmaları, toplumda yaşayan bireylerin birbirlerine uyumlu bir şekilde yaşamaları için olmazsa olmaz bir unsur olarak karşımıza çıkmaktadır. Zira kişi ne kadar ahlaklı olursa olsun ne kadar adaletle önem gösterirse göstereceği tavırla ve yumuşak olmayan kırıncı ve dökücü bir edayla iletişim kurduğu vakit karşısındaki insanla sağlıklı bir iletişim kurmakta zorlanma ihtimali ortaya çıkacaktır. Bu da toplumsal eğitim ve uyum açısından bir sorun teşkil etmektedir. Bireyler arasındaki iletişimin sağlıklı olması için gerekli olan güzel sözlü olma ve yumuşak konuşma ilahi vahyin insanlara tavsiyelerinden biridir.³³ Her ne kadar çok mühim bir mesele olarak görülmemesi muhtemel olsa da iletişimin sağlıklı olması ve toplumsal uyumun inşası için bu unsurlara dikkat edilmeli ve Kuran-ı Kerim'in tavsiyesine hayatın her alanında uyulmalıdır. Nitekim güzel sözlü olmak, akabinde eza gelen sadakadan daha hayırlı görülmektedir. Güzel sözlü olmak toplum nezdinde gerilimi azaltacağı gibi insanlar arasında çıkması muhtemel problemlerin de daha oluşmadan yok olmasına imkan tanımaktadır. Bu meselenin ehemmiyetine vakıf olmak için güzel sözün kökü sabit dalları göklere uzanan bir ağaca benzetildiği ayeti hatırlamak yeterli gözükmektedir.³⁴

İnsanın mensubu olduğu topluma faydalı olup olmaması değerlendirildiğinde bu kişinin elinde hali hazırda var olanla yetinip çevresinde bulunan diğer insanların sahip olduğu şeyler hakkında haset edip etmemesi değerlendirilebilir bir husus olarak karşımıza çıkmaktadır. Zira kendisi sahip olmadığı için etrafındaki insanlara haset besleyen bir kimsenin hem kendisine hem de çevresine sadece zararı dokunacaktır. Çünkü bu kimse sahip olunan şey hakkında, onun ortadan kalkmasını ve kendisi sahip değilse başkasının da kendisi gibi sahip olmamasını istemektedir.³⁵ Bu hastalıklı bakış açısına sahip kimselerin de kendilerini Kuran-ı Kerim'in de insanları bu kötü hasletten yasakladığı şekilde hasetten uzak tutmaları ve Allah'tan (cc) bu hususta mağfiret dilemeleri gerekmektedir.

²⁷ El-Bakara, 2/282

²⁸ El-Bakara, 2/280

²⁹ El-Müzzemmil, 73/20

³⁰ El-Muminun, 23/8

³¹ En-Nisa, 4/58

³² El-Mearic, 70/32

³³ El-Bakara, 2/263

³⁴ İbrahim, 14/24

³⁵ El-Bakara, 2/109

Zira haset sahibi kimseler kendilerinden sakınılması gereken derecede tehlike kimselerdir.³⁶ Kuran-ı Kerim'in anlatımına bakıldığında haset sahibi kimselerin, genelde iman etmemiş kimseler³⁷ olarak karşımıza çıkması, iman ettiğini iddia eden bir kimsenin eğer bünyesinde haset taşıyorsa düşünmesi gereken önemli bir husus olarak karşımıza çıkmaktadır. Zira bu kimse her ne kadar iman ettiğini söylese de iman etmemiş kimselerle aynı özelliği taşımakta ve bu da onun mümin karakterine gölge düşürmektedir.

KİŞİSEL MAHREMİYET

İdeal bir toplum oluştururken en önemli rehber olarak Muhammed (as) aracılığıyla insanlara indirilmiş olan Kuran-ı Kerim kişinin mahremiyetine de önem göstermekte ve onu yüceltmektedir. Mahremiyetin olmadığı bir toplumda bireyler arasında saygı zeminine oturmuş bir ilişki ağının kurulu olması mümkün gözükmemektedir. Bu mahremiyetin sağlanabilmesi için de kişinin kendisini toplumdan soyutladığı yer olan kendi başına kaldığı evi büyük ehemmiyet arz etmektedir.³⁸ Kuran-ı Kerim evlere girerken izin alma gerekliliğine vurgu yapmak suretiyle kişilerin mahremiyetini koruma altına almaktadır. Böyle bir mahremiyetin inşa edilmemiş olduğu bir toplumda kişisel sırların korunabilmesi, bireyin izzet ve şerefine ayak altına vermeden bir yaşam sürebilmesi mümkün gözükmemektedir. Bu sebeptendir ki Kuran-ı Kerim, ideal bir toplum inşa ederken kişisel mahremiyetin tesis edilmesi en kolay mekan olan evleri güvence altına almaktadır. Evleri güvence altına almakla kalmayan Kuran-ı Kerim aynı zamanda kişilerin birbirleri hakkında casusluk yapmalarını da kesin bir dille yasaklamakta ve ayıpların araştırılmasından insanları men etmektedir.³⁹ Öyle ki kişinin gizlediği bir kusuru olsa bile bunu araştırıp ortaya çıkarmak ilahi vahiy açısından hoş görülmemektedir. Bu yasaktan kendisini sakınan bir toplumun bireyleri hem kendi hem de çevrelerindeki insanların özel alanlarına saygı duymak suretiyle aslında ideal bir toplumun inşasına doğru bir adım daha yaklaşmış olmaktadır.

Mahremiyete önem gösterip birbirinin ayıbını araştırmayan bir toplum kendisini direkt olarak dedikodu yapma illetinden de korumuş olmaktadır. Zira insanların birbirlerinin arkasından dedikodu yapmaları da ilahi vahiy tarafından hoş karşılanmamakta ve bunun terk edilmesi istenmektedir.⁴⁰ Hoş karşılanmayan ve yasaklanan bu kötü özelliklerden korunmak için çaba harcayan bir toplum, bünyesinden hasedi atabilmekte ve kendisini tüketen bir yapı olmaktan kurtarabilmektedir. Kişinin kendisini gıybet ve dedikodudan koruması hususunda Kuran-ı Kerim, böyle bir şeyle karşılaştıklarında iman eden kimselerin yüzlerini çevirdiklerini ve bununla ilgilenmediklerini anlatmaktadır.⁴¹ Öyleyse kişi, ideal bir toplumun parçası olmak istiyorsa kendisini ve çevresindeki insanları tecessüsten, hasetten ve gıybet hastalığından korumak zorundadır. Bunu başardığı ölçüde bir toplumun ideali yakalama ihtimali artacak ve ilahi vahye uygun bir yaşam inşa etme fırsatını kendisinde bulacaktır.

VAHYE UYGUN KARAKTER İNŞASI

Hasedin yanında Kuran-ı Kerim'e tabi olduğunu söyleyen ve buna iman eden bireyin dikkat etmesi gereken bir diğer husus olarak kin ve kibirden uzak durması gerekmektedir. Zira Allah (cc) büyüklük taslayanları sevmediğini bize ayetinde açık bir şekilde bildirmektedir.⁴² Mensubu olduğu toplum içinde kibirlenerek dolaşan etrafındaki insanlara üstten bakan bir birey Allah (cc) tarafından sevilmemekte ve onun yapmış olduğu bu kötü davranış kesin bir dille yasaklanırken insanın acziyetine de vurgu yapılmaktadır.⁴³ O halde Allah'ın (cc) istemesi olmaksızın hiçbir şey yapması mümkün olmayan insanın bu acziyetinin farkında olmalı ve yeryüzünde böbürlenerek

³⁶ El-Felak, 113/5

³⁷ El-Ahzab, 33/19

³⁸ En-Nur, 24/28

³⁹ El-Hucurat, 49/12

⁴⁰ El-İsra, 17/36

⁴¹ El-Muminun, 23/3

⁴² En-Nahl, 16/23

⁴³ El-İsra, 17/37

dolaşmaması gerekmektedir.⁴⁴ Kibrin yanında kişinin kendisini uzak tutması gereken bir diğer husus olan kin ise tehlikeli bir özellik olarak karşımıza çıkmaktadır. Zira Allah (cc), kin güdülmesi gereken bir yerde bile adaletten sapılmamasını emretmekte ve bu hususta kendisinden korkulması gerektiğini vurgulamaktadır.⁴⁵

Kin, nefret, haset, kıskançlık ve gıybet gibi kötü hasletleri kendisinden uzak tutmaya gayret edip ilahi emrin kendisine emrettiği bir hayat yaşamaya gayret eden bir kimsenin sahip olduğu özellikler arasında iffetli olmasını⁴⁶ ve merhamet duygusuna sahip olmasını sıralamak pekala mümkün gözükmemektedir. Nitekim yukarıda da değindiğimiz üzere anne ve babaya merhametle yaklaşılması Allah'ın (cc) merhametli olmayı emrettiği yerlerden biri olarak karşımıza çıkmaktadır.⁴⁷

İffet ve merhamet duygusunu kendisinde barındıran bir kimse sahip olmaması gereken kötü huylardan kendisini korumakta ve mensubu olduğu topluma da faydası dokunmaktadır. Zira kendi iyi hasletlerinden dolayı çevresindeki insanlara, diğer canlı ve cansız varlıklara iyi davranacak ve ideal bir toplum inşa etmekte üzerine düşeni yerine getirme hususunda doğru bir tutum sergilemiş olacaktır.

Bu iki güzel karakteristik özelliği kendisinde barındıran ve çevresinde bulunanlara da bunu aşıl原因an kimse ihsanda bulunma noktasında büyük bir mesafe kat etmiş olarak kabul edilmelidir. Zira benliğinde merhamet bulunmayan bir kimsenin ihsanda bulunması mümkün gözükmemektedir. Allah'ın (cc), ilahi vahyin her yerinde zikrettiği ihsan⁴⁸ kişinin ancak merhamet sahibi olmasıyla kendinde ortaya çıkmakta ve bunu gerçekleştirebilmektedir.

İyiliğin genel bir kavram olarak düşünüldüğü varsayımından hareketle kişinin yapmış olduğu ve karşı tarafça iyilik olarak değerlendirilebilecek her hareketin ihsan kavramı içine girmesi mümkün gözükmemektedir. Fakat yapılan bu hareketlerin iyilik olarak kabul edilmesi için herhangi bir karşılık beklenmemesi⁴⁹ ve sonuç olarak da başa kakılmaması gerekmektedir. İyilik yaparken bir diğer dikkat edilmesi gereken husus ise yapılan iyiliğin teşhir edilmemesi meselesidir. Zira Kuran-ı Kerim, yapılan iyiliğin teşhir edilmemesinin yapan açısından daha hayırlı olduğunu bize bildirmektedir.⁵⁰

Kuran-ı Kerim'in ideal bir toplum inşasında dikkat ettiği hususlar arasında iktisadi meseleler büyük ehemmiyet arz etmektedir. İktisadın güçlü olmadığı, hak olmayanın kolaylıkla gasp edildiği, rüşvetin yendiği, mali anlamda yardımlaşmanın göz ardı edildiği bir toplumda en ufak bir düzenden bahsetmek mümkün gözükmemektedir. Kişinin karnını doyurmak için hak ve adaleti devre dışı bırakmak zorunda olduğu bir ortamda, yukarıda bahsetmeye çalıştığımız hususlara önem göstermesini beklemek akıl dışı kalmaktadır. Buna benzer bir durumla karşılaşmamak için sistemli bir iktisadi düzen ve bu düzene uygun bir yaşam biçimini benimsemiş bir toplum gerekmektedir. Bu iktisadi düzen ise temelini ilahi vahiyden almalı ve temel çerçevesinin çizildiği üzere bir sistem inşa edilmeye çalışılmalıdır. Bu sistem içinde kişi ilk olarak kendiyile alakalı meseleleri halletmeli daha sonra toplum bazında üstüne düşeni yerine getirmelidir. Bu noktada kişiyi ilgilendiren en ehemmiyetli mesele olarak karşımıza israf meselesi çıkmaktadır.

İsraf edenlerin Allah (cc) tarafından sevilmediğini belirten Kuran-ı Kerim, bu uyarıyla birlikte insanların yiyip içmelerinde herhangi bir beis olmadığını bize anlatmakta fakat bir ölçünün gözetilmesi gerektiğini de bildirmektedir.⁵¹ Ayetten de anlaşılacağı üzere meyve veren ağaçlardan yemede bir sakınca gözükmemektedir. Fakat

⁴⁴ El-Enam, 6/59

⁴⁵ El-Maide, 5/8

⁴⁶ El-Muminun, 23/5

⁴⁷ El-İsra, 17/24

⁴⁸ En-Nahl, 16/90

⁴⁹ El-İnsan, 76/7-9

⁵⁰ El-Bakara, 2/271

⁵¹ El-Enam, 6/141

bu ağaçların meyvelerinden yenirken hak olarak sadaka ve zekatın verilmesi gerekliliğine yapılan vurgu gözden kaçırılmamalıdır.

Bu ve diğer ayetlerden de⁵² hareketle israftan bahsedilirken herhangi bir kısma durumu söz konusu olmamaktadır. Zira israftan bahsedilmeden önce Allah'ın (cc) kullarına yiyin ve için emri görülmektedir. Öyleyse israf konusunda her iki ayette önümüze çıkan ölçülü olma hususuna önem gösterilmeli ve yapılan tüketim ve harcamalarda israf göz ardı edilmemelidir.

İsraftan kaçınılmanın emredildiği toplumun yapmakla mükellef kılındığı bir diğer husus mallarından yapmaları gereken harcamalardır.⁵³ Bu harcamalar kimi zaman ihtiyacı olan kimselere verilen borç olarak ortaya çıkarken kimi zaman da mali yardımlaşma olarak karşımıza çıkmaktadır. Yukarıda da değinmeye çalıştığımız üzere birbirleri üzerinde hakları bulunan müminlerin, maddi anlamdaki zorluklarında da birbirlerine destek olmaları gerekmektedir.⁵⁴ Mali anlamdaki yardımların yapılabileceği kimselere gelince bu konu hakkındaki ayet incelendiğinde karşımıza; ebeveyn, yakınlar, yetimler, fakirler ve yolda kalmışlar çıkmaktadır.⁵⁵ Mali yardımlaşmanın mahiyetine değinilmesi gerektiğinde bunun kişinin sevdiği şeylerden infak edilmesi suretiyle olabileceği görülmektedir.⁵⁶ Bu suretle kişi iyiye erişme imkanını Allah'ın (cc) izniyle kendisinde bulabilecektir.

SONUÇ

Kuran-ı Kerim'in toplumsal bazda bir eğitim anlamında hangi meselelere değindiğini irdelemeye çalıştığımız makalemizde genel olarak ahlak boyutunu inceleme imkanını kendimizde bulduk. Ahlak meselesini ele aldığımızda insanın mensubu olduğu toplumun ideal bir toplumda olması gereken vahye dayalı ahlaki erdemler etrafında şekillenen bir hayat düzenine sahip olması gerekliliği ortaya çıkmaktadır.

Adaleti tesis etme, doğru sözlü olma, affedici olma, anne babaya itaatkar olma, sosyal ilişkilerde vahiy temelli bir tutum ortaya koyma gibi ahlaki erdemlere sahip bireyler vasıtasıyla toplumsal bazda bir eğitimin başarısından bahsedilebilir olduğu ise kaçınılmaz bir sonuç olarak görülebilir. Nitekim Allah'ın emir ve yasaklarına uygun bir yaşam inşa etmek ve bu doğrultuda bir sistemi hayatın her alanına yaymak bir bütünle mümkündür. Bu bütünü yakalayabilmek içinse Kuran-ı Kerim'in emir ve yasaklarına uygun bir yaşam süren bir toplum anlamına gelmektedir. Bu toplum ise ilahi vahiy rehberliğinde kendisini eğittiği ölçüde ideal bir toplum olabilme imkanını kendinde bulacak ve Allah'ın (cc) dininin yer yüzündeki koruyucusu olabilecektir.

Bu sebeptendir ki Kuran-ı Kerim kendisine muhatap olarak aldığı insanı tek başına yönlendirmemekte aksine onu yaşadığı toplumun bir parçası olarak görmekte ve kendisine bir bütün içinde varlığını idame ettiren bir birey olarak davranmaktadır.

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“VAHŞİ DEREGÜLASYON” KAVRAMINA HALLİN VE MANCİNİ YAKLAŞIMI: ORTA ASYA MEDYASI BAĞLAMINDA DEĞERLENDİRME

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GİRİŞ

Hallin ve Mancini'nin Karşılaştırmalı Medya Sistemleri modelinde temel amaç medya sistemlerini karşılaştırma amacıyla bir çerçeve kurmak ve medya sistemlerinin siyasal sistemin gelişimine yapısal ve tarihsel olarak bağlı olduğunu göstermektir (Duman, 2013: 114). Bu medya modeli, ana akım medya yaklaşımlardan farklı olarak, batı eksensli liberal yaklaşımın normatif bir biçimde idealleştirilmesine karşı çıkarak tarihsel analizin önemini vurgulamaktadır. Hallin ve Mancini modeli, evrensel olarak belirli bir modele üstünlük atfetmeden ülkelerdeki medya sistemlerinin tarihsel değişimi sorunuyla ilgilenmektedir (Hallin, Mancini, 2004: 1).

Karşılaştırmalı Medya Modeli ve Orta Asya Medyası

Medya sistemlerini, çalıştıkları sosyal ve siyasal sisteme göre işlerlik gösterdiği fikrinden yola çıkarak, Hallin ve Mancini, dört büyük boyut önermektedir:

- Devletin medya sistemine müdahalesinin niteliği ve kapsamı
- Toplumdaki siyasi benzerlik düzeyi
- Medya piyasasının gelişimi, özellikle basının kullanım yaygınlığı ve dolaşımı
- Gazeteciliğin profesyonelleşmesi.

Bu boyutlara göre, Hallin ve Mancini, medya sistemlerini üç model olarak sınıflandırmaktadır. Ticari medya ve piyasa mekanizmaları ile karakterize edilen

- Özgürlükçü (Liberal) Model (Birleşik Krallık, İrlanda, ABD ve Kanada);
- Devletin aktif ama sınırlı rolünün yanı sıra ticari medya ve organize sosyal ve politik gruplar arasındaki bağlantıyı vurgulayan Demokratik Korporatif Model (Almanya, İsviçre, Avusturya, Hollanda, Belçika, İsveç, Norveç, Danimarka, Finlandiya);
- Zayıf ticari medya ve devletin daha güçlü bir rolü ile medyayı parti siyasetine entegre eden Kutupsal Çoğulcu Modeli (Fransa, İtalya, İspanya, Portekiz, Yunanistan).

Orta Asya ve benzeri ülkelerdeki medyayı anlayabilmek ve değerlendirme yapabilmek için Daniel C. Hallin ve Paolo Mancini'nin 2004 yılındaki çalışmasında ele alınan “Kutuplaşmış Çoğulcu Model”i geniş bir şekilde incelemek gerekir.

Düşük seviyede gazete tirajı, yandaşları savunma amaçlı haberler yapma geleneği, özel sektöre ait medyanın araçsallaştırılması, kamu yayıncılığının ve yayıncılık yönetmeliğinin siyasallaşması ve gazeteciliğin özerk bir

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Bu bildiri 2016 yılında hazırladığım Orta Asya Türk Cumhuriyetlerinde Karşılaştırmalı Medya Sistemleri başlıklı doktora tezi esas alınarak hazırlanmıştır.

meslek olarak sınırlı oranda gelişmesi gibi özelliklere sahip model Orta Asya ülkelerindeki medya durumlarını özetlemektedir.

Bu ülkelerde, politik amaçları için medyanın özelliklerini kullanmak isteyen siyasi ittifak ve emellere sahip olan özel çıkar grupları tarafından medyanın kontrol edilmesine güçlü bir eğilim gözlemlenmektedir. Orta Asya'da çoğu yerel televizyon kanalları, ülkenin devlet merkezli politikasıyla uyumlu bir şekilde hiçbir eleştiride bulunmadan yerel hükümet ve iş çevreleri üzerine haberlere odaklandıklarını belirtmek gerekir. Gazetecilerin aynı zamanda siyasetçi olduğu Orta Asya Cumhuriyetlerinde parlamentoda gazeteci, hatta gazete veya televizyon kanalı sahibi milletvekilleri yer almaktadır.

Vahşi Deregülasyon (Savage Deregulation)

Vahşi Deregülasyon (Savage Deregulation) kavramını kullanan Tarquina bu kavramı ile 1980'li ve 1990'lı yıllarda Portekiz medya politikasını tanımlamak için üretmiştir. Portekiz medyasındaki ticarileşmeyle oluşan olumsuz sonuçları kontrolsüz deregülasyon kavramı ile anlatan Tarquina, siyasi sistemin dayatılmış medya politikalarının başarısızlığının altını çizer. Vahşi deregülasyon kavramı ile ticari yayıncılık kamuoyunun hizmetinde kamu yayıncılığı korumak için bir çerçeve olmadan dizginsiz, kuralsız sürdürülen bir medya politikası anlatılmaktadır (Duman, 2013: 116).

Kutuplaşmış Çoğulcu Medya Sistemindeki Akdeniz ülkelerinde olduğu gibi Orta Asya ülkeleri için de geçerli olan "vahşi deregülasyon" kavramı Hallin ve Mancini'nin "Comparative Media Systems" adlı çalışmasında geniş bir şekilde incelenmiştir. Bu çalışmada deregülasyon özellikle radyo-televizyon yayıncılığı alanında temel olarak yasal düzenleme ya da yeniden düzenlemeyi ifade etmek için kullanılmıştır.

Hallin ve Mancini'nin (2004: 125) analizindeki en önemli sorun, onların vahşi deregülasyonu "ticari tufan" ile eşit tutmasından kaynaklanmaktadır. "Tufanın" "yabani" olduğunu iddia etmek kolay olsa da, "serbestleşme" tamamen ticari bir niteliğe sahip değildi. Onların Traquina'ninkini (1995) tekrarlayan argümanı, hükümetin ticari anlayışa el pençe divan durması, kamu hizmeti yükümlülüklerinin mevcudiyetini zayıflatmış ve yayıncıların gereğinden fazla türemesine olanak sağlamış olmasıdır. Hallin ve Mancini, mevcut medya sistemlerini etkileyen birçok kavramı detaylandırmıştır. Bunlardan ikisi *kayırmacılık* ve *araçsallaştırma* doğrudan yabani serbestleşmeye en bağlı olanlardır.

Hallin ve Mancini'nin geç demokrasi yabani serbestleşme yörüngesi, Güney Avrupa'nın geçmişindeki kayırmacılığın rolü ile başlamaktadır. Orta Asya Cumhuriyetleri de uzun dönem Sovyet Sisteminin çatısı altında kaldığı için demokratik yaşamdan bihaber şekilde yaşamışlar. Bu sosyalist hayat şekli medyayı da etkilemiş ve Sovyet döneminde medya da o çizgide gelişmiştir. Bağımsızlığına kavuşan bu cumhuriyetler daha sonra otoriter ve baskıcı rejimle karşılaşmış ve gene de demokrasiden uzak kalmışlardır.

Dolayısıyla vahşi deregülasyon bu ülkelerin de medyasında kendini göstermiştir. Hallin ve Mancini (2004; 37), araçsallaştırılmayı, güncel siyaset dünyasına müdahale için kullanmak üzere partiler, politikacılar, sosyal gruplar veya siyasi nüfuz arayan ekonomik aktörler tarafından medyanın kontrolü olarak tanımlamaktadır. Kayırmacılık nedeniyle aktörlerin medyayı kontrol edenlere ayrıcalıklı bir şekilde erişim sağlaması mümkün olduğunda, genellikle medyanın kendisi de araçsallaştırılmaya yol açmıştır.

Hallin ve Mancini'nin elde ettiği ancak burada anlatılanlarla çelişen sonuçlardan biri de onların kapitalizm ortaya çıktığında kamu hizmeti yükümlülüklerinin eksikliğinin, otomatik olarak piyasada kısıtlanmamış bir bağlılığa yol

açması gerektiği varsayımlarıdır. Bir sosyal refah 've/veya' piyasa ekonomisi senaryosu oluştururken, onlar Orta Asya Cumhuriyetlerinde meydana geldiği gibi rejimin, kendi kazancı için medyanın kontrolünü sürdürmeye devam ederken serbestleşmenin oluşabileceği üçüncü olasılığı hariç tutmuştur. Orta Asya örneğinde, medyanın güçlü bir şekilde devlet kontrolünde olması, hükümetin, piyasanın serbestleşmesi sonrasında güçlü bir devlet kontrolünü sağlama konusunda devam etmesi adına bir eğilime yol açmıştır. Kamu yayıncılığı ile ilgili olarak Hallin ve Mancini'nin gözden kaçırdığı nokta, küçük, yerel yayıncıların sayısındaki çoğalmanın değil 'büyük' şirketlerin yoğunlukta olmasının, kamu yayıncılığının zayıflamasına yol açmasıdır.

Orta Asya ülkelerinin Sovyet sisteminden ayrılarak yeni düzene geçişi, bir bakıma "üstü örtük" özelleştirme sürecinden "vahşi deregülasyona" doğru evrilen medya politikalarının demokratik bir iletişim düzeni ve iletişim özgürlüğü yerine *neo-otoriter* bir medya düzeni içinde yansımaları bulmuştur. Daniel Hallin ve Paola Mancini'nin (2004:124) belirttiği gibi, Akdeniz ülkelerinde medya politikalarının genel eğilimini, ticari radyo ve televizyonların kontrol edilemeyen yollarla ulus devletler içinde yayın yapması, yasal düzenlemelerin ise çoğunlukla geç kalması ve giderek ticarileşen yayıncılığa karşı kamusal yarar kriterinin uygulamaması oluşturmaktadır. Hallin ve Mancini sözü edilen durumu tam da "üstü örtük özelleştirmeden – "vahşi deregülasyona" doğru bir evrim olarak tanımlamaktadır. Orta Asya Türk Cumhuriyetleri için de geçerli olan bu durum bu ülkelerdeki kapitalist düzenin devletle olan ilişkisini de aydınlatmaktadır.

Sermayenin bileşenlerinden birisi olan medyanın içinden bakıldığında neo-liberal politikalar neo-otoriter bir medya formasyonu içinde kendini şekillendirmiştir. Bununla birlikte, sermaye ve siyasal iktidar arasındaki birtür mübadele unsuru olan medya, fon denetiminde de demokratik bir iletişim düzeninin ve iletişim özgürlüğünün öncelikli amaç olmadığı belirtilmelidir (Kaymas, 2008; 98).

SONUÇ

Orta Asya ülkelerinde kapitalizmin yapısı irdelendiğinde, ideolojik bir söylemin "özgürlük" söylemiyle tasarladığı yapının devlet müdahalesini ortadan kaldırmaktansa, tam aksine, "alaturka" kapitalizmin yapısal değişimine koşut olarak sermaye fraksiyonları tarafından devletin yeniden ele geçirilmesine yol açtığı gözlemlenmektedir. Medya politikalarında "üstü örtük özelleştirmeden" – "vahşi deregülasyona" doğru bir evrim geçiren, Orta Asya Cumhuriyetleri kapitalizmindeki neo-liberal dönüşüme koşut olarak, sermaye birikim kurallarının ve ideolojisinin egemen olduğu bir medya düzeninde yerini bulmuştur.

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VIRTUAL LEARNING: VOCATIONAL SCHOOL MATHEMATICS LECTURES

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ABSTRACT

In mathematics, teacher usually use virtual learning environment (VLE) in their teaching at high school or university level lectures that they believe this kind of teaching can help students' understanding of math. In this experimental case study, we try to see the effect of VLE on vocational school students' mathematics. Virtual learning environment application was introduced in teaching mathematics lecture among forty-five students of a vocational school education. The data collection tools used in this study was the questionnaire, observation and interview. According to the results, students were more interactive by VLE as emotionally and educationally. Also, exams were efficient activity and lecture videos were most preferred materials for the students. Students' personal computers, internet connection and effective using of ICTs tools in lectures turned out to be main positive ways of VLE. We can say that math courses of vocational schools should be given adopting of VLE in an efficient and necessary way.

Keywords: virtual learning environment, mathematics teaching and learning, vocational school

INTRODUCTION

Educational studies and application in all part of teaching and learning are widely affected by using of technological materials to all over the sector at last two decades. The interlock between information communication technology (ICT) and education has led radical changes at the learning and teaching way in all steps of education, for example, online learning distance education and e-learning (Khanal, 2015; Dhakal and Sharm, 2016). According to many studies in this area, the combination of education and technology has made more positive effects, especially in math education, as more quality education, more global education, faster reach to educational materials than the negative ways as decreasing of using paper- pencil in math lectures (Khanal, 2015; Kozma, 2008; Beard and Harper, 2002). It can be said that the mean aim of this renewing education is to enhance teachers' teaching and students' learning.

Many educational projects as World Bank Higher Education Reform Project provided information communication technology to enhance the level of academic presentations to students (Paul, Peter and Paul, D., 2005). As a main scientific area, math education plays a big role in education of math teachers and math education persons (Lindner and Murphy, 2001). Theoretical education at mathematics education departments usually conducted well but some problems could be seen in practical ways of the theory at many developing countries (Dhakal and Sharm, 2016; Breen, Cohen and Chang, 2003). As a result of this situation, the problems living at the mathematics education departments of the universities in teacher training reflects to elementary and high school mathematics teaching and learning. Math education departments personals of the universities should be aware of the big important of the innovative technological tools on the preparing of math teachers. According to many math education researchers, Virtual Learning Environment (VLE) could be helper the adaptation of information communication technologies to the education systems (Siragusa, 2002; Brace-Gowan and Culalow, 2002). In this paper, it was focused to express the students' adaptation to VLE to enhance their math learnings.

VLE are used and preferred rarely at vocational school level because of that many university math lecturers shares the idea that the application format could cause the decreasing of students' mathematical thinking times when they spend time with any mathematical activity such as solving a math problem and learning a math subject.(Bonner, 1999; Reese, 2015; Bryant and Hunton, 2000). Many math education researchers stressed that math education without using VLE could be decreasing of students' motivation to math lectures (Petty and Farinde, 2013; Dhakal and Sharm, 2016). University math teachers should add ICTs applications as a supplementary model of their teaching by which students could turn out to be more comfortable with the technological education systems. In this context, it is focused VLE model in this study to understand the effect of the approach in interactive learning between teachers and students at university level, and to determine the difficulties that teachers and students experience when they use the model.

METHOD

An experimental case study method is used in this study. Case study is a qualitative research method that a deeply analyze of special situation (Creswell, 2014). VLE model is the case element of this study. In this study, the data was collected with a closely connection between the researcher (the author) and researched (the teachers and the students) to see the students' behaviors in learning mathematics with VLE (Dhakal and Sharm, 2016; Lindner and Murphy, 2001).

Kocaeli vocational school is one of the biggest vocational schools (about 3500 students) in Turkey with fifteen departments such as marketing, business and accounting and task departments (social programs), and computer, constructor, electronic and machine (technical programs) The participants coming from all over the city of the country to this school. Almost all of the departments are using technological laboratories, computer classrooms and internet connection in the classes to e-learning. And, some of the departments give distance education. The teachers and the students in this school have chance to use ICTs tools for their teaching and learning. So, mathematics lectures of these departments were determined for the data unit of this study.

VLE tools were used in math lectures as a supported part of teaching in the departments. The VLE tools were presented to the students from the department webpages in the academic year 2017-2018. Some mathematics lectures of the departments were presented in the interactive model using the software as Mathematica and the video files selected from the other university lectures. The students could access the all kinds of materials at any times and at anywhere by login. The courses in which the all supplementary technological materials were used when the students needed were modified for 14 weeks (one semester). The lecturers took an assistant role to help their students during the lectures. The students' experiences such as their group discussions and using VLE were observed with a special observation list (modified from the Perkins and Murphy's scale (2013) as a basic data collection tool, and archive analyze method were used to examine the data collected during the semester.

The students' access to VLE tools, the opportunities presented to the students during the lectures were the main items in the checklist. The reliability and validity of the questions in the check list was made with a special pilot group out of the study group. The archive was the students' documents which generated during the mathematics courses. students from the construction and computer departments at a vocational school in Turkey taking mathematics I course participated to this study. During the lectures, students used android mobile phone.

FINDINGS

The main observation was that students used ICT tools efficiently and continuously during the semester because of their teachers' motivation to this way. Using a proxy measurement students' access was determined for their motivation and adaptation on VLE tools. The data coming from the archived showed that three different level of access in the system was classified that low-level access, intermediate level access and high-level access. 13 students were in the low-level access that their access to the system was 21 times during the semester. The lectures were conducted at the classrooms and at the math laboratory. If this reality is considered, the situation of these students is not bad. According to these students' archive generated by the researcher, they didn't have their special computer or android mobile phone. Also, these students used Mathematica when the lectures were conducted in math laboratory. According a student from these group;

“Sometimes, I used my classmate mobile phone to complete my exams or educational activities. I am not well in using of technological materials and, I don't have laptop and computer at home. For this reason, I dint used the technological sources much. Maybe that is a reason for my low-level participation to this digital system that I only well understand mathematics lecture listening from teacher”.

30 students were in the intimidate-level access that their access to the system was 112 times during the semester. It could be said that the students in this category were sometimes willingly and in some weeks of the semester interested in VLE tools. 17 students from this group had their own android mobile phone or computer. According to this data, we can say accept that the participants in this group were supplementary to the VLE tools. The video files, activities and materials registered and operated with the system provide sometimes positive effect students' using to VLE. The connection to the system for some of the students in this group was made every time and everywhere with their mobile or personal computer which they had at their homes. A student from this group expressed that;

“The technological system gave us a big advantage to understand our mathematics lecture well. It was very helpful, and it was very nice to connect or to learn at home. Sometimes, I accessed the system with my classmates at the same time and we talked on the materials in the system via a chatting line. Also, I had some difficulties to connect to the school system from my hostel”

18 students were in the high-level access that their access to the system was 136 times during the semester. It could be said that the students in this category were very happy and interested in VLE tools. When we consider that the half of the lectures were conducted at the classrooms, we can say accept that the participants in this group were highly motivated to the VLE tools. The video files, activities and materials registered and operated with the system provide positive effect students’ using to VLE. The archived documents showed that the all students of this group had their special android mobile phone. The connection to the system for these students was made every time and everywhere with their mobile. According a student from these group;

“The connection to the system with my mobile phone was very easy and highly exciting. The registered material in the system help me to understand the course well. Also, the best point was the connect to the system when I want. Sometimes I used my laptop to connect to the webpage of mathematics lectures when I was studying mathematics or doing homework.”

Shortly, we can express the general situation of this tree level group that the students were generally engaged in the system and motivated to VLE tools. The main indicating point between the group was to have an android mobile phone/computer or not to have this technological material. Also, the main reason of the lower level accessing to the mathematics webpage was the lack of mobile phone or laptop/computer of the vocational school students.

The finding about using of VLE in education system to teach and to learn mathematics could be expressed based on the archived material in the system and the author observation as that; VLE tools provided the students to learn mathematics more technological ways and to integrate their learning to the technology. The student’s mathematics final exam scores were better than the old years students of the departments. Teacher supporting for using of VLE tools had big effect to enhance of students’ motivation on VLE. Using of VLE turned out to be a positive effect on mathematics lectures in all departments of the vocational school. The alternative sources of the mathematics lectures gave to the students using of the materials for their mathematical level and for understanding of more difficult math subjects. By the VLE tool, the reach learning and teaching environment caused the enhancing of students’ study habits, the developing of their learning styles and the active participation to the lectures. According to the analyze of the data, it can be said that students of the technological century prefers collaborative learning environment, free thinking approach on the mathematical subjects and the courses that they are enrolling interactively with the learned subject.

RESULT

By the view of the analyze and the findings of this study, VLE has positive effect on developing of student’s motivation to learning mathematics and taking good scores with exams in vocational school mathematics. VLE could be accepted as a basic supportive teaching and learning model for vocational school mathematics. As the needed for many educational method, teachers or lecturers in vocational schools should have seriously concentration on the collaboration of ICTs tools with mathematics lectures applying the necessities of the teaching and learning methods. The main point of this education method is to coordinate the basis elements which are necessary to effectively manage of VLE and the professional design of the lecture’s environments. For vocational school student in Turkey, we can say that they are coming from lower lever science and math education environment as technical high schools and socio-economical parts of the cities of the country. For this reason, VLE could provide good opportunities to these students. And finally, using of ICT could provide more participation of students to develop their educational level.

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XELEDRING: INTELLIGENT TECHNOLOGY OF INTERACTIVITY AND INTERCONNECTION BETWEEN THE WORLD'S EDUCATION SYSTEMS

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ABSTRACT:

Our contribution consists in proposing smart technology that addresses the current challenges of implementing inclusive education. It thus meets the needs:

- To create a framework for collaboration, interactivity and interconnection between the world's educational institutions and between the various educational actors and systems;
- To help and sensitize the various actors of society (governors, decision-makers, parents, educators, teachers, learners, etc.) to play their full role in the development of education by providing them with tools for digital tip and easy to use;
- Collect mass, continuous and diverse data (data stream) via connected objects, interfaces and platforms through sensory sensors and artificial intelligence programs that will be stored and allow international organizations, decision makers and government officials to make the right decisions to achieve the objectives of the sector.

The proposed technology includes hardware components (example: Xeltab connected boards) and software (software and multiplatform applications) that are specific to it.

The project is still in the prototype phase with an international patent granted in 2018. The validation of our results will be done with the production data from the next deployment of the technology in test phase. These data will then be analyzed and confronted with the diagnosis of professionals in the sector: psychologists, doctors, sociologists, pedagogues, etc., to know the degree of reliability to which the technology meets our expectations.

Keywords: Interconnexion, Internet of Things, Artificial intelligence, Inclusive education

INTRODUCTION

XELEDRING is a new intelligent technology of interactivity and interconnection between all educational systems of the world. It includes a software part and a hardware part.

- Software: a cross-platform web and mobile application (android, IOS, windows phone etc.) that has video calling, instant messaging, mailing, can interconnect all educational system entities, use facial recognition and others technologies;
- Hardware: consisting of Xeledring electronic board called Xelboard able to interconnect all the world's educational institutions with an unparalleled translation system.

In this paper we are going to present Xeledring giving information mainly about its contribution and target.

1. Who are we?

Xeledring is a young senegalese start-up rooted in applied research for 8 years. His vision, a better global education system. It is composed of engineers, researchers, actors of the education system, etc. and was awarded in 2018, an international patent of invention.

2. Xeledring contribution

Encourage exchange between actors through interactivity

We have implemented a modular multiplatform interface, varying from one type of user to another according to their access rights and guaranteeing the security and confidentiality of their users' personal data:



Figure 1: intelligent interactivity between actors in the education system

Participate in the popularization and socialization of knowledge by facilitating collaboration and partnership between institutions

Ability to follow live courses from Xel-connected universities from London by being in another xel-connected institution at the other end of the world thanks to the use of videoconferencing.



Figure 2: intelligent interconnection between educational institutions

Intelligent statistical quantification as a stock market index

The sector's challenges are pushing education professionals to aspire to more relevant, diversified, reliable and continuous information. In order to obtain specific data about student performance, health, ..., the international community organizes surveys such as the PISA assessment (Trisannual), the global survey on school health (GSHS conducted in 2013 in 94 countries), ..., and faces financial, organizational and technological constraints. Modelling the learner induces finer granularity information, more data to learn him. Until now,

"volumetry is a factor of precision not yet sufficiently exploited". Why should not AI and Iot open the doors of a highly standardized educational Big Data?

We are talking here about the use of interconnect and interactivity technology on several levels, including all education's actor. This implies large-scale deployment: standardization, consensus, standard, agreement, nomenclature, harmonization, etc. While public authorities have access to dashboards that allow them to visualize education traditional's indicators but also their values at finer levels, the parent has a special view of the learner activities. For each target, the variables are stored at reduced time intervals, in OLAP data cube for processing online queries through the use of intense optimization algorithms, relying in particular on the mathematical principles of transformed into wavelet and Gaussian copula, running on servers guaranteeing a "low latency" service. This implies like a using mimicry of the stock exchange for a state-of-the-art inclusive education system.

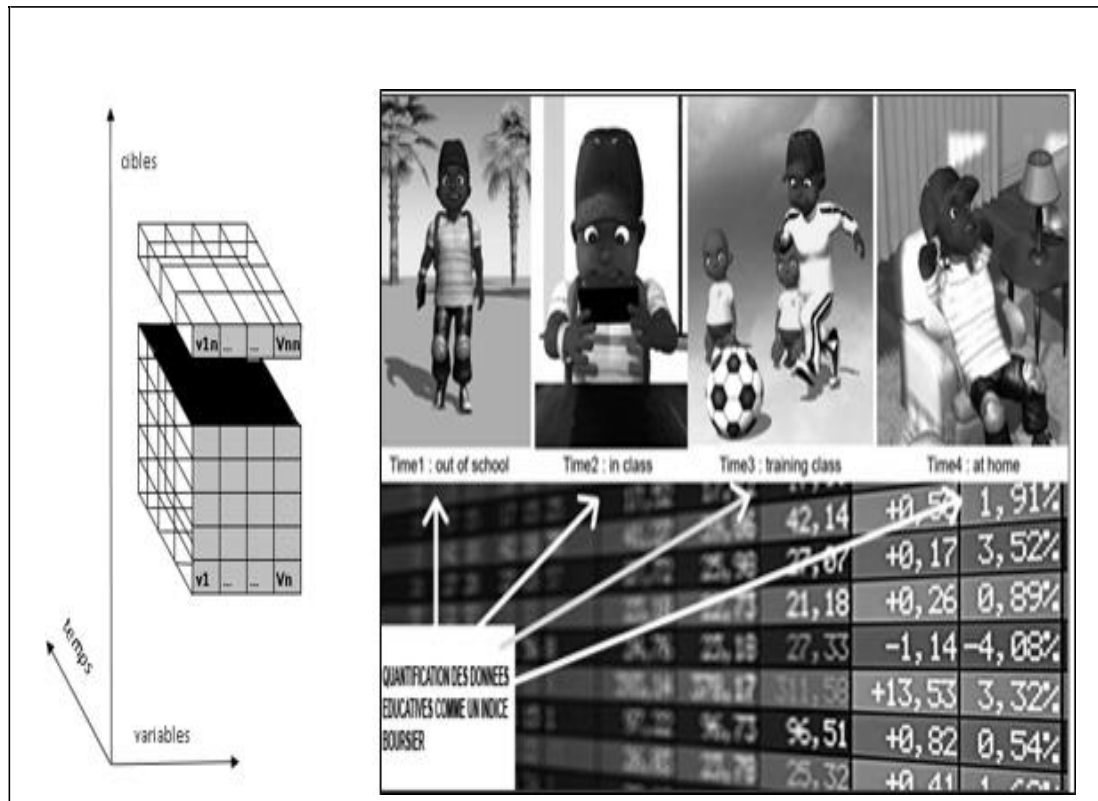


Figure 3: representation of a simplified OLAP data structure, scalable data: information to the parent

So the OLAP cube, which we use among others, has been chosen for its suitability to store in a pre-synthetic way (according to the demand and information needs of the education sector), multidimensional data but also, for its capacity to allow a quick query of this data during the submission of requests.

Xeledring simultaneously offers the targeted benefits of a social network, an e-learning platform, a forum but also an e-market, in accordance with the shared vision sector concerned. Thus, access to reliable large data, stored at time interval allows automatic and instantaneous sector quantification.

Taking in account mental, emotional and physical learner's health:

Xeledring connected objects use advanced technologies such as facial recognition, photoplethysmography, ... and thus allow using powerful algorithms of artificial intelligence, capture and to exploit data such as the mental and emotional health of the learner.



Figure 3: facial recognition, indexation and positive diagnosis of a learner

We do not claim to be able to diagnose the mental health of the individual at the moment t but rather these mental states whose observation over a certain period will allow to follow it and to propose a diagnosis of mental health.

3. The target ?

We meet the needs of:

- Teaching institutions: interconnections between partner schools and professors who give live classes to several connected classes and users regardless of their geographical distribution and their language by videoconference, etc.
- Parents of students: to know what their child does at school, to be connected to the teaching staff, to access their notes as real, to receive teacher's observations and recommendations, ...
- International institutions: like the World Bank, UNESCO, OECD, UNICEF, WHO, etc. who will no longer have to deal with the budgetary and logistical constraints associated with the implementation of international field surveys such as PISA and the Global School Health Survey.
- Decision-makers who thus have access to reliable statistics enabling them to better focus public policies;
- Companies wishing to present products and/or services conforming to the desired vision and values;
- Etc.

CONCLUSION

Our writing demonstrates Xeledring's ability to provide a more inclusive education from a collaborative perspective and the involvement of all stakeholders through a relevant exchange flow through interconnection and interactivity. The choice of presentation of a poster is justified by the fact that we did not yet have operating data

In perspective, we note the upcoming deployment in the test phase of the device and the analysis of the first results. The validation of our results will be done with the production data from the next deployment of the technology in test phase. These data will then be analyzed and confronted with the diagnosis of professionals in

the sector: psychologists, doctors, sociologists, pedagogues, etc., to know in the degree of reliability to which the technology meets our expectations.

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YIRMİ BİRİNCİ YÜZ YIL BECERİLERİNDEN: BİLİŞSEL DÜŞÜNME BECERİSİNİN DÜNYA VE TÜRKİYE'DEKİ DURUMUNA SİSTEMATİK BİR BAKIŞ

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ÖZET

Bilgisayar programcılığının okul müfredatındaki yeniden canlanması, öğrencileri sadece kodlamayı öğrenmenin ötesine geçen bir gelecek için hazırlama vaadi sunar. Bu çalışma, okulda kodlamayı öğrenen çocukların eğitim çıktılarını analiz etmek için araştırmaları gözden geçirdi. Makaleleri belirlemek adına sistematik bir derleme yapılmıştır. Bulguları sentezlemek için ise tematik bir analiz yapıldı. Sentezde on makale yer aldı ve temaları gösteren genel bir model geliştirildi. Elde edilen sonuçlar, öğrencilerin kodlamayı öğrenmesinin dışında, kodlama eğitiminin 21. Yüzyıl becerilerinin geliştirilmesinde çok büyük etkileri olduğunu görmekteyiz. Bu beceriler problem çözme, eleştirel düşünme, sosyal beceriler, özyönetim ve akademik becerilerdir. Bu çalışma ayrıca, kodlama yoluyla eğitim çıktılarını geliştirmek için öğretim tasarımının önemine dikkat çekmektedir.

GİRİŞ

21. yüzyılın en önemli becerilerinden bir tanesi olan, bilimsel düşünme becerisi üzerinde net olarak fikir birliğine varılmış bir tanım bulunmamaktadır. Bunun yanında literatüre baktığımızda da birkaç tanıma rastlamak mümkündür. Curzon, Black ve ark. (200) yılında, bilişsel düşünmeyi şu şekilde tanımlamışlardır, bilgisayar biliminin temel ilkelerine dayanan ve çoklu problem çözme becerilerinden yalnızca bir becerisidir. Bilgisayar bilimleri ise biraz yanlış anlaşılmış bir terimdir. Bunun en büyük nedeni “bilgisayar” kelimesinden kaynaklanmaktadır. Bilgisayar bilimleri, “bilgisayar çalışmaları”, bilgisayarları ve bilgisayarın teknik problemlerini çözmekten çok; sadece problem çözmek olarak anlaşılmalıdır. Jaokar (2013), bilgisayar biliminin bu tanımından bazı önemli çıkarımlarda bulunmaktadır. Bu çıkarımlardan en önemlisi, bilgisayar biliminin temelini matematik oluşturmaktadır. Bundan dolayıdır ki, birçok problemi ve problem çözme teknikleri bakımından diğer bilimsel alanlarla benzerlik gösterir. İkincisi, bilgisayar bilimi cihazları kullanmaktan çok problemlere çözüm yolları bulmak için bu cihazlardan yararlanmak ile ilgilenmektedir. Bundan dolayı da gerçek hayattaki veya diğer alanlardaki problemler ile karşılaşıldığında, aynı yöntem ve teknik ile çözüm yolları üretilebilir. Bilgisayar bilimlerinde bu duruma algoritma denilmektedir.

Algoritma ise; belirli bir problemin çözümünde adım adım izlenmesi gereken yol anlamına gelmektedir. Günümüz teknolojisi ele alındığında ise bilgisayar bilimleri artık sadece bir araç olmaktan çıkmış, her alanı temelden

etkilemiş ve bu alanda önemli değişiklikler getirmektedir. Bunun en büyük nedeni bireylere kazanmayı vaat ettiği problem çözme becerisine koyacağı katkılardır. Bu yolla bireyler gerçek hayatta karşılaştıkları problemleri çok daha kolay bir şekilde çözeceklerdir. Bu nedenlerden dolayıdır ki, ilk ve orta öğretim müfredatına bakıldığında öğrencilerin gerçek hayata hazırlama konusunda eksiklikleri olduğunu söylemek mümkündür. Buda eğitim öğretim müfredatını ve eğitim öğretim yöntemimizi değiştirmemiz gerektiğini bize açıkça göstermektedir.

Bilişsel düşünme, çok geniş bir terimdir ve literatüre bakıldığında bilişsel düşünmenin ne anlama geldiğine dair sayısız ve bazen de farklı fikirlerde tanımlara rastlamak mümkün. Carnegie Mellon Üniversitesi Bilgisayar Bilimleri Bölüm Başkanı Jeannette M. Wing'in bilişsel düşüncenin en önemli öncülerinden biridir. Wing'e (2006) göre bilişsel düşünme, "bilgisayar bilimi için temel olan kavramları kullanarak" problem çözme, sistemleri tasarlama ve insan davranışını anlama "yöntemi veya yaklaşımı olarak tanımlanabilir (Wing, 2006, s. 33-35). Wing ayrıca, bilişsel düşünmeyi bir analitik düşünme türü veya problem çözmek için durumları modelleme veya sistemleri tasarlama bununla birlikte uygulama için kavram odaklı yaklaşımı olarak görmektedir. Bilişsel düşünme, sorunlara çözümler üretmek için bilgi işleme teknikleri kullanılarak değerlendirilebilecek şekilde temsil edilen bir düşünce süreci olarak görülebilir. Bilişsel bir problemi çözmek, mantıklı ve algoritmik düşünme yaklaşımlarını gerektirir. Kilit beceri, bir probleme mantıklı ve sistematik bir şekilde çözmek için uygun bir algoritma oluşturmaktır (Grover, 2013).

Karşılaşılan problemleri ve çözümlerini ayrı ayrı düşünmek yerine, bilişsel düşünme becerisi problemin küçük parçalara ayrılmasını ve bunları çözmek için mantık, algoritmalar ve çoğu zaman yaratıcı düşünme becerisini kullanımını gerektirir. Yaratıcı düşünme becerisi, sezgi gibi niteliklerle birlikte, mantıksal, aritmetik, verimlilik, bilimsel ve yenilikçi düşüncenin bir birleşimidir (Curzon, Black ve ark. 2009). Bilişsel düşünme, genellikle bir işin veya problemin küçük parçalara ayrılmasını, örüntü tanıma ve soyutlamayı ve bu ve benzeri problemleri veya durumları çözmek için belirli algoritmalar oluşturmayı kapsamaktadır (Phillips, 2007).

Literatürde bilişsel düşünme becerisi ile ilgili sayısız farklı görüş olmasına rağmen, Bilişsel düşünme becerisinin 21. Yüzyılın en önemli becerilerinden bir tanesi olduğu ve çok önemli bir yere sahip olan, çeşitli düzeylerde daha derinlemesine araştırılması gereken bir beceri olarak görülmektedir.

Bu çalışmanın amacı 21.yüzyılın en önemli becerilerinden bir tanesi olan bilişsel düşünme becerisi ile ilgili yapılmış çalışmalarını taramak ve bu becerinin günümüzdeki önemini ortaya koymaktır.

Tablo1: sistematik inceleme süreci

Amaç	Kodlamanın öğrenim çıktılarına etkileyip etkilemediğini belirlemek
Tarama Yöntemi	Kodlama VEYA Programlama, Öğrenciler, Beceri VEYA Okul anahtar kelimeleri kullanılmıştır.
Kriterler (Dâhil Edilme)	Taramada, programlama ile kodlamanın öğrenim çıktılarına etkisine yönelik yapılmıştır. Taramada Tam metin ve hakemli bilimsel makaleler araştırılmıştır.
Kriterler (Dâhil Edilmeme)	Yüksek lisans veya üniversite öğrencileri, kodlama öğretim yöntemleri, Programlama yapmak ve kodlamanın dahil edilmediği diğer teknoloji taramaları bu çalışmanın dışında tutulmuştur.
Veri Çıkarma	Toplanan çalışmalar okunup, benzer bilgiler çıkartıldı.
Verilerin Sentezlenmesi	Temaları, benzerlikleri ve farklılıkları tanımlayan veri çıkarma işleminden sonra kodlama ile ilgili eğitim sonuçlarını gösteren tablo oluşturun.
Rapor	Sonuçlar, kodlamanın eğitim sonuçları üzerindeki etkisini göstermek için oluşturulmuş bir modelde analiz edildi ve özetlendi.

YÖNTEM

Jesson, Matheson ve Lacey (2011) de yaptıkları çalışmadan açıklanan sistematik gözden geçirme süreci, verilerin toplanması, sentezlenmesi ve değerlendirilmesi olarak belirtilebilir. Kodlama ve kodlama dışı spesifik eğitim sonuçları arasındaki ilişkiyi araştıran çalışmaların bulguları derlenmiştir.

Çalışmaya dahil edilen araştırmalar, kodlama veya programlama ile ilgili deneysel araştırmadır. A + Education, Education Source and ProQuest gibi eğitim ile ilişkili veri tabanları taranmıştır. Bu araştırmalarda anahtar kelimelerimiz kodlama veya programlama olmuştur. Bu da bize özellikle eğitim ve kodlama ile ilgili yapılmış deneysel çalışmalara ulaşma olanağı tanımıştır. Bu ilk aramada elde edilen makalelerin başlıkları kodlama veya programlama içeriyordu. Bu nedenle, anahtar kelimeleri başlık içinde sınırlandırmak için bir filtre kullanılmıştır. İlgili tüm araştırmaların başlığında bu sözlerin bulunmaması mümkün olabilir. Sonuçları optimize etmek için bir terim süreci aracılığıyla okul veya çocuklar ve beceri VEYA soyut düşünmeyi gerektiren terimleri içeren diğer temel terimler. Filtreler yalnızca hakemli dergilerden alınan makaleleri içerecek şekilde kullanılmıştır. Kodlama, 1960'larda öğrenciler için ilk kez geliştirildiği için, yayınlanma tarihinde herhangi bir kısıtlama olmamıştır. Alınan makalelerin çoğu 2012 ve 2016 yılları arasında yayınlandı.

Arama sürecinde kullanılan yöntem, Ekim 2017'de 172 potansiyel konu ile ilişkili araştırma makalesini tespit etmiştir. İlgili makalelerin konu dışı riski nedeniyle, ayrıştırma işlemleri üç aşamada yapılmıştır. İlk olarak, her bir makalenin başlığının okunmasıyla ilgili olan, muhtemelen ilişkili görünenler, özetin okunması ve daha sonra da tam makalelerin okunması ile ilgili üçüncü bir aşamada incelenmiştir. ayrıştırılan makaleler, öğretim programlarını veya uygulamalarını tanımlayanları veya öğrencilerin bilgisayar programcılığındaki başarısını değerlendirenleri kapsamaktadır. Arama stratejisi, Jesson ve arkadaşlarının önerdiği şekilde bireysel önyarguları azaltmak için iki uzman tarafından bağımsız bir şekilde gerçekleştirildi. (2011). Bu stratejiye dayanarak, 10 makale tespit edildi ve bunların genel geçerliliği ile ilgili kanıtlar değerlendirildi. Makalelerin her biri daha sonra uyarlanmış olan kritik değerlendirme becerileri program kontrol listesine (Kuper, Lingard ve Levinson, 2008) uyarlanmış bir versiyonu kullanılarak değerlendirilmiştir. Karma yöntemler için Tondeur ve ark. (2012) araştırmanın kalitesini değerlendirmede yararlanılmıştır.

ProQuest Central'dan alınan makaleler, Eğitim Kaynağından alınmış olanları hariç. Bazı tam metin araştırma makaleleri çevrimiçi olarak ulaşılamadı.

Bir sonraki sistematik inceleme süreci veri çıkarmaktı; Bu çalışmalar okunarak tamamlandı ve tüm önemli bilgiler kaydedildi ve özetlendi. Kodlama yoluyla etkilenen eğitim sonuçlarıyla ilgili makalelerdeki yapıları tanımlamak için, verileri sentezlerken tematik bir yaklaşım kullanmak uygun görüldü. Her makalede tanımlanan eğitimsel yönler kaydedildi ve temalar halinde gruplandı. Hem nitel hem de nicel veriler, raporlanan sonuçların belirlenmesiyle aynı şekilde analiz edildi. Temalar daha sonra yeniden tanımlandı, örneğin, problem çözme “matematiksel kavramlarla” birleştirildi, çünkü problemler matematiksel kavramların uygulanmasıyla çözüldü. Makaleler, listelenen temalar ve belirlenen çalışmalar arasındaki ilişkiler dikkate alınarak yeniden okunmuştur.

Bloom'un revize edilmiş taksonomisi, bilişsel eğitim çıktılarını düşünme düzeyleriyle karşılaştırmak için bir kaynak olarak kullanılmıştır.

Taksonomi eğitim toplumunda eğitim sonuçlarını karşılaştırmak ve kategorilere ayırmak için yaygın olarak kullanılmaktadır (Anderson ve Krathwohl, 2001). Bilişsel alandaki altı seviye iki düşünme düzeyinde belirlenmiştir; Hatırlama, anlama ve uygulamada alt düzey düşünme ve analiz etme, değerlendirme ve oluşturmada üst düzey düşünme becerileri şeklindedir.

Bu derleme ile belirlenen bilişsel beceriler, fiillerin bir kontrol listesi kullanılarak altı bilişsel alana karşı değerlendirildi. Anderson ve Krathwohl (2001) aa kaynak olarak alındı ve tespit edilen becerilerin genişliğini ve derinliğini değerlendirmek için düşük düşünme becerileri ve daha yüksek düşünme becerileri olarak kategorize edildi. Örneğin, eleştirel düşünürken, öğrenciler kodlarını test ettiler ve değerlendirdilerse, bu, sınıflandırma düşünme becerilerinin değerlendirilmesi ve kanıtlanması olarak kategorize edildi.

Bilişsel alanın dışındaki diğer önemli temalar arasında sosyal beceriler / işbirliği ve özyönetim yer alıyor. Makaleler, listelenen temalar ve belirlenen çalışmalar arasındaki ilişkiler dikkate alınarak yeniden okunmuştur.

BULGULAR

On makale incelemesinde kullanılan ve 5 ile 17 yaşları arasında, öğrencilerinden nicel veriler, ve ilkökul öğrencileri ile öğretmenlerinden nitel verileri dahil edildi. Makaleler, yayımlandığı ülkeler: Amerika birleşik devletleri, Yeni Zelanda, Yunanistan, İrlanda, İspanya ve Türkiye, çalışmanın günümüzdeki önemini daha net ortaya koyabilmesi açısından, 1988 ve 2017 yılları arasında yayınlanan makaleler tercih edilmiştir.

İncelenmiş olan on çalışmada da kodlamayı öğrenmenin eğitim sonucu açıklı, ancak bu araştırma, bilgisayar bilimi ve bilişsel düşünmenin ötesindeki sonuçları araştırdı. Sentez temelinde, kodlamanın öğretilmesinden elde edilen diğer eğitim sonuçlarına ilişkin temel temalar belirlenmiştir. Literatürde, araştırma çalışmalarının öğretim programının ve pedagojik bağlamlarının öğrenme çıktıları üzerinde bir etkisi olduğunu gösteren kanıtlar elde edilmiştir.

Matematiksel kavramlarla problem çözme

Bu tema, on çalışmada da açık bir şekilde belirlemiştir. Dokuz çalışmada matematiksel problemler ile problem çözme becerisi test edilmiştir. Onuncu çalışma, matematiksel problemleri nasıl çözeceklerini programlama yoluyla öğrencilere öğretilmeye çalışılmıştır.

Tablo2: Belirlenen çalışmalardaki eğitim çıktıları

Çalışma	Kodlama becerileri hariç eğitim çıktıları				Akademik beceriler (matematiksel veya bilgisayar bilimleri / programlama ile ilgili beceriler dahil olmadığı)
	Matematiksel kavramlar ile problem çözme	Sosyal beceriler işbirliği dahil	Öz-yönetim / Aktif öğrenme	Kritik düşünce	
Bernardo	✓				
Falloon	✓	✓	✓	✓	
Fessakis	✓	✓	✓	✓	
Hayes	✓			✓	✓
Kalelioğlu ve Gülbahar	✓				
Kalelioğlu	✓			✓	
değirmenci	✓				
Palumbo	✓			✓	

Sáez-López	✓		✓	✓	✓
Psycharis	✓			✓	

Bir problemin belirlenmesi ve problemin çözümü için öğrenciler, kodlama veya bilişsel düşünme becerileri, öğrencinin algoritmik bir akış tasarlayıp uygulayabildiği becerilerdir (yani bilgisayara sorunu çözmek için ne yapması gerektiği komutunu veren). Matematiksel kavramlar ve kodlama arasında bir örtüşme vardır. Fessakis, Gouli ve Mavroudi (2013) çalışmasında, beş ve altı yaşlarından itibaren programlama kullanarak çocuklardan belirli problemleri çözmeleri istendi. Örneğin, bir labirentte olabildiğince az komutla gezinerek oryantasyon, aç döndürme, sayma ve ölçme kavramlarını uygulaması yapıldı. On öğrenciden sekizi tüm etkinlikleri tamamlayabildi. Falloon (2016), Scratch'ın programlaması sırasında matematik yoluyla problem çözen genç öğrencileri de tanımlamıştır. Benzer şekilde, Kalelioğlu (2015) 'da, 4. sınıf öğrencilerine code.org kullanarak matematiksel problemlere çözüm getiren etkinlikler verilmiştir. Tüm öğrenciler dokuz etkinlikten üçünü tamamlayabildi (ancak işler daha karmaşık hale geldikçe, daha az öğrenci bunları tamamlayabildi). Bernardo ve Morris (1994) ve Palumbo ve Michael Reed (1991) tarafından yapılan ilk çalışmalar, problem çözme yeteneğini ölçmüş ve kodlamanın öğrenmenin matematiksel problem çözme becerisini, belirli programlama talimatlarını almayan kontrol gruplarından önemli ölçüde daha fazla geliştirdiğini bulmuştur. Ancak, diğer çalışmalardaki kanıtlar daha az ikna edicidir.

Miller, Kelly ve Kelly (1988) tarafından yapılan çalışmada, erkeklerin problem çözmeye kızlara oranla daha başarılı olduğunu bulunmuştur. Yarı deneysel bir çalışmada Psycharis ve Kallia (2017), matematik öğretiminin bilgisayar programlama ile birlikte anlamlı bir şekilde matematiksel problem çözme için önemli ölçüde arttırdığını, ancak iyileştirmenin istatistiksel olarak anlamlı bir şekilde bilgisayar programlama olmadan öğrenilen kontrol grubundan daha fazla olmadığını tespit edilmiştir. Hayes ve Stewart'ın (2016) çalışması, Scratch kullanan öğrencilerdeki bilişsel değişimleri, türetilmiş bir ilişkisel yanıt (DRR) eğitim programı kullananlarla karşılaştırmış ve Scratch kullananların, DRR programındakilerden daha az gelişmiş olduğu sonucuna varmıştır. Bilgisayar programlama matematiksel problem çözme için geliştirilebilirken, öğrenmenin kapsamı, ölçümün eğitim programı ile ne kadar uyumlu olduğu ile doğrudan ilişkilidir.

Problem çözme bilişsel bir beceri olduğundan, eğitimlerin sonucu derinliği ve genişliğini belirlemek için Bloom'un revize edilmiş taksonomisi kullanılmıştır. Öğrencilerin sorunu anlamak ve kavramları uygulamak zorunda oldukları açık bir şekilde ifade edildi. Ancak öğrenciler problemi analiz ettiler, örneğin olabildiğince az komutun nasıl kullanılacağını belirlerken, bu nedenle üst düzey düşünme becerilerini gösterdiler.

Problem çözme matematik problemlerini çözme yeteneği ile test edilmiştir. Genel olarak kanıtlar matematiksel kavramlarla problem çözmenin kodlamanın öğrenmenin bir sonucu olabileceğini göstermektedir. Bununla birlikte, matematiksel problem çözmenin öğrenilmesi, kodlamanın öğrenilmesiyle doğrudan öğretme yönteminden daha iyi elde edilemeyebilir. Bu nedenle öğretmenin pedagojik becerileri ve çalışmada ölçülenler önemli hususlardır. Örneğin, Kalelioğlu (2015) tarafından yapılan çalışmada kodlama yoluyla öğrenilen problemleri çözmenin yeni yolları, görüşülen öğrenciler tarafından tanımlanmış, ancak bu problem çözme önlemlerinde belirlenmemiştir.

İşbirliğini içeren sosyal beceriler

İki çalışmada bulgular doğrudan bilgisayar programlama veya kodlamayı öğrenme özelliği olarak işbirliğini içeren sosyal becerileri ifade etmektedir. Sosyal beceriler diğer insanlarla etkili iletişim yeteneği ile ilişkilidir. Bu, başkalarıyla pozitif bir iletişim kurarak olabilir. Bu mutlaka planlanmış bir öğrenme sonucu değildi, ancak sınıf bağlamında güçlendirildi. Kalelioğlu (2015) ve Fessakis ve ark. (2013), öğrencilerin kodlamalarını yardıma ihtiyacı olan başkalarıyla paylaşacaklarını belirlemiştir.

Fessakis ve ark. (2013) te öğrenciler arasında diyalog geliştirmenin, etkinlikler ve görevlerle ilgili konuların tartışılmasının olduğunu keşfetmiştir. Bu gözlemler, kodlamanın öğrenciler arasında etkileşime olanak tanıdığını ve bu nedenle sosyal becerilerin geliştirildiğini belirlemiştir. Falloon (2016) işbirliğini kolaylaştırmak için öğrencilerin bilgilerini paylaşmaları ve diğer insanların görüşlerini kabul etmelerini desteklemek için çiftler halinde organize edilmeleri gerektiğini önermektedir. İşbirliği, öğrenmenin bir özelliği gibi görünmekle birlikte, bunun bilgisayar programı öğrenmek için geliştirilen bir beceri mi yoksa incelenen sınıflar bağlamında geliştirilen bir beceri mi olduğunu tespit etmek için hiçbir ölçüm yapılmamıştır.

Özyönetim ve aktif öğrenme

Her on çalışmadan üçünden elde edilen bir tema özyönetim ve aktif öğrenme idi. Bu üç araştırmadan sadece biri aktif öğrenmeyi bir sonuç olarak ölçmüş, diğer ikisi gözlemler ve niteliksel veriler yoluyla kanıtlar bulmuştur. Bu tema, öğrencilerin etkinliklere katılabilecekleri ve kendi öğrenmeleri üzerinde kontrol sahibi olabilecekleri bir süreç olarak tanımlanmaktadır. Kalelioğlu (2015), öğrencilerin normal sınıf aktivitelerine kıyasla code.org kullanarak kendi hızlarında daha fazla aşama ve daha fazla seviye tamamlamaya çalıştıklarını söylüyor. Öğretmen öğrencilerin etkinlik aşamalarında devam etmeye istekli olduklarını ve daha önce dersle ilgilenmeyenlerin code.org'u kullanırken “şaşırtıcı” bir ilerleme gösterdiğini belirtilmiştir. Bir öğrenci “Code.org sitesinin tüm aşamalarını tamamlamak istiyorum” demiştir (Kalelioğlu, 2015, s. 208). Öğrencilere, videoların yanı sıra ilerlemelerini nasıl gözden geçirecekleri ile içerik öğretildi. Falloon (2016), çalışmasında öğrencilerin ne yapmak zorunda olduklarını tartışmak ve planlamak için çok zaman harcadıklarını gözlemledi. Gözlem ve anketler yoluyla, Sáez-López, Román-González ve Vázquez-Cano (2016), çocukların öğrenme için kendi aktif yaklaşımlarını tanıdıkları sonucuna varmıştır. Temanın önerdiği kodlamanın öğrencilerin aktif olmalarına izin vermesidir.

Bununla birlikte, çalışmalarda, kendi kendine yönetme ve aktif öğrenci olmalarını sağlamak için öğrenme faaliyetlerini başarılı bir şekilde nasıl yürüteceklerini anlama konusunda öğrencilere özel ders verme ve görev tasarımı gibi pedagojik yönlerin gerekli olduğunun tespit edilmiştir.

Eleştirel düşünme

Çalışmalarda eleştirel düşünme becerileri tespit edildi. Eleştirel düşünme ve problem çözme arasında bir örtüşme olduğu, çünkü çocukların eleştirel düşünmesi ve akıl yürütmesi gereken sorunları çözmesi gerekir bulunmuştur. Bu derlemede, problem çözme teması problemi matematiksel kavramlarla çözme eylemidir, oysa eleştirel düşünme aşağıdakilerin bir kısmını veya tamamını gerçekleştirme yeteneği olarak tanımlanır; bir görevi analiz etme, bir plan oluşturma ve uygulama, sonuçları değerlendirme, performansı iyileştirmek veya düzeltmek için gereken eylemleri tanımlama, uygulama ve istenen sonuca ulaşıp ulaşılmadığını değerlendirme. Kritik düşünme çalışmalar arasında bir özellik olarak tanımlandı. Falloon (2016), Scratch kullanan öğrencilerin kodlarını

çalıştırmadan önce çalıştırmanın olası bir sonucunu öngördüğünü belirlemiştir. Bu, geri adım atma ve sorunların nasıl çözüldüğü hakkında eleştirel düşünme yeteneği olarak değerlendirildi. Benzer şekilde, Palumbo ve Michael Reed (1991) eleştirel bir düşünme değerlendirmesi kullanmış ve kontrol grubuna kıyasla bilgilerin analizinde ve yorumlanmasında artışlar tespit etmişlerdir. Sáez-López ve ark. (2016) öğrencilerin gözlemleri ve öğrenci anketinden elde edilen sonuçlar, öğrencilerin Scratch uygulamasından kaynakların kullanımıyla resimlerdeki tarihi ve sanatsal içeriği analiz edebildiklerini belirtti. Fessakis ve ark. (2013), öğrencilerden önce görevi tamamlamış olan öğrencilerden daha iyi alternatif çözümler bulmaya teşvik edildiler, böylece performansları arttırdılar. Buna ek olarak, bir öğrenci süreçte bazı hatalar yaptı. Geliştirilmiş akıl yürütme becerileri bilgisayar programlamanın öğrenilmesinin bir sonucu olarak belirlenmiştir (Hayes ve Stewart, 2016; Psycharis ve Kallia, 2017).

Kanıtlar, eleştirel düşünmenin yönlerinin kodlama etkinlikleriyle geliştirilebileceğini ve görev tasarımının öğrencileri eleştirel düşünme becerilerini geliştirmek için kodları test etmeleri, değerlendirmeleri ve değiştirmeleri konusunda teşvik desteklemesi gerektiğini göstermektedir. Kodu test edebilme, değerlendirebilme ve değiştirebilme, Bloom'un revize edilmiş taksonomisine karşı üst düzey düşünme becerileri olarak değerlendirildi.

Akademik beceri veya bilgi (matematiksel veya bilgisayarla ilgili beceriler dahil değildir.)

Akademik beceri veya bilgi, on çalışmadan ikisinde tespit edildi ve okulla ilgili konulardaki yeterlilik seviyesinin artırılmasını da içeriyor. Bu temaya dahil edilmeyen konu alanları matematik ve kodlama / bilgisayar bilimleridir, çünkü bunlar tüm çalışmalarda açıkça görülmektedir ve ayrıca tartışılmıştır. Hayes ve Stewart (2016) 'da, 10-11 yaşları arasında, Scratch programlamasını kullanan bir yapı almış öğrenciler, okuma ve heceleme gibi akademik becerilerde test edildi. Ön test ve son test sonuçları bu akademik becerilerde bir iyileşme gösterdi, ancak kullanılan metodoloji nedeniyle yapılan iyileştirmelerin önemi açık değil. Sáez-López ve diğ. (2016), programlamayı sanat tarihi müfredatına uygulamış ve öğrencilerin programlama yazılımını kullanarak bir dizi sanat ve tarih kavramını anlayabileceklerini ve kavrayabileceklerini bulmuşlardır. Bu nedenle, kodlamanın akademik beceriyi etkileyebileceğine dair bazı imalar vardır, ancak bu, aktivitenin pedagojik tasarımındaydı ve Bloom'un revize edilmiş taksonomisine karşı analiz edildiğinde, bunun, örneğin, bilgiyi hatırlamak gibi, düşük dereceli düşünme ile ilgili olduğu görülmüyordu.

Müfredat ve pedagojik model

Müfredat ve pedagojik model, kodlamada ne öğretildiğini ve nasıl öğretileceğini içerir. Bu tema, kendi içinde bir sonuçtan ziyade eğitim çıktılarına etkileyen bir yönle ilgilidir. Müfredatın ve pedagojik tasarımın tespit edilen öğrenme çıktılarına belirlemede önemli olduğunu öne süren ilk temalar arasında ilişkiler vardı. Bilgisayar, görev alanı dışındaki alanlarda ya da gruplar halinde kodlamayı öğretmekti. Örneğin, matematik ve sanat tarihi gibi konu alanlarına kodlamanın entegre edilmesi öğrencilerin programlamada değil, aynı zamanda ders içeriğinde de önemli kazanımlar sağladığını göstermiştir (Psycharis ve Kallia, 2017; Sáez-López ve ark, 2016). Scratch programlama yazılımını kullanan bazı kodlama örnekleri sadece açılar, yön ve uzaklık gibi matematiksel kavramların öğretimini sağlamak için kullanılmadı, aynı zamanda matematiksel problem çözme ve eleştirel düşünme için fırsatlar sağladı. Bu, örneğin kod oluşturmadan veya test etmeden önce hataları tanımlamak ve düzeltmek için öngörüler yaparak sorunları analiz etmek ve çözmek için mantıklı bir yöntem içeriyordu (Falloon, 2016). Araştırma ayrıca öğrencilerin sınıfta nasıl organize edildiğini kodlama görevlerini tamamlarken iletişim ve işbirliği gibi sosyal becerilerin geliştirilmesine izin verdiğini tespit etti. Örneğin, birbirine zıt olmak yerine yan yana oturan öğrenciler,

sıkışıp kaldıklarında birbirlerine yardım etme fırsatı verdi (Falloon, 2016; Kalelioğlu, 2015; Fessakis ve ark ., 2013). Bazı kodlama görevleri, kendine yönelik öğrenme için fırsatlar sunmuştur; örneğin, code.org, öğrencilerin, görevleri nasıl tamamlayacaklarını öğretmek için izlemekte oldukları ve bu süreçte ilerlemelerini izlemek için kendi hızlarında çalışabilecekleri video dersleri vermiştir (Kalelioğlu, 2015). Ayrıca, eğitim sonuçlarını ortaya koymak için öğretmenin açıklama yapması, desteklemesi ve modellemesinin gerekli olduğu gösterilmiştir. Örneğin, akran desteğini modelleyen öğretmenler, sorular sorarak, öğrencilerin iletişim ve işbirliği becerileri geliştirebilirler (Falloon, 2016). Fessakis ve diğ. (2013) öğretmeni öğrenmeyi kolaylaştırmanın anahtarı olarak tanımlamıştır; örneğin, bir öğrenci bir sorunu çözemezse, öğretmenden yardım isteyebilecekleri, öğretmen de öğrencileri kodlama görevlerini yerine getirmeye teşvik etmede etkili olmaktadır. Falloon (2016) öğretmen açıklamasının sosyal becerilerin geliştirilmesinde kritik olduğunu belirtti ve Kalelioğlu (2015) öğretmenlerin öğrencilere yardımcı olmak için daha karmaşık etkinlikleri açıklamanın önemini vurguladı. Literatürden müfredatın ve pedagojik bağlamın öğrenme çıktılarına nasıl etkilediğini açıkça görülmektedir.

Genel model

Kodlamayı öğrenmek, genel modelin merkezindedir, çünkü programlama yoluyla öğrenmenin önemli bir sonuç olduğu kesindir. Sáez-López ve diğ. (2016), Scratch'ı sınıfta kullandıktan sonra öğrencilerin programlama kavramlarını ve hesaplama uygulamalarını anlama becerilerinde önemli gelişmeler olduğunu tespit eden nicel bir test uygulamıştır. Bununla birlikte, çalışmalar kodlama etkinliklerinin tasarımı ve sınıf ortamı ile diğer eğitim sonuçlarının etkilenebileceğine dair kanıt sunmaktadır. Bunlar, sınıf ortamında müfredat ve pedagojik tasarım ve öğretmen desteklemesi yoluyla gerçekleştirilebilir. Eğitim çıktılarının temaları, üç geniş başlık altında toplanmıştır; anlama ve düşük seviyeli düşünme becerileri, eleştirel düşünme ve problem çözme becerileri; matematiksel kavramlar ve sosyal beceriler özyönetimi içeren kişisel beceriler. Bloom'un revize edilmiş taksonomisi bağlamında analiz edilen bilişsel becerilerde alt düzey ve üst düzey düşünme becerileri kullanılmıştır. Kişisel beceriler, iletişim kurma, işbirliği ve özyönetim için uygun bir başlık olarak görülüyordu, çünkü bu beceriler doğal olarak öğrencilerin kendi deneyimleri ve uygulamaları aracılığıyla kullanıldı. Her başlık altındaki beceriler birbiriyle ilişkilidir. Örneğin, problemleri çözmek için öğrenciler eleştirel düşünme becerisini de kullanmalıdır.

Genel olarak, literatür, kodlamayı öğrenerek öğrencilerin kodlamanın ötesinde bir dizi beceri kullanmasını önermektedir. Bununla birlikte, bu beceriler planlı öğretim ve müfredata dahil edilmesi ile daha da geliştirilebilir.

SONUÇ

Bu gözden geçirme, üst düzey düşünme, düşük dereceli düşünme ve genel bir modele dahil edilen kişisel beceriler olarak sınıflandırılan eğitimsel sonuçlara kodlamanın nedenini araştıran bir çalışmanın özetini sunmaktadır. Model, bu geniş eğitim sonuçlarının her birine özel temalar altında belirli örnekler vermiştir; eleştirel düşünme, problem çözme, sosyal beceriler, özyönetim ve akademik beceriler. Buda bize, eğitim sonuçlarının nasıl ve niçin kodlandığına dair bir fikir vermektedir. Kodlamayı öğrenen öğrenciler, daha etkili eğitim elde edebilir ve kazanımlara daha kolay ulaşılabilir. Bu nedenle, öğretim programlarının bilişsel düşünme becerileri kazandıracak kazanımlar ile desteklenmelidir.

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FEN BİLGİSİ ÖĞRETMEN ADAYLARININ TÜRK EĞİTİM SİSTEMİNİN SORUNLARINA İLİŞKİN GÖRÜŞLERİ

OPINIONS OF SCIENCE TEACHER CONDIDATES ABOUT PROBLEMS OF TURKISH EDUCATIONAL SYSTEM

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Özet

Eğitim Fakültesi Fen Bilgisi Öğretmenliği Anabilim Dalı'nda öğrenim gören öğretmen adaylarının Türk Eğitim Sistemi'nin sorunlarına ilişkin görüşlerini almaya yönelik olarak gerçekleştirilen bu araştırma durum belirlemeye yönelik olarak gerçekleştirilen nitel bir araştırmadır. Amaçlı örnekleme türlerinden tipik örnekleme yöntemine göre belirlenmiş 2018 güz döneminde öğrenim gören öğretmen adaylarından yapılandırılmamış görüşme formu kullanılarak veriler toplanmıştır. Örneklem 45 öğretmen adayından oluşturulmuştur. Verilerin analizinde içerik analizi yöntemi kullanılmıştır. Yapılan analizler sonucuna göre Türk Eğitim Sistemi'nin beş temel sorunu olduğu belirlenmiştir. Bu sorunlar "Eğitim Yönetimi ve Planlama", "Eğitim Programları", "Sınavlar", "Öğretmen" ve "Fiziki Şartlar ve Donanım" dan oluşmaktadır.

Anahtar Kelime: Eğitim sorunları, Türk Eğitim Sistemi'nin Sorunları.

Abstract

This study was carried out to determine of opinions of sciences teacher condidates about Problems of Turkish Educational System. This research is held a kind of qualitative research that is a situation determination. The research' samplly has been determined according to typical sampling method which is a kind of aimed sampling methods. 45 sciences teacher candidates who studied at education faculty in 2018 were in the samplly. A unstructured interview form was used to collect data.by researcher. The collected datas was analyzed through content analysis method. According to result of analyze, there were determined 5 main problems of Turkish Educational System. Determined 5 main problems were consist of "education managment and planning", "curriculum", "examitions", "Teacher" and "physical facilities and equipment".

Keywords: Problems of Education, Problems of Turkish Educational System

GİRİŞ

Sistem, bir amaç için birleşen, bir birine dayanan bir birini etkileyen parçaların oluşturduğu bir bütün (Sarpkaya, 2008) olduğuna göre eğitim sistemi de eğitimsel amaçlar için birleşen, bir birine dayanan, bir birini etkileyen parçalardan oluşan bir bütün olarak görülmelidir. Her bir sistem, girdi, süreç, çıktı ve değerlendirme olmak üzere dört temel öğeye sahiptir. Eğitim sistemi de eğitimin girdileri, eğitim süreci, eğitimin çıktıları (ürün) ve değerlendirme (dönüt ve düzeltme) olacak şekilde bu dört temel öğeye sahiptir.

Eğitim bir ülkenin nitelikli insan gücüne sahip olmasının en önemli anahtarlarından birisi olması nedeni ile birçok ülke kendi eğitim sistemlerini oluşturarak eğitim faaliyetlerini sistemli bir şekilde yürütme cabası içerisinde. Her sistemin işleyişinde bir takım sorunlar ile karşılaşılabilceği gibi eğitim sistemleri de bir takım sorunları bünyesinde barındırabilir. Ülkelerin kendine özgü eğitim sistemleri söz konusu olduğuna göre her bir ülkenin de kendi eğitim sistemine özgü sorunları olacaktır. Dolayısı ile Türk Eğitim Sistemi'nin de kendi özgü bir takım sorunlara sahip olması doğal karşılanmalıdır. Ancak bu noktada önemli olan husus sorunları doğru bir şekilde tespit etmek ve tespit edilen sorunlara çözüm yolları üretmek olmalıdır.

Türkiye'de Türk eğitim sisteminin sorunlarını tespit etmeye ve çözüm yolları ortaya koymaya yönelik birçok araştırma gerçekleştirilmiştir (Karabacak ve Öztunc, 2018; Erişti, Polat ve Erdem, 2018; Karataş ve Çakan, 2018; Abu Bacanak ve Gökdere, 2016; Sarıbaş ve Babadağ, 2015; Kösterelioğlu ve Bayar, 2014; Coşkun, 2013; Başdemir, 2012; Yılmaz ve Altinkurt, 2011, Gül, 2008). Bu sorunların en başında 2009 Eğitimi İzleme Raporuna göre (2010) Türkiye'deki tüm eğitim düzeylerinde bir kalite sorunu gelmektedir. Kalite sorununu ortadan kaldırmak için Avrupa Birliği Eğitim Politikaları takip edilmesine rağmen halen istenilenin gerçekleştirilemediği görülmektedir (Sağlam, Özdoğru ve Çayır, 2011).

Abu, Bacanak ve Göktepe'ye göre (2016) Türk Eğitim Sistemi'nin sorunları (1) genel sorunlar ve (2) öğretim kademelerine göre yaşanan sorunlar olmak üzere iki başlıktan oluşmaktadır. Gedikoğlu'na göre (2005), Türkiye'de, okulöncesi, ilköğretim ve yükseköğretim kademelerinin her birinde sorunlar bulunmaktadır. Yılmaz ve Akkurt'a (2011) göre bu kademelerden her hangi birinde görülen sorun, bütün kademelerde bulunmaktadır Yükseköğretime ilişkin sorunları Coşkun (2013), Başdemir (2012), Gül (2008), Karabacak ve Öztunc (2018), Erişti, Polat ve Erdem (2018) ortaya koymuşlardır. Eğitim programları kaynaklı sorunlar (Karabacak ve Öztunc, 2018; Özyılmaz, 2013; Yeşil ve Şahan, 2015), eğitim yönetiminden ve ideolojik yaklaşımlardan kaynaklanan sorunlar (Karabacak ve Öztunc, 2018; Özyılmaz;2013; Başdemir, 2012),insan gücü planlamasından kaynaklanan

sorunlar (Yılmaz ve Akkurt, 2011), Eğitim paydaşları arasında eşgüdümün sağlanamamasına ilişkin sorunlar (Nartgün, 2008), rehberlik hizmetleri ile ilgili sorunlar (Yılmaz ve Akkurt, 2011; Özyılmaz, 2013) bu sorunların sadece bir kısmını yansıtmaktadır. Bu nedenle de araştırma Türk eğitim sisteminin sorunlarını ortaya koymak amacı ile gerçekleştirilmiştir. Bu amacı gerçekleştirmek için de aşağıdaki problem cümlesi oluşturulmuştur.

Problem Cümlesi

Fen Bilgisi öğretmenliği adaylarının Türk eğitim sisteminin sorunlarına ilişkin görüşleri nelerdir?

Araştırmanın Önemi

Öğretmen adayları örgün eğitimin yükseköğretim öncesi bölümünü yeni tamamlamış kişilerdir. Bu kişiler öğrenim gördükleri yükseköğretim bölümünü bitirdiklerinde eğitim sistemi içerisinde görev alacaklardır. Ayrıca halen yükseköğretimde öğrenimlerine devam etmelerinden dolayı da güncel halde olan sorunlar ile de karşı karşıya kalmaktadırlar. Bu bağlamda öğretmen adaylarının ortaöğretim kurumlarından çok kısa sürede önce ayrılmış olmaları, yükseköğretime halen devam ediyor olmaları ve kısa bir süre sonra tekrar eğitim sistemi içerisinde görev alacak olmalarından dolayı Türk eğitim sistemine ilişkin görüşlerinin alınması açısından araştırma önemli görülmektedir.

Sınırlılıklar

Bu araştırma eğitim fakültelerinin Fen Bilgisi öğretmenliği anabilim dalında 2018 güz döneminde öğrenim gören öğretmen adaylarının görüşleri ile sınırlıdır.

YÖNTEM

Araştırmanın Modeli, Evren, Örneklem,

Bu araştırma nitel araştırma yöntemleri arasında yer alan bir durum araştırması modeline göre gerçekleştirilmiştir. Durum araştırmaları var olanı veya oluşmakta olanı inceleme fırsatı veren araştırmalardır (Glense, 2011; Christenson, Johnson ve Turner, 2015). Örneklem Eğitim Fakültesi Fen Bilgisi Öğretmenliği Anabilim Dalı'nda öğrenim gören 45 Öğretmen adayından oluşmaktadır. Örneklem amaçlı örnekleme yöntemlerinden birisi olan tipik örnekleme yöntemine göre belirlenmiştir (Büyüköztürk, Çakmak, Akgün, Karadeniz ve Demirel, 2013).

Veri Toplama Araçları, Verilerin Toplanması ve Analizi

Verilerin toplanmasında yapılandırılmamış görüşme formu kullanılmıştır. Öğretmen adaylarına "sizce Türk eğitim sisteminin sorunları nelerdir?" sorusu yöneltilmiştir. Öğretmen adaylarının vermiş oldukları cevaplar görüşme formuna kayıt edilmiştir. Verilerin analizinde nitel veri analiz yöntemlerinden içerik analizi yöntemi kullanılmıştır.

Bulgular

Analiz sonuçlarına göre elde edilen bulgular aşağıdaki verilmiştir.

Tablo 1. Eğitim Yönetimi ve Planlaması

Tema ve Alt Temalar	f	%
Eğitim Yönetimi ve Planlaması	45	100
Oturmuş bir sistemin oluşturulmamış olması	18	40
Değişen siyasetçinin/yetkilinin yeni sistem oluşturma denemeleri	6	13,33
Sistemsizliğin, öğretmenlere, velilere ve öğrencilere de işlemiş olması	1	2,22
Uzun süreli (makro) eğitim planlarının doğru bir şekilde oluşturulmaması	4	8,88
Planlama olmaması nedeni ile mezunların işsiz kalması	4	8,88
Üniversitede bölümlere alınan öğrenci sayısının fazla olması (plansızca)	2	4,44
Üst düzey yöneticilerin istediğini yapamaması	1	2,22
Okulların bağımsız olmaması	1	2,22
Zorunlu hizmetin olması	1	2,22
Eşit şartlarda Eğitim alınmaması	1	2,22
Sorun odaklı çalışmaların gerçekleştirilmemesi	1	2,22
Ülke genelinde okul sayısının yetersiz olması	1	2,22
Alan seçimi için çok fazla gecikmenin olması	1	2,22
Liseler arasındaki ayrımın (Düz, Fen Anadolu) rekabet yaratması	1	2,22
Öğrenci sayısına göre öğretmen azlığı	1	2,22
Hizmet içi eğitim faaliyetlerinin olması gerektiği şekli ile gerçekleştirilmemesi	1	2,22
Görüş belirtmeyen	0	0
Toplam	45	100

Tablo 1 incelendiğinde görülmektedir ki öğretmen adaylarının tamamı Türk eğitim sisteminin en temel sorunlarından ilkinin "Eğitim Yönetimi ve Planlaması" temasının oluşturduğunu ifade etmişlerdir. Bu öğretmen

adaylarından %40'ına göre oturmuş sistemin oluşturulamaması bu temadaki en önemli sorundur. Bu tema içerisinde öğretmen adaylarının %13.33'ü değişen siyasetçi ve yetkililerin yeni bir sistem oluşturmaya çalışmalarının da sorun teşkil ettiğini ifade etmişlerdir. Özellikle bir öğretmen adayı (%2,22) “sistemsizliğin öğretmenlere, velilere ve öğrencilere de işlemiş olmasını” önemli bir sorun olarak görmektedir. Bunların yanı sıra öğretmen adaylarının %8,88'ine göre “Uzun süreli (makro) eğitim planlarının doğru bir şekilde oluşturulmaması”, %8,88'ine göre “Planlama olmaması nedeni ile mezunlar işsiz kalması”, %4,44'üne göre “Üniversitede bölümlere alınan öğrenci sayısının fazla olması (plansızca)” “eğitim yönetimi ve planlaması” teması içerisinde yer alan sorunlardandır. Ayrıca öğretmen adaylarının %2,22'si, “üst düzey yöneticilerin istediğini yapamaması” , %2,22'si, “okulların bağımsız olmaması” %2,22'si “zorunlu hizmetin olması”, %2,22'si “eşit şartlarda eğitim alınmaması”, %2,22'si “sorun odaklı çalışmaların gerçekleştirilmemesi”, %2,22'si “ülke genelinde okul sayısının yetersiz olması”, %2,22'si “alan seçimi için çok fazla gecikmenin olması”, %2,22'si “liseler arasındaki ayrımın (Düz, Fen Anadolu) rekabet yaratması”, %2,22'si “öğrenci sayısına göre öğretmen azlığı”, %2,22'si “hizmet içi eğitim faaliyetlerinin olması gerektiği şekli ile gerçekleştirilmemesi” konularını bu tema altında yer alan sorunlar arasında görmektedir.

Tablo 2. Eğitim Programları

Tema ve Alt Temalar	f	%
Eğitim Programları	40	88,89
Ezberciliğin ön planda olması	8	17,79
Öğretim programlarının yoğun bir içeriğe sahip olması	6	13,33
Programların yetersizliği	4	8,88
Eğitim öğretim etkinliklerinin tek düze olması/çeşitlilik gerilmemesi	2	4,44
Derslerde uygulamalara az yer verilmesi	3	6,66
Öğrencilere ve onların görüş, düşüncelerine yer verilmemesi	2	4,44
Öğretimin teoride kalması	1	2,22
Öğrencilerin sürekli ödevler ile bunaltılması	1	2,22
Gereksiz verilen ödevler	1	2,22
Öğrenciye uygun programlarının oluşturulmaması	1	2,22
Gerekli olan derslere yer verilmemesi	1	2,22
Ders sayısının fazla olması	1	2,22
Yabancı dil öğretiminin gerçekleştirilememesi	1	2,22
Kaliteli bir eğitim verilmemesi	1	2,22
Resim, müzik ve Beden Eğitimi gibi derslerin doğru bir şekilde değerlendirilmemesi	1	2,22
Öğrencilere sadece teorik bilgi kazandırılmaya çalışılması	1	2,22
Öğrencilerin duyuşsal gelişimlerine fazla ağırlık verilmemesi	1	2,22
Öğretim programlarının hayatta kullanılabilir bilgileri içermemesi	1	2,22
Bireylere her türlü bilginin verilmeye çalışılması	1	2,22
Öğrencilerden kapasitesinin üzerinde performans beklenmesi	1	2,22
Sosyal aktivitelere zaman ayrılmaması	1	2,22
Görüş belirtmeyen	5	11,11
Toplam	45	100

Öğretmen adaylarına göre Türk eğitim sisteminin ikinci önemli sorunu “eğitim programları” temasından oluşmaktadır (%88,89). Bu tema altında öğretmen adaylarının %17,79'u programların ezberci olmasını, %13,33'ü programların yoğun bir içeriğe sahip olmasını, %8,88'i programların yetersiz olmasını, %6,66'sı derslerde uygulamaya az yer verilmesini, %4,44'ü eğitim öğretim etkinliklerinin tek düze olmasını/çeşitlilik getirilmemesini, %4,44'ü öğrencilerin görüş ve düşüncelerinin ele alınmamasını sorun olarak görmektedirler. Ayrıca öğretmen adaylarının %2,22'sine göre “öğretimin teoride kalması”, %2,22'sine göre “öğrencilerin sürekli ödevler ile bunaltılması”, %2,22'sine göre “gereksiz verilen ödevler”, %2,22'sine göre “öğrenciye uygun programlarının oluşturulmaması”, %2,22'sine göre “gerekli olan derslere yer verilmemesi”, %2,22'sine göre “ders sayısının fazla olması”, %2,22'sine göre “yabancı dil öğretiminin gerçekleştirilememesi”, %2,22'sine göre “kaliteli bir eğitim verilmemesi”, %2,22'sine göre “Resim, müzik ve Beden Eğitimi gibi derslerin doğru bir şekilde değerlendirilmemesi”, %2,22'sine göre “öğrencilerin duyuşsal gelişimlerine fazla ağırlık verilmemesi”, %2,22'sine göre “öğrencilere sadece teorik bilgi kazandırılmaya çalışılması”, %2,22'sine göre “öğretim programlarının hayatta kullanılabilir bilgileri içermemesi”, %2,22'sine göre “bireylere her türlü bilginin verilmeye çalışılması”, %2,22'sine göre “sosyal aktivitelere zaman ayrılmaması” gibi sorunlar bulunmaktadır.

Tablo 3. Sınavlar

Tema ve Alt Temalar	f	%
Sınavlar	24	53,33
Sınav sisteminin doğru bir şekilde oluşturulmaması	17	37,77
Sürekli sınav olması	2	4,44
Yapılan sınavların objektif olmaması	1	2,22
İnsanların her yaşta sınava tabi tutulması	1	2,22
Öğrencilerin başarısının sadece bir sınava göre belirlenmesi	1	2,22
Sınavlara girişlerde katı kurallar (anahtar dahi alınmaması) bulunması	1	2,22
Üniversiteye girişlerin sınavla olması	1	2,22
Görüş belirtmeyen	21	46,67
Toplam	45	100

Türk eğitim sisteminin üçüncü grup sorunlarını ise “sınavlar” teması altında toplanmıştır. Öğretmen adaylarının %53,33’üne göre sınavlar Türk eğitim sisteminin sorunları arasında yer almaktadır. Öğretmen adaylarından %37,77’sine göre sınav sisteminin doğru bir şekilde oluşturulmamış olması önemli bir sorundur. Öğretmen adaylarının %4,44’üne göre sürekli bir şekilde sınav olması, %2,22’sine göre “yapılan sınavların objektif olmaması”, %2,22’sine göre “insanların her yaşta sınava tabi tutulması”, %2,22’sine göre “öğrencilerin başarısının sadece bir sınava göre belirlenmesi” %2,22’sine göre “sınavlara girişlerde katı kurallar (anahtar dahi alınmaması) bulunması” %2,22’sine göre “üniversiteye girişlerin sınavla olması” bu tema altındaki diğer sorunları ifade etmektedir.

Tablo 4. Öğretmen

Tema ve Alt Temalar	f	%
Öğretmen	23	51,11
Öğretmen atamaları	15	33,34
Kalifiye öğretmenlerin yetiştirilmemesi	3	6,66
Görevlendirilen öğretmen sayısının yetersizliği	2	4,44
Öğretmenlerin öğrencilerin öz güvenlerini olumsuz etkileyecek şekilde davranması	1	2,22
Öğretmenlerin kullandığı yöntemlerin çağa uygun olmaması	1	2,22
Öğrencinin öğretmenler tarafından yeterince tanınmaması	1	2,22
Görüş belirtmeyen	22	48,89
Toplam	45	100

Dördüncü tema ise “öğretmen” kaynaklı sorunlardan oluşmaktadır. Toplam 45 öğretmen adayından %51,11’i öğretmenler konusunda sorunlar bulunduğunu ifade etmiştir. Bu temadaki en önemli sorun ise öğretmen atamaları konusudur (%33,34). Öğretmen adaylarının %6,66’sına göre kalifiye öğretmen yetiştirilememesi, %4,44’üne göre görevlendirilen öğretmen sayısının yetersiz olması, %2,22’sine göre öğretmenlerin öğrencilerinin öz güvenlerinin olumsuz etkileyecek şekilde davranması, %2,22’sine göre öğretmenlerin kullandığı yöntemlerin çağa uygun olmaması, %2,22’sine göre öğrencilerin öğretmenler tarafından yeterli düzeyde tanınmaması bu tema altındaki diğer sorunları oluşturmaktadır.

Tablo 5. Fiziki Şartlar ve Donanım

Tema ve Alt Temalar	F	%
Fiziki Şartlar ve Donanım	9	20
Okullardaki yetersizlikler	5	11,12
Mevcut okulların ihtiyacı karşılayamaması	1	2,22
Teknolojik yetersizlikler	1	2,22
Okul çevresinin çok kalabalık olması	1	2,22
Öğrenme ortamlarının (fiziki olarak Lab. Atölye vb.)eksikliği	1	2,22
Görüş belirtmeyen	36	80
Toplam	45	100

Son ve beşinci tema ise “Fiziki Şartlar ve Donanım” temasından oluşmaktadır. öğretmen adaylarının %20’sine göre bu alanda sorunlar söz konusudur. Öğretmen adaylarının %11,12’sine göre okullarda yetersizlikler bulunmaktadır. Bunun yanı sıra mevcut okulların ihtiyaçları karşılayacak düzeyde olmaması (%2,22), teknolojik yetersizlikler (%2,22), okulların çevresinin çok kalabalık olması (%2,22) ve öğrenme ortamlarındaki (fiziki olarak okullarda laboratuvarların atölye vb. olmaması) eksiklikler gibi sorunlar da bulunmaktadır.

SONUÇ VE TARTIŞMA

Bu araştırma, eğitim fakültesi Fen Bilgisi Öğretmenliği Anabilim Dalı'nda öğrenim gören öğretmen adaylarının Türk eğitim sisteminin sorunlarına ilişkin görüşlerini almak için gerçekleştirilmiştir. Veriler, 2018 güz döneminde öğrenim gören 45 öğretmen adayından yapılandırılmamış görüşme formu kullanılarak toplanmıştır. Verilerin analizinde içerik analizi yöntemi kullanılmıştır. Yapılan analizler sonucunda elde edilen bulgulara göre aşağıdaki sonuçlara ulaşılmıştır:

Türk eğitim sisteminin sorunlarından birinci ve en önemlisi, “Eğitim Yönetimi ve Planlaması” sorunudur. Araştırmaya dâhil olan 45 öğretmen adayının tamamı bu soruna ilişkin görüşler ortaya koymuşlardır. Bu ana başlık altında yer alan en önemli sorun ise halen Türk eğitim sisteminin oturmuş bir halde olmamasıdır. Özellikle değişen siyasetçi ve yöneticilerin her defasında yeni bir sistem oluşturmaya çalışmaları bunun altında yatan nedenler arasında gösterilmektedir. Bu alandaki önemli bir sorun da uzun süreli (makro) eğitim planlarının doğru bir şekilde oluşturulamamasıdır. Yükseköğretime plansızca öğrenci alınması da bu başlık altında dile getirilen başka bir sorundur. Diğer taraftan liseler arasındaki ayrımlar, hizmet içi eğitim faaliyetlerinin amacını tam olarak yerine getirememesi ve mesleki yönlendirmenin geç gerçekleştirilmesi de bu alandaki önemli sorunlar arasındadır. Özellikle mesleki rehberliğin geç başladığı görüşünü ve insan kaynakları konusunda planlamanın Türk eğitim sisteminin sorunları arasında yer aldığını Yılmaz ve Akkurt'da (2011) desteklemektedir. Karabacak ve Öztunç'a göre (2018) rehberlik ve planlama sorunu yükseköğretimde de kendini bariz bir şekilde göstermektedir. Özyılmaz'da (2013) Türk eğitim sisteminde eğitim yönetimi ve ideolojik yaklaşım sorunu bulunduğunu dile getirmektedir. Özellikle Türk eğitim sisteminin tam olarak oturmamış olmasının nedeni Başdemir'in (2012) ifade ettiği gibi sürekli ve ani yapılan değişikliklere bağlanabilir.

Türk eğitim sisteminin sorunlarına ilişkin ikinci başlığı “eğitim programları” oluşmaktadır. Eğitim programlarında 2005 yılında ve 2017 yılında önemli değişiklikler gerçekleştirilmiştir. Ancak halen programların yetersiz ve yoğun olduğu görüşü hâkimdir. Ayrıca 2005 yılında uygulamaya geçen programlar yapısal ve çoklu zekâyı ön plana çıkarmasına rağmen istenilen düzeyde verimli olmadığı görülmektedir. Çünkü eğitim öğretim etkinlikleri halen tek düze olarak yürütülmekte, çeşitlilik getirilememektedir. Teoride kalmakta, hayatta kullanılacak bilgiler bakımından yetersiz kalmakta, içinde her türlü bilgiyi barındırmakta ve anlamsız ödevler verilmektedir. Bu nedenle de kaliteli bir eğitim verilemediği ifade edilebilir. Yeşil ve Şahan'da (2015) Türk eğitim sisteminin temel sorunlarından birisi olarak eğitim programlarını işaret etmektedir. Karabacak ve Öztunç'da (2018) yapmış oldukları araştırmalarında yükseköğretimde de eğitim programları konusunda problemlerin bulunduğunu belirlemişlerdir. Bu nedenlerden dolayı da Özyılmaz'ın (2013) ortaya koyduğu gibi eğitimde program geliştirme sorununun halen devam ettiği söylenebilir.

Türk eğitim sisteminin sorunlarına ilişkin üçüncü başlık “sınavlar”dır. Öğretmen adaylarının yarısı sınavları Türk eğitim sisteminin bir sorunu olarak görmektedir. Öğretmen adaylarının üçte biri sınav sisteminin doğru bir şekilde oluşturulamadığı görüşündedir. Sürekli bir şekilde her yaşta sınavlar ile karşılaşmalarını eğitim sisteminin bir sorunu olarak görmektedirler. Öğrencilerin sürekli sınavlar ile karşılaşması, öğrencilerin, öğretmenlerin ve aileleri de olumsuz etkilemektedir (Karabacak, 2001). Karabacak (2001) yapmış olduğu çalışmasında öğrencilerin sürekli olarak sınavlara girmesinin psikolojik ve sosyal yönden olumsuz etkilerinin olduğunu ortaya koymaktadır. Ailelerin dahi sosyal yaşantısı etkilenmektedir. Eğitim sisteminde sınavlar elbette olacaktır. Ancak sınav sistemi doğru bir şekilde oluşturulursa ve sürekli sınavlar ile öğrenciler karşı karşıya gelmez ise daha sağlıklı bir nesil yetiştirme şansı yakalanabilir.

Türk eğitim sisteminin sorunlarına ilişkin dördüncü başlık “öğretmen” kaynaklı sorunlardan oluşmaktadır. Öğretmen atamaları bu başlık altında yer alan en önemli sorundur. Bunun yanı sıra öğretmenlerin iyi bir şekilde yetiştirilememesi ve sayısal olarak yeterli öğretmenin görevlendirilememesi diğer sorunlardır. Öğretmen atamaları konusu aslında eğitim yönetimi ve planlaması kapsamına giriyor gibi görünse de öğretmen adayları genel olarak bu başlık altında dile getirmişlerdir. Bu sorunun çözümünde Nartgün'ün ifade ettiği gibi YÖK ve Milli Eğitim Bakanlığı'nın eş güdüm içinde çalışması etkili olacaktır. Diğer taraftan eğitim fakültelerinde uygulanan programlara ilişkin sorunların olması (Karabacak ve Öztunç, 2018) da kalifiye öğretmenlerin yetiştirilmemesinin altında yatan nedenlerden birisi olabilir.

Türk eğitim sisteminin sorunlarına ilişkin beşinci ve son başlık “Fiziki şartlar ve Donanım”dır. Okullarda yetersizlikler söz konusudur. Öğrenme ihtiyaçları ve Öğrenci sayıları dikkate alındığında, mevcut okullar hem donanım olarak hem de sayısal olarak ihtiyacı karşılayamamaktadır. Özellikle bazı okulların kütüphane, laboratuvar, atölye, spor salonu gibi mekânlara ve bu mekânlarda bulunması gereken donanımlara sahip olmaması sıkıntı yaratan durumlardandır.

Sonuç olarak bu çalışmada Türk eğitim sisteminin sorunlarının (1)Eğitim Yönetimi ve Planlaması, (2)Eğitim

Programları, (3)Sınavlar, (4)öğretmenler ve (5)Fiziki Şartlar ve Donanım olmak üzere beş ana başlık altında toplandığı belirlenmiştir.

Öneriler

1. Türk eğitim sistemi oturmuş bir hale getirilmelidir. Siyasilerin ve yöneticilerin değişmesi eğitim sistemini etkilememelidir. Eğer sistem bir şeylerden etkilenecek ise bu siyasi ve yönetici değişikliklerinden değil, bilgi ve teknolojiadaki gelişmelerden kaynaklanmalıdır.
2. Türkiye’de makro düzeyde eğitim planlaması ülke gerçekleri dikkate alınarak doğru bir şekilde gerçekleştirilmelidir.
3. Eğitim programları gerçekçi ve ihtiyacı karşılayacak şekilde tasarlanmalıdır. Eğitim programları dinamik bir yapıya sahiptir. Bu nedenle belirli aralıklarla eğitim programlarını yeniden oluşturmak yerine var olan eğitim programları değişen şartlara ve ihtiyaca göre geliştirilmelidir.
4. Eğitim sistemi içerisinde yer alan öğrenciler sürekli olarak sınavlar ile karşı kaşıya kalmamalıdır. Her okul kademesinden sonra gerçekleştirilen sınavlar yerine sadece üniversiteye öğrenci yerleştirmeye yönelik sınavlar gerçekleştirilebilir. Üniversiteye yerleştirmeye yönelik değerlendirme şekli de sadece bir veya iki oturumda gerçekleşen sınavlara göre değil, başta önceki eğitim kademesindeki sürece yönelik değerlendirmeler olmak üzere daha farklı (proje çalışmaları, araştırmalar, alınan ödüller, vb) çalışmalar dikkate alınarak gerçekleştirilebilir.
5. Milli eğitim bakanlığı ve Yüksek Öğretim Kurumu eş güdüm içerisinde çalışarak, ihtiyacı karşılayacak öğretmenlerin yetiştirilmesine ilişkin düzenlemeler gerçekleştirebilir.
6. Gerek sayısal olarak gerekse donanım olarak yeterli okulların Türk eğitim sisteminde yerini alması için çalışmalara ağırlık verilebilir.

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INVESTIGATION OF COMMUNICATION SKILLS OF GIFTED STUDENTS IN TERMS OF VARIOUS VARIABLES

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Abstract

The aim of this study is to examine the communication skills of gifted students in terms of various variables in order to form a program model to support their interpersonal communication skills. After determining the interpersonal communication skills of the students in Science and Art Center (BİLSEM), it is aimed to improve the communication skills of these gifted students by applying programs that support the communication skills. The quantitative part of the study was applied to a total of 338 gifted students aged between 13 and 18 years through a scale adaptation to determine communication skills. The 23-item 6-dimensional model was found to be consistent in confirmatory factor analysis. As a result of the study, the scale was found to be reliable and valid. According to the findings, a significant difference was found in communication skills of gifted students according to gender and school type. There was no significant difference according to grade level.

Keywords: gifted student, scale, communication skills

Introduction

Gifted students, who experience communication deficiencies and problems, prefer to use three ways in the context of unacceptable environments. The first is that they isolate themselves from the environment. When they are perceived as unwarranted by others, they prefer to display extreme behaviors as the second way and in the third they try to show the same behaviors as their peers. This leads to the lack of potential for them (Clark, 1997). Although the communication skills of gifted individuals are generally high, they may have communication problems due to reasons such as avoiding mistakes, high self-confidence, self-centeredness, seeing oneself different and superior, not being understood by their peers. Because of their advanced mental development, they tend to communicate with individuals who are older than them in general (MEB, 2017).

Gifted individuals in adolescence prefer to stay away from their peers (Buescher, 1985). It is suggested that such problems in peer relations stem from the lack of social skills (Kennedy, 1988). They prefer not to stay away from their normal peers but also from each other during adolescence (Silverman, 1988).

In a study, a number of disorders affecting interpersonal communication were identified due to attention deficit based on hyperactivity, developing opposing attitudes and behavioral problems (Webb, 2000). When such problems are not taken under control, failure may occur and children may have more severe consequences regarding the sensitivity caused by the special ability and inconsistencies are observed between the age of intelligence and chronological age of these children (Silverman, 1993). Gifted children do not have the same development as their peers and also have problems communicatively because their emotional and social developments are different (Coleman & Cross, 1998).

It has been understood that as the age of the students receiving special education grows, their communication problems increase along with their adolescent development. When the literature is examined and the researches are taken into consideration, the problem of this research is related to the determination of the level of interpersonal communication skills among the gifted students in terms of various variables.

The aim of this study is to examine the communication skills of gifted students in terms of various variables by adapting the Communication Scale developed in 2002 by Susan Barkman and Krisanna Machtmes into Turkish.

Findings

Study Group

The adaptation of the scale was performed on 338 gifted students aged between 13 and 18 years. Within the scope of the research, 161 (47.6%) of the sample were female and 177 (52.4%) were male. The students in the sample; 163 (48.2%) of them were in private schools; 175 (51.8%) were in public schools. 294 people were at the level of 7-9 (87%); 44 people are in the class level of 10-12 (13%).

Communication Scale

The Communication Scale (Barkman & Macthmes, 2002), which consists of 23 items and 6 sub-dimensions, is graded over a 5-point likert. The sub-dimensions of the scale were:

- Awareness of one's own styles of communication
- Understanding and valuing different styles of communication
- Practicing empathy
- Adjusting one's own styles of communication to match others' styles. (Communicative adaptability)
- Communication of essential information
- Interaction management

The scale consists of 23 items and the score values vary between 23 and 115. The higher the scores are, the higher the communication skills are determined. When the literature on communication skills was examined, it was found that reliability coefficients were acceptable in the researches using the communication scale and that it was seen as the most appropriate measurement tool according to the age level to measure the communication skills of young people (Duerden et al., 2010). Validity varies according to the degree to which the scale wants to measure. In the original scale, it was found that the internal consistency of both factors was high. As a result of the study applied to 338 gifted students, the reliability of the communication scale was found to be .90.

Translation of Communication Scale into Turkish

During the adaptation phase, Krisanna Machtmes was contacted in digital form. Necessary permits have been obtained for adapting the communication scale to measure the communication skills of gifted students between the ages of 13-18 in Turkish. The original language of the scale was translated into Turkish by independent translators so that it can be used in the participants whose native language is Turkish. Four different translations were applied by the translators. They work as two experts in the field of special education in the Science and Art Center and two teaching staff in the Communication Sciences.

In the next stage, the Turkish version of the scale was translated into English by five English teachers. The items of the scale were compared by translating from Turkish to English and from English to Turkish. In the next stage, the scale was piloted to 102 gifted students studying at Science and Art Center in order to test the comprehensibility of the items. The questions were reorganized in a comprehensible way when the students could not understand. In the last stage, the reliability and validity study of the scale was made.

Item Analysis and Reliability

As a result of the analysis conducted to determine item discrimination, the corrected correlation coefficients were found to vary between .37 and .60. Table 1 shows the result of the analysis.

Table 1. Correlation Scores of Communication Scale Items

Number	<i>r_{ix}</i>	Number	<i>r_{ix}</i>	Number	<i>r_{ix}</i>
1	.49	9	.40	17	.53
2	.52	10	.49	18	.53
3	.58	11	.51	19	.37
4	.54	12	.60	20	.50
5	.59	13	.58	21	.53
6	.60	14	.59	22	.45
7	.42	15	.54	23	.54
8	.44	16	.41		

Cronbach's (α) coefficient for the whole scale was found to be .90.

Table 2. Scale Statistics

Mean	Variance	Std. Deviation	N of Items
.90,2071	.199,993	.14,14187	23

According to Table 2, the mean communication scale of 23 items was .90, variance was .199 and standard deviation was .14.

Table 3. T test for gender

	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	.722	.396	2,260	336	.024	3,45931	1,53086	.44803	6,47059
Equal variances not assumed			2,268	335,851	.024	3,45931	1,52550	.45856	6,46006

Since α value ($\alpha: 0,024 < \alpha: 0,05$) calculated according to Table 3 is less than 0.05, there is a significant difference in the communication skills of gifted students according to gender.

Table 4. Communication skills for gender

gender	N	Mean	Std. Deviation	Std. Error Mean
female	161	92,0186	13,50392	1,06426
male	177	88,5593	14,54062	1,09294

Table 4 shows that communication skills of female students are higher than male students.

Table 5. T test for grade level

	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	1,269	.261	.950	336	.343	2,17161	2,28627	-2,32560	6,66883
Equal variances not assumed			.944	56,422	.349	2,17161	2,29973	-2,43454	6,77776

As the α value calculated according to Table 5 ($\alpha: 0.34 > \alpha: 0.05$) is higher than 0.05, there is no significant difference in communication skills according to grade level of gifted students.

Table 6. T test for school type

	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	,429	,513	-2,535	336	,012	-3,87183	1,52715	-6,87582	-,86784
Equal variances not assumed			-2,524	323,591	,012	-3,87183	1,53398	-6,88966	-,85400

Since α value ($\alpha: 0,012 < \alpha: 0,05$) calculated according to Table 6 is less than 0.05, there is a significant difference in the communication skills of gifted students according to the type of school.

Table 7. Communication skills for type of school

	school	N	Mean	Std. Deviation	Std. Error Mean
	private	163	88,2025	14,91505	1,16824
	public	175	92,0743	13,15121	,99414

When Table 7 is examined, it is seen that the communication skills of gifted students at public school are more than the gifted students at private school.

Conclusion and Discussion

The aim of this study was to adapt the Communication Scale developed in 2002 to Turkish and to get the opinions of gifted students to express their communication skills within the scope of quantitative questions prepared on the basis of scale items.

When the literature is examined, it is understood that gifted students would enter into a more successful education process by going into a continuous research and overcoming communication-based problems during their education process (Lang, et al., 1999). Gifted students experience an ongoing inquiry process. An inquisitive approach reflects the spirit of inquiry and inquiry of accepted truths in education (Eskicumalı, 2001).

According to a research, it has been found that there is a relationship between the scores of lifelong learning tendencies of the gifted students and the problem solving styles scale. Accordingly, it is thought that the fact that they receive more education about lifelong learning tendencies may contribute to problem solving styles in general (Dervişoğulları, 2019). Therefore, communication based trainings are one of them. It is obvious that these students can be successful in their professional lives in the future with the right education.

It has been stated that gifted students can be successful in their chosen professional fields with the right guidance (Kara, 2019). When the researches are examined, it is stated that the success of these students in different fields can be realized by gaining the right communication skills. Thanks to their communication skills, they exchange information, make friends, receive emotional support and get to know each other better. However, with the increasing dependence on mobile phones, traditional face-to-face communication has become quite difficult and bizarre for new generation students (Liu, 2019: 28).

It is easier for gifted students to overcome this situation. In fact, these students can use the new media efficiently in line with their needs (İşman & Kara, 2017). However, the effects of the learning environment and teacher roles on the learning process cannot be denied (Çelik, 2017). Therefore, it is considered necessary to prepare a supportive training program for the communication skills of gifted students.

In this study, communication scale adaptation developed by Barkman and Machtmes (2002) was applied to gifted students. Barkman and Machtmes tried to measure the communication skills of adolescents between the ages of 12-18. Reliability coefficient was found as .8. However, the standards range from .5 to .9 depending on the intended use and content for the scale. The internal consistency number was .79. As a result of the adaptation of the communication scale in our study, the reliability coefficient was found to be .90, which indicates that the measurement tool is suitable for measuring the communication skills of gifted students.

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Communication Scale

1.	Herhangi bir kişi ile konuşurken göz teması kurmaya çalışırım.
2.	Söylemeye çalıştığım şeyi beden dilim ile ifade ederim.
3.	Söylemek istediğim şeyi pekiştirmek için beden dilimi kullanırım.
4.	Söylemeye çalıştıkları şeyi pekiştirmek için insanların ellerini kullandıklarını fark ederim.
5.	Ne söylemeye çalıştığımı göstermek için ellerimi kullanırım.
6.	Ne söylemeye çalıştıklarını anlamama yardımcı olması için insanların vücut dilini izlemeye çalışırım.
7.	Kendi söyleyeceğimi düşünmeye başlamadan önce karşımdakinin sözünü bitirmesini beklerim.
8.	Diğer insanların sözlerini kesmeden onları dinlerim.
9.	Bir insanın beni sadece dinlediği fakat söylediklerimi anlamak için kulak vermediği zamanı bilirim.
10.	Cevap vermeden önce kişinin ne söylediğini anladığımdan emin olurum.
11.	Başkalarının ne söylediğini anladığımdan emin olmak için onların söylediklerini yeniden ifade ederim.
12.	Arkadaşlarımla neler yaşadıklarını anladığımı bilmeleri için kendi tecrübelerimi kullanırım.
13.	Birini dinlerken ne hissettiğini anlamaya çalışırım.
14.	Başkalarının bakış açısını anlamaya çalışırım.
15.	İki kişi aynı şeyi farklı şekillerde söylemeye çalıştıkları zaman bunu fark ederim.
16.	Konuşma tarzımı iletişim kurduğum kişiye göre ayarlarım (arkadaş, ebeveyn, öğretmen vb.)
17.	Beni anlamasına yardımcı olmak için karşımdakinin benimle nasıl konuştuğuna bağlı olarak konuşma biçimimi değiştiririm.
18.	Söylemeye çalıştığım şeyi pekiştirmek için ses tonumu kullanırım.
19.	Derdimi anlatmak benim için kolaydır.
20.	İnsanlar hiç durmadan konuştuklarında sohbeti yeniden yönlendirmenin yollarını bulurum.
21.	Sadece ses tonuna tepki vermek yerine karşımdakinin söylediklerine cevap vermeye çalışırım.
22.	Konuşmadan önce kafamda birtakım düşünceler kurarım.
23.	Birisi sınırlendiğinde sakinleşmesine yardımcı olmak için ses tonumu değiştiririm.

MATEMATİK ÖĞRETMENİ ADAYLARININ GELECEKTE KARŞILAŞABİLECEKLERİ SORUNLARA İLİŞKİN GÖRÜŞLERİ

OPINIONS OF MATHEMATICS TEACHER CANDIDATES ABOUT THE PROBLEMS THEY MAY FACE IN THE FUTURE

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ÖZET

Bu araştırmanın amacı eğitim fakültesinde Matematik Öğretmenliği Anabilimdalı'nda öğrenim gören öğretmen adaylarının, Matematik öğretmeni olarak gelecekte karşılaşılabileceklerini düşündükleri sorunları ortaya koymaktır. Matematik öğretmenliği Anabilim dalında öğrenim gören öğretmen adayları ile sınırlandırılmış olan araştırmada, veri toplama aracı olarak yapılandırılmamış görüşme formu kullanılmıştır. Araştırma nitel bir araştırmadır. Veriler toplam 52 öğretmen adayından toplanmıştır. Veriler içerik analizi yöntemi ile analiz edilmiştir. Analiz sonuçlarına göre sorunlar 9 başlık altında toplanmıştır. Bu dokuz temel sorun "iş ve geçim", "çalışma ortamı", "iletişim", "veli", "tutum" "öğrenci", "öğretmen", "eğitim programları" ve "eğitim sistemi" başlıkları altında toplanmıştır.

Anahtar Kelime: Matematik, Matematik Öğretmenliği, Matematik öğretmenliğinin sorunları, Öğretmenliğin sorunları

ABSTRACT

This study was carried out to determine of opinions of Math teacher condidates about The future of maths teachers in Turkey. This research is held a kind of qualitative research that is a situation determination. The research'samply has been determined according to typical sampling method which is a kind of aimed sampling methods. 52 Maths teacher candidates who studied 3rd grade of education faculty in 2018 were in the samply. A unstructured interview form was used to collect data.by researcher. The collected datas was analyzed through content analysis method. Occording to result of analyze, there were determined 9 main problems. Determined 9 main problems were consist of "job and livelihood", "working environment", "communication", "parents", "attitude", "student" "teacher", "curriculum" and "educational System".

Keywords: Mathematics, Mathematics Teacher, Prooblem of Mathematics Teachers, Problem of Teachers

GİRİŞ

Bireyler arasında birçok yönden farklılıklar vardır. Bu farklılıkların ne düzeyde olduğunu anlatabilmek için açı kavramını kullanırsak 360 dereceye kadar ulaştığını söyleyebiliriz. Öğrenciler de bir birey olduğuna göre doğal olarak bir sınıftaki öğrencilerin çok farklı özelliklere sahip oldukları söylenebilir. Aynı sınıf ortamında bulunan öğrencilerin fiziki görünüşleri, duyguları, düşünceleri, yetenekleri, derslere karşı olan ilgileri de doğal olarak farklılık göstermektedir. Bir öğrenci Türkçe dersine karşı daha ilgili iken, başka bir öğrenci sosyal bilgiler dersine, bir başkası ise matematik dersine daha çok ilgi duyabilir. Bir öğrencinin bir derse karşı olan ilgisi, o derse karşı sahip olduğu tutumları da etkilemektedir. Derslerin geneline bu açıdan bakıldığında ise matematik dersine ilişkin olumlu tutum geliştiren öğrencilerin sayısının diğer derslere oranla daha düşük olduğu söylenebilir.

Matematik herkesin öğrenim hayatının ilk yıllarında karşılaştığı, sevdiği ya da nefret ettiği, belki de korktuğu bir ders (Yenilmez, 2006) olarak görülmektedir. Matematik dersine olumlu tutum geliştiren öğrencilere, matematik dersini korkulu bir rüya olarak tanımlayanlar ile karşılaştırıldığında kolay olarak görülen bir ders olabilir. Hatta Matematik dersini korkulu rüya olarak görenlerin ilköğretimden, üniversite eğitimlerine kadar matematik dersi ile kaygı içerisinde mücadele ettikleri ve bu mücadelede başarısız oldukları dahi görülmüştür (Yetkin, 2003). Oysaki matematiğe karşı olumlu tutuma sahip olanların ilköğretimden başlayarak üst öğrenimlerinde de bu derse daha çok ağırlık vermek sureti ile mesleki tercihlerini dahi Matematik ağırlıklı mühendislik, mimarlık, matematik öğretmenliği gibi alanlarda gerçekleştirdikleri görülmektedir.

Türkiye'deki eğitim ve öğretimde yaşanan sorunlara ilişkin (Karabacak ve Öztunç 2018; Erişti, Polat ve Erdem, 2018; Karataş ve Çakan, 2018; Abu Bacanak ve Gökdere, 2016; Sarıbaş ve Babadağ, 2015; Taşdemir, 2015), Kösterelioğlu ve Bayar, 2014; Coşkun, 2013; Başdemir, 2012; Yılmaz ve Altinkurt, 2011; Gül, 2008; Nartgün, 2008; Kalander, 2006; Gedikoğlu, 2005; Karabacak, 2001) oldukça fazla sayıda araştırma söz konusudur. Aynı şekilde matematik dersi ve matematik öğretiminde yaşanan sorunları ortaya koyan araştırmalar da sayıca çok fazladır. Bu konuda burada bütün araştırmalara yer vermek mümkün olmamakla birlikte, Dağdelen ve Ünal'ın (2017), Sezgin Memnun'un (2015), Çoban ve Erdoğan'ın (2013), Güneş ve Baki'nin (2011), Alkan'ın (2011), Kalander'in (2006), Yenilmez'in (2006), Baykul'un (2003) un çalışmaları örnek olarak gösterilebilir. Gerçekleştirilen araştırmaların daha mevcut durumu ortaya koyan, çözüm önerileri ile süren türde olduğu söylenebilir. Ancak bu araştırma ise matematik öğretmenliğinde öğrenim gören öğretmen adaylarının bir

matematik öğretmeni olarak gelecekte karşılaşılabilecekleri sorunlara ilişkin görüşlerini ortaya koymak amacı ile gerçekleştirilmiştir. Bu amaç doğrultusunda araştırmada aşağıdaki problem cümlesine cevap aranmaya çalışılmıştır.

Problem Cümlesi

Eğitim fakültelerinin matematik öğretmenliği anabilim dalında öğrenim gören öğretmen adaylarına göre Türkiye’de matematik öğretmeni olarak gelecekte karşılaşılabilecekleri sorunlar nelerdir?

Araştırmanın Önemi

Araştırma matematik öğretmeni adaylarının gelecekte karşılaşılabilecekleri sorunları ortaya koyması açısından önemli görülmektedir.

Sınırlılıklar

Bu araştırma 2018 güz döneminde eğitim fakültelerinin matematik öğretmenliği anabilim dalında öğrenim gören öğretmen adaylarının görüşleri ile sınırlıdır.

YÖNTEM

Araştırmanın Modeli

Araştırma durum araştırması modeline göre gerçekleştirilmiştir. Durum araştırması, oluşmakta olan veya hali hazırda var olanı derinlemesine inceleme imkânı sağlayan nitel araştırmalar arsında yer alan bir araştırma modelidir (Glense, 2011; Christenson, Johnson ve Turner, 2015).

Evren ve Örneklem

Örneklem 2018 güz döneminde eğitim fakültelerinin Matematik Öğretmenliği Anabilim Dalı’nda öğrenim gören 52 Öğretmen adayından oluşmaktadır. Örneklem amaçlı örnekleme yöntemleri arasında yer alan tipik örnekleme türüne göre belirlenmiştir (Büyüköztürk, Çakmak, Akgün, Karadeniz ve Demirel, 2013).

Veri Toplama Araçları ve Verilerin Toplanması

Veriler bir alanda derinlemesine bilgiler veren yapılandırılmamış görüşme formu kullanılarak toplanmıştır (Büyüköztürk, Çakmak, Akgün, Karadeniz ve Demirel, 2013). Görüşmede öğretmen adaylarına “Bir matematik öğretmeni adayı olarak gelecekte karşılaşılabileceğiniz sorunlar nelerdir?” sorusu yöneltilmiştir. Görüşmeler 2018 güz döneminde derslerin başladığı ilk haftadan başlayarak 14 hafta süresince gerçekleştirilmiştir.

Verilerin Analizi

Nitel analiz yöntemlerinden içerik analizi yöntemi kullanılarak veriler analiz edilmiştir. İçerik analizinde birbirine benzeyen veriler belirli kavramlar ve temalar çerçevesinde bir araya getirilir ve okuyanın anlayabileceği şekilde düzenlenerek yorumlar bulunulur (Şimşek ve Yıldırım, 2011). İçerik analizi sonucunda ana temalar ve alt temalar oluşturulmuştur. Ana temalar içinde yer alan alt temaların tekrarlanma sıklığına (frekans) yer verilerek yorumlarda bulunulmuştur.

BULGULAR

Analiz sonuçlarına göre elde edilen bulgulara bu bölümde yer verilmiştir.

1. İş Bulma ve Geçim

Tablo 1. İş Bulma ve Geçim

Tema ve Alt Temalar	f	%
İş Bulma ve Geçim	38	73,08
İş bulamama/atanamama	20	38,46
İş bulamama sonucunda başka mesleklere yönelme	2	3,85
Maddi kazancın yetersizliği	13	25
Mutlu bir iş hayatı yaşayamama	3	5,77
Görüş belirtmeyen	14	26,92
Toplam	52	100

Matematik öğretmeni adaylarının gelecekte yaşayacaklarını düşündükleri sorunların ilki ve en önemlisi “İş bulma ve Geçim” teması altında toplanmıştır. 52 öğretmen adayından 38’i (%73,08) bu konuda sorunlar ile yaşayacakları görüşüne sahiptir. Öğretmen adaylarının %38,85’i iş bulamama/atanama gibi sorunlar ile karşılaşılabileceklerini ifade ederken, %3,85’i iş bulamama nedeni ile başka mesleklere yönelme gibi bir durumlar da karşılaşılabileceklerini ifade etmiştir. Ayrıca öğretmen adaylarının %25’ine göre maddi kazancın yetersiz kalacağı ve %5,77’sine göre de mutlu bir iş hayatına sahip olamayabilecekleri görüşüne sahip oldukları belirlenmiştir.

2. Çalışma Ortamı

Tablo 2. Çalışma Ortamı

Tema ve Alt Temalar	f	%
Çalışma Ortamı	24	46,15
1. Çalışma Arkadaşları	13	25
Yöneticiler ile anlaşamama	8	15,38
Aynı okulda çalışacak kadroların ortak hareket edememesi	3	5,77
Birlikte Görev yapan öğretmenlerin anlaşamaması	2	3,85
2. Fiziki koşullar ve Donanım	11	21,15
Ders araç ve gereçlerinin yetersizliği	5	9,62
Kalabalık sınıflar	3	5,77
Teknolojik yetersizlikler	1	1,92
Kötü şartlara sahip okullarda görev alma	1	1,92
Köy okullarına ulaşımında sıkıntılar	1	1,92
Görüş belirtmeyen	28	53,85
Toplam	52	100

Matematik öğretmeni adaylarının gelecekte karşılaşılabilecekleri sorunlara ilişkin ikinci temasını ise “çalışma ortamı” oluşturmaktadır (%46,15). Ancak bu temanın “çalışma arkadaşları” (%15,38) ve “fiziki koşullar ve donanım” (%21,15) olmak üzere iki alt temadan oluştuğu belirlenmiştir. Çalışma arkadaşları temasına ilişkin öğretmen adaylarının %15,38’i yöneticiler ile anlaşamama, %5,77’si aynı okulda çalışanların ortak hareket etmemesi ve %3,85’i birlikte görev yaptığı öğretmenler ile anlaşamama gibi sorunlar ile karşılaşılabileceği görüşüne sahiptir. “Fiziki koşullar ve donanım” alt temasına ilişkin de Öğretmen adaylarının %9,62’si ders araç gereçlerinin yetersizliği, %5,77’si kalabalık sınıflar, %1,92’si teknolojik yetersizler, %1,92’si kötü şartlara sahip okullarda görev yapma, %1,92’si köy okullarına ulaşım konularında sorun yaşayabileceklerisin belirtmişlerdir.

3. İletişim

Tablo 3. İletişim

Tema ve Alt Temalar	f	%
İletişim	24	46,15
Veliler ile iletişim kuramama/anlaşamama	15	28,85
Öğrenciler ile iletişim sorunları	5	9,62
Öğretmen-öğrenci ve veli arasındaki iletişim sorunları	4	7,69
Görüş belirtmeyen	28	53,85
Toplam	52	100

“İletişim” teması matematik öğretmeni adaylarının %46,15’ine göre gelecekte karşılaştıklarını düşündüğü sorun grubunun üçüncüsünü oluşturmaktadır. Bu ana tema altında öğretmen adaylarının %28,85’i veliler ile iletişim kuramama, %9,62’si öğrenciler ile iletişim kuramama, %7,69’u hem öğrenci hem de veliler ile iletişim kuramama gibi sorunlar ile karşılaşılabileceklerini ifade etmişlerdir.

4. Veli

Tablo 4. Veli

Tema ve Alt Temalar	f	%
Veli	15	28,85
Velilerin öğretmenlere hak ettikleri değeri vermemesi/saygı göstermemesi	8	15,38
Velilerin ilgisizliği	7	13,46
Görüş belirtmeyen	37	71,15
Toplam	52	100

Matematik öğretmeni adaylarının gelecekte karşılaşılabilecekleri sorunlara ilişkin gerçekleşen dördüncü tema ise “veli” temasıdır (%28,85). Öğretmen adaylarının %15,38’ine göre velilerin kendilerine hak ettikleri değeri vermemesi/saygı göstermemeleri ve %13,46’sına göre velilerin çocuklarının eğitimine ve okula karşı olan ilgisizliği bu tema altında dile getirilen sorunlardır.

5. Tutum

Tablo 5. Tutum

Tema ve Alt Temalar	f	%
Tutum	14	26,92
Öğrencilerin Matematik dersine olan ilgisizliği/isteksizliği	8	15,38
Öğrencilerin Matematik dersini sevmemesi	3	5,77
Matematik dersini sevilmediği için matematik öğretmeni olarak sevilmemek	1	1,92
Matematik dersi ile ilgili önyargılar	1	1,92
Matematik dersine ilişkin Özgüven eksikliği	1	1,92
Görüş belirtmeyen	38	73,08
Toplam	52	100

Öğretmen adaylarının gelecekte karşılaşabilecekleri sorunlara ilişkin oluşan beşinci tema ise “tutum” temasıdır (%26,92). Bu tema altında öğretmen adaylarının %15,38’i öğrencilerin matematik dersine olan ilgisizliği/isteksizliği, %5,7’i öğrencilerin matematik dersini sevmemesini, %1,92’si matematik dersinin sevilmeyen bir ders olmasından dolayı matematik öğretmeni olarak sevilmemeyi, %1,92’si matematik dersine ilişkin önyargılara yönelik ve %1,92’si matematik dersine ilişkin öz güven eksikliğine yönelik sorunlar ile karşı karşıya kalabileceklerini ifade etmişlerdir.

6. Öğrenci

Tablo 6. Öğrenci

Tema ve Alt Temalar	f	%
Öğrenci	12	23,08
Bazı öğrencilerin söz dinlememesi/kendine buyruk davranışları	8	15,38
Öğrencilerin matematik temelini olmaması	2	3,85
Şımarık çocuklar ile başa çıkamama	1	1,92
Öğrencilerin teknolojik aletlerle (cep telefonu) girmesi	1	1,92
Görüş belirtmeyen	40	76,92
Toplam	52	100

Öğretmen adaylarının gelecekte karşılaşabilecekleri sorunlara ilişkin oluşan altıncı temanın ise “öğrenci” teması olduğu belirlenmiştir (%23,08). Bu tema altında öğretmen adaylarının %15,38’i bazı öğrencilerin söz dinlememesi/kendine buyruk davranmalarını, %3,85’i öğrencilerin matematik temeli olmamasını, %1,92’si şımarık çocuklar ile başa çıkamamayı ve %1,92’si öğrencilerin teknolojik aletlerle sınıfa gelmelerini karşılaşabilecekleri sorunlar arasında gördükleri belirlenmiştir.

7. Öğretmen

Tablo 7. Öğretmen

Tema ve Alt Temalar	f	%
Öğretmen	11	21,15
Bir öğretmen olarak çeşitli nedenlerden dolayı öğrenciye yeterli ilgi gösterememe	3	5,77
Görev yerine adaptasyon	3	5,77
Öğrenci psikolojisini dikkate alamama	1	1,92
Aile kurabilme	1	1,92
Kendimi kanıtlayamamak	1	1,92
Öğretmenlikten bıkmak	1	1,92
Matematik dersini öğrenciler için ilgi çekici hale getiremememe	1	1,92
Görüş belirtmeyen	41	78,85
Toplam	52	100

Öğretmen adaylarının gelecekte karşılaşabilecekleri sorunlara ilişkin oluşan yedinci tema ise öğretmen adaylarının kendi kişisel özelliklerinden kaynaklanan sorunları içeren “öğretmen” teması altınında toplanmıştır (%21,15). Bu tema altında öğretmen adaylarının %5,77’si bir öğretmen olarak çeşitli nedenlerden dolayı öğrencilere yeterli ilgi gösteremeyecek olmasını, %5,77’si kendisinin görev yerine adaptasyonda sorunlar yaşayabileceğini, %1,92’si öğrenci psikolojisini dikkate alamamayı, %1,92’si bir aile kuramamayı, %1,92’si kendini kanıtlayamamayı, %1,92’si öğretmenlikten bıkabileceğini, %1,92’si matematik dersini öğrenciler için ilgi çekici hale getirememeyi sorun olarak görmektedir.

8. Öğretim Programları

Tablo 8. Öğretim Programları

Tema ve Alt Temalar	f	%
Öğrenci	7	13,46
Matematik programının içeriğinin yoğun olması, yetiştirememesi	4	7,96
Öğretim programlarının sık sık değişmesi	2	3,85
Programlarda öğrenciler arasındaki bireysel farklılıklarının olmaması nedeni ile ders işlerken bu konudaki sorunlar	1	1,92
Görüş belirtmeyen	45	86,54
Toplam	52	100

Öğretmen adaylarının gelecekte karşılaşılabilecekleri sorunlara ilişkin oluşan yedinci tema “eğitim programları” temasıdır (%13,46). Bu tema altında öğretmen adaylarının %7,96’sı matematik programının içeriğinin yoğun olmasını ve bu nedenle programı yetiştirememeyi, %3,85’i programların sık sık değişime uğramasını, programda öğrencilerin bireysel farklılıklarının belirgin bir şekilde ortaya konulmamasından dolayı ortaya çıkabilecek sorunları göstermişlerdir.

9. Eğitim Sistemi

Tablo 9. Eğitim Sistemi

Tema ve Alt Temalar	f	%
Eğitim Sistemi	6	11,54
Türk Eğitim Sisteminden kaynaklı sorunlar	3	5,77
Öğrencileri sürekli olarak bir sınava hazırlama	2	3,85
Sürekli değişen sistemde çalışmanın ortaya çıkaracağı sorunlar	1	1,92
Görüş belirtmeyen	46	88,46
Toplam	52	100

Öğretmen adaylarının gelecekte karşılayacaklarını düşündüğü sorunların dokuzuncusu ise “eğitim sistemi” teması altında toplanmıştır. Tablo 9’da görüldüğü gibi bu temaya ilişkin 52 öğretmen adayından 6’sının (%11,54) sorun yaşayacaklarına dair görüş bildirdiği belirlenmiştir. Bu öğretmen adaylarından %5,77’si ayrıntı vermemekle birlikte Türk eğitim sisteminden kaynaklı sorunları, %3,85’i sürekli olarak öğrencilerini sınavlara hazırlama, %1,92’si sürekli değişen sistemde çalışmanın ortaya çıkaracağı sorunlar ile karşılayacaklarını düşündüklerini belirtmişlerdir.

SONUÇ VE TARTIŞMA

Eğitim Fakültesi Matematik Öğretmenliği Anabilim Dalı’nda öğrenim gören öğretmen adaylarının bir matematik öğretmeni olarak gelecekte yaşayabilecekleri sorunlara ilişkin görüşlerini almaya yönelik olarak gerçekleştirilen bu araştırma durum belirlemeye yönelik olarak gerçekleştirilen nitel bir araştırmadır. 2018 güz döneminde öğrenim gören öğretmen adaylarından yapılandırılmamış görüşme formu kullanılarak veriler toplanmıştır. Örneklem 52 öğretmen adayından oluşmaktadır. Verilerin analizinde içerik analizi yöntemi kullanılmış ve elde edilen bulgulara göre aşağıdaki sonuçlara ulaşılmıştır:

1. İş Bulma ve Geçim

Matematik öğretmeni adaylarının gelecekte yaşayacaklarını düşündükleri sorunların en önemlisi “İş bulma ve Geçim” başlığı altında toplanmıştır. İş bulamama/atanamama bu başlık altında yer alan en önemli sorundur. İş bulamama nedeni ile başka mesleklere yönelmelerin gerekebileceklerini düşünen öğretmen adayları da bulunmaktadır. Diğer taraftan yeterli bir düzeyde gelire sahip olamayacaklarını düşünenlerde az değildir. Bu nedenlerden dolayı da mutlu bir iş hayatı yaşamayacak olmaları kaygısına kapılan öğretmen adayları da bulunmaktadır. İş bulma konusu günümüzde birçok öğretmenlik branşında kendini gösteren bir durumdur. Gerek mezun olanların oranı ile atama yapılanlarının oranları karşılaştırıldığında ve gerekse bu konuda yapılan araştırmalar incelendiğinde bu durum gayet net bir şekilde ortaya çıkmaktadır. Ekonomik gelir konusu ele alındığında ise öğretmen adaylarının bu konuda haklı endişelere sahip oldukları söylenebilir. Çünkü öğretmenlik mesleği yapılan işin önemi dikkate alındığında geliri düşük olarak kabul görmektedir. Ayrıca Yılmaz ve Akkurt’a (2011) göre eğitim alanında Türkiye’deki en önemli sorunlardan birisi insan gücü planlaması konusudur. Özellikle öğretmen ihtiyacına bakılmadan plansız bir şekilde hareket edilmesi istihdam sorununu beraberinde getirmiştir (Gedikoğlu, 2005). Bu durumlarında sadece matematik öğretmeni adaylarının değil diğer birçok branştaki öğretmen adayında da iş bulma endişesinin oluşmasında önemli bir yere sahip olduğu ifade edilebilir.

2. Çalışma Ortamı

Matematik öğretmeni adaylarının gelecekte karşılaşılabilecekleri sorunlara ilişkin ikinci başlık ise “çalışma ortamı” ile ilgili sorunlardır. Çalışma ortamı ile ilgili sorunlar kendi içerisinde çalışma arkadaşları ile yaşanabilecek sorunlar ve fiziki koşullar ve donanımdan kaynaklanabilecek sorunlar olmak üzere iki alt başlıktan oluşmaktadır. Çalışma arkadaşlarından kaynaklanabilecek sorunlar ise yöneticiler ile anlaşamama, okulda çalışanların ortak hareket etmemesi ve birlikte görev yattığı öğretmenler ile anlaşamama gibi sorunlardan oluşmaktadır. Fiziki koşullar ve donanımdan kaynaklanabilecek sorunlar ise ders araç gereçlerinin yetersizliği, kalabalık sınıflar, teknolojik yetersizler, kötü şartlara sahip okullarda görev yapma, köy okullarına ulaşım gibi sorunlardan oluşmaktadır. Fiziki alt yapı ve donanım sorunu aynı zamanda yükseköğretimde de bulunan bir sorundur (Karabacak ve Öztunç, 2018). Yılmaz ve Akkurt’a göre de (2011) donanım ve fiziki alt yapı Türk eğitim sisteminin sorunlarından birisidir. Dolayısı ile araştırmada ulaşılan sonuçlar ile bu araştırmacıların elde ettiği sonuçların örtüştüğü ifade edilebilir.

3. İletişim

Matematik öğretmeni adaylarının gelecekte karşılaştıkları düşündüğü sorunlardan üçüncüsü de iletişim kurma konusudur. Öğretmen adaylarının öğrenciler ile ve velileri ile doğru bir iletişim kuramayabilecekleri konusunda endişelerinin bulunduğu söylenebilir.

4. Veli

Matematik öğretmeni adaylarının gelecekte karşılaşılabilecekleri sorunların dördüncü veli başlığı altında toplanmıştır. Velilerin öğretmenlere hak ettikleri değeri vermemesi veya saygı göstermemesi ve çocuklarının eğitimine ve okula karşı olan ilgisizliği bu konuda yaşanabilecek temel sorunlar arasında yer almaktadır. Ailenin öğrencinin başarısında son derece etkili (Şad, 2012) olduğu bilinmektedir. Bu nedenle ailelerin çocuklarının eğitimlerine katılımlarının sağlanması önem taşımaktadır.

5. Tutum

Matematik öğretmeni adaylarının gelecekte karşılaşılabilecekleri sorunlara ilişkin beşinci başlık matematik dersine yönelik tutumdan kaynaklanan sorunlardan oluşmaktadır. Bu sorun başlığı altında öğrencilerin matematik dersine olan ilgisizliği/isteksizliği, öğrencilerin matematik dersini sevmemesi, matematik dersinin sevilmeyen bir ders olmasından dolayı matematik öğretmenin de sevilmemesi, matematik dersine ilişkin önyargıların olması ve matematik dersine ilişkin öz güven eksikliği gibi sorunların bulunduğu sonucuna ulaşılmıştır. Öncelikli olarak matematik öğrenmeye olumsuz tutum gösteren, ön yargılı öğrencilerin matematik öğrenmeleri zorlaşmaktadır (Yenilmez, 2006). Baykul’a göre (2003), matematik dersine öğrencilerin sahip oldukları tutum ile matematik başarısı arasında oldukça anlamlı bir ilişki vardır. Bu nedenle öğrencilerin olumlu tutum geliştirmesini sağlamak için öğrencilere yol göstermek gerekmektedir. Ayrıca öğretmenlerin matematik dersini verirken kullandıkları metotların olumlu tutum geliştirme yerine öğrencilerin kaygılandırıldığını (Alkan, 2011) ortaya koyan araştırmalarda bulunmaktadır. Oysaki öğrencilere özellikle küçük yaşlardan itibaren matematik dersine ilişkin öz güvenlerini arttıran çalışmalar gerçekleştirilirse veya bu konuda rehberlik yapılırsa matematik dersine yönelik olumlu tutumlara sahip olmaları sağlanabilir.

6. Öğrenci

Matematik öğretmeni adaylarının gelecekte karşılaşılabilecekleri sorunlara ilişkin altıncı başlığın ise öğrencilerden kaynaklanan sorunlardan oluştuğu sonucuna ulaşılmıştır. Bu başlık altında ise bazı öğrencilerin söz dinlememesi/kendine buyruk davranmaları, öğrencilerin matematik temeli olmaması, şımarık çocuklar ile başa çıkamama, öğrencilerin teknolojik aletlerle sınıfa gelmeleri karşılaşılabilecek sorunlar arasında yer almaktadır.

7. Öğretmen

Matematik öğretmeni adaylarının gelecekte karşılaşılabilecekleri sorunlara ilişkin oluşan yedinci başlığın öğretmenin sahip olduğu özelliklerden kaynaklanan sorunları içerdiği belirlenmiştir. Bu nedenle başlığın ismi “öğretmen” olarak tanımlanmıştır. Öğretmen olarak çeşitli nedenlerden dolayı öğrencilere yeterli ilgi gösteremeyecek olmalarını, görev yerine adaptasyon, öğrenci psikolojisini dikkate alamama, bir aile kuramama, kendini kanıtlayamama, öğretmenlikten bıkmama, matematik dersini öğrenciler için ilgi çekici hale getirememe gibi sorunların bu başlığın altında yer aldığı sonucuna ulaşılmıştır.

8. Öğretim Programları

Öğretmen adaylarının gelecekte karşılaşılabilecekleri sorunlara ilişkin oluşan yedinci başlığın “öğretim programları” başlığından oluştuğu sonucuna ulaşılmıştır. Matematik programının içeriğinin yoğun olmasını ve bu nedenle programı yetiştirememeden, programların sık sık değişime uğramasından, programda öğrencilerin bireysel farklılıklarının belirgin bir şekilde ortaya konulmamasından dolayı ortaya çıkabilecek sorunlara öğretmen adayları tarafından bu başlık altında yer vermiştir. Programın yoğun olması Baykul (2003) tarafından da dile getirilmiştir. Türkiye’de eğitimde program geliştirme konusunda önemli sorunların bulunduğu (Özyılmaz, 2013) bir gerçektir. Hatta Yeşil ve Şahan (2015) Türk eğitim sisteminin en önemli sorunlarından birisi olarak eğitim programlarının nitelikli bir şekilde oluşturulmadığını ifade edilmektedir. Ayrıca öğretim programlarında çok fazla değişikliğe gidilmesi de yeni programların ve bu programların önerdiği öğrenme-öğretme yaklaşımlarının öğretmenlerin istenilen şekilde uygulayamamasına neden olduğu da düşünülebilir. Araştırmada bu konuda ulaşılan sonuçların da araştırmacıların elde ettiği sonuçlarla örtüştüğü ifade edilebilir.

9. Eğitim Sistemi

Matematik öğretmeni adaylarının gelecekte karşılaşacağını düşündüğü sorunlara ilişkin son başlık “eğitim sistemi” başlığının altında toplanmıştır. Öğretmen adayları sürekli olarak değişen eğitim sistemi nedeni ile gelecekte bir takım sorunlar ile karşı karşıya kalacakları düşüncesindedir. Ayrıca sınav sistemi olması nedeni ile öğrencileri sürekli sınavlara hazırlayan bir öğretmen olacak olmalarını da bir sorun olarak görmekteyiz. Ulaşılan bu sonuç Karabacak ve Öztunç’un (2018) yapmış olduğu çalışmada elde ettiği eğitim sistemi ile ilgili sonuçlar ile örtüşmektedir. Başdemir’de (2013) araştırmasında sürekli ve ani yapılan değişikliklerin eğitim sisteminde istikrarsızlığı sağladığı görüşündedir.

Öneriler

1. Öğretmenlerin iş bulma sorununun giderilmesi gerekmektedir. Bu sorunu gidermek elbette ki birden bire mümkün değildir. Bunun için makro planlarda iş gücü ihtiyaçları çok dikkatli bir şekilde belirlenerek öğretmenlik branşlarında ihtiyaca göre yükseköğretim kontenjanları belirlenebilir.
2. Öğretmenlik branşlarında temel işveren devlettir. Ancak birçok özel okul ve kursların da öğretmen ihtiyacı söz konusudur. Bu nedenle öğretmen adaylarına bu kurumlara yönelik yönlendirmeler yapılabilir. Hatta bununla ilgili seçmeli dersler yükseköğretim programlarına ilave edilebilir.
3. Öğretmen adaylarının göreve başladıklarında öğrenci ve veliler ile iletişim sorunları yaşamaması için lisans düzeyinde “insan ilişkileri ve iletişim” konusunda derslere yer verilebilir. Bu derslerde özellikle öğretmen-veli, öğretmen-öğrenci, öğretmen-yönetici, öğretmen-öğretmen iletişimlerine ağırlık verilebilir.
4. Velilerin okula ve çocuklarının eğitimine ilgisini arttırmak için anne-baba eğitimleri düzenlenebilir. Bu anlamda okul, öğrenci, veli iş birliği sağlanarak öğrencilerin başarıları artırılabilir.
5. Matematik dersine yönelik olarak öğrencilerin olumlu tutum kazanabilecekleri öğretim yöntem ve teknikleri kullanılmalıdır. Özellikle küçük sınıflardan itibaren ağır matematik bilgisi yerine oyunlar ve aktif öğrenmeyi sağlayacak teknikler matematiği sevdirmeye anlamında kullanılabilir.
6. Öğrencilerin derslere teknolojik aletler (cep telefonu vb.) ile girmelerinin önüne geçilmelidir. Bu konuda Milli Eğitim Bakanlığı tarafından standart bir uygulamanın gerçekleştirilmesi için yasal düzenlemeler veya açıklamalarda bulunulabilir.
7. Fakültelerde öğretmen adaylarının öğretmenlik hayatına başladıklarında karşılaşabilecekleri sorunlara ilişkin gerçekçi ve günlük hayatla ilişkili rehberlik yapılmalıdır. Hatta sadece bu konuyu içeren bir ders önerilebilir. Bu derslerde özellikle hali hazırda görevde bulunan öğretmenlerden kaynak kişi olarak faydalanılabilir.
8. Matematik dersi öğretim programının çok yoğun bir şekilde oluşturulmaması önemlidir. Bu derste özellikle yüklü programları yetiştirme cabası içerisinde giren öğretmenlerin matematikte başarı sorunu yaşayan öğrencileri ihmal etmiş konuma gelebilecekleri de göz ardı etmemelidir.
9. Türk eğitim sisteminde gerçekleştirilen sürekli değişikliklerin önüne geçilmelidir. Eğer bu değişikliklerin gerçekleştirilmesi zorunlu ise öğretmen adaylarına daha lisans düzeyinde bu değişikliklere ilişkin bilgi veren programlar düzenlenmeli ve öğretim elemanları bu konuda üzerine düşen görevleri yerine getirmelidir.
10. Bu çalışmanın benzeri yükseköğretimde öğrenim gören öğrenci görüşlerinin yanı sıra, halen iş başında olan öğretmenlerin, velilerin, yöneticilerin görüşleri alınarak gerçekleştirilebilir.

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ÖĞRETMENLERİN YAŞAM BOYU ÖĞRENME DÜZEYLERİNİN ÇEŞİTLİ DEĞİŞKENLER AÇISINDAN İNCELENMESİ

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ÖZET

Bu çalışmada öğretmenlerin yaşam boyu öğrenme düzeyleri cinsiyet, branş ve kıdem değişkenlerine göre farklılıklar bulunup bulunmadığı araştırılmıştır. Araştırmanın örneklemini 2017-2018 eğitim-öğretim yılında Kocaeli/Kartepe’ de ilkokul ve ortaokulda görev yapan 233 kadın ve 130 erkek olmak üzere toplam 363 öğretmenden oluşmaktadır. Araştırmada elde edilen veriler analiz edilmeden önce normal dağılım gösterip göstermediğini belirlemek amacıyla Kolmogorov-Smirnov testi uygulanmıştır. Analiz sonucunda her iki ölçekten elde edilen verilerin normal dağılıma sahip olması belirlenmiştir ($p<.05$). Bu nedenle elde edilen puanların belirlenen değişkenlere göre farklılaşp farklılaşmadığını belirlemek amacıyla Mann Whitney U testi kullanılmıştır. Çalışma sonucunda öğretmenlerin en çok çalışmanın sonunda elde edilecek kazancı düşünerek (başarı, mutluluk, güven, içsel doyum, pratiklik) güdülendikleri; öğrenme istek ve kararlılıklarını ise öğrenme sonucu elde edecekleri kazanca göre (mutluluk, başarı inancı ...) devam ettirdikleri sonucuna ulaşılmıştır.

ABSTRACT

In this study, it was investigated whether the teachers' lifelong learning levels differed according to gender, branch and seniority variables. In the 2017-2018 academic year, the sample consists of a total of 363 teachers, including 233 women and 130 men, who worked in primary and secondary schools in Kocaeli/Kartepe. Kolmogorov-Smirnov test was used to determine if the data obtained in the study showed normal distribution before being analyzed. As a result of the analysis, it was determined that the data obtained from both scales have a normal distribution ($p<.05$). For this reason, the Mann Whitney U test was used to determine whether the scores obtained differed according to the determined variables. Teachers are most driven by thinking about the gain (success, happiness, confidence, inner satisfaction, practicality) that will be achieved at the end of the study, and their desire and determination to learn according to the gain that they will achieve as a result of learning (happiness, belief in success ...) it was understood that they continued.

GİRİŞ

Yirminci yüzyılın en önemli özelliği sosyal, kültürel ve politik alanlarda meydana gelen değişimler ve gelişmelerdir. Bilgi ve iletişim teknolojileri son yıllarda hızla artmaktadır ve tüm bu değişiklik ve gelişmeler belirli mesleklerin yeniden tanımlanmasına neden olmaktadır (Pieri ve Diamantini,2010). Toplumlar kendilerini geliştirebilir ve bu doğrultuda bireyler yetiştirerek değişime uyum sağlayabilirler. Değişime uyum sağlayabilen, araştırma becerisine sahip ve bilgi okuryazar olan bireyleri yetiştirmek, yalnızca eğitim sistemlerinin önemli bir bileşeni olan müfredatlar ile gerçekleştirilebilir (Cai ve Cirillo, 2014).

Yaşam boyu eğitime olan ilginin, günümüz toplumunda ve ekonomisindeki hızlı değişime bağlı olarak, şimdi daha büyük bir önemi vardır. Yenilik alanındaki mutasyonlar, gelişmiş teknolojik değişim, uzaktan iletişim kolaylığı ve bilgi yayma hızı eğitim sürecinde köklü değişikliklere neden olmuştur. Yaşam boyu eğitim, ekonomik ve sosyal yaşamın küreselleşmesinin dalgaları karşısında güvende değildir. Bilginin gittikçe zarar gördüğü gelişen bir çevrenin zorluklarını karşılaması gerekir. Bu nedenle bilgi ve bilgi yelpazesinin periyodik olarak güncellenmesini gerekir (Demirel, 2009). Bu yüzden, öğretmenler, doktorlar, avukatlar gibi birçok meslek grubu düzenli mesleki gelişim kurslarına katılmalı ve mesleki deneyim kazanmalıdırlar. Gelişmekte olan bilgi toplumunda, eğitilmiş bir kişi, öğrenmeyi yaşam boyu bir süreç olarak kabul etmeye istekli biri olacaktır. Daha fazla bilgi, özellikle de üst düzey bilgi; örgün eğitim çağının çok ötesinde ve birçok durumda geleneksel okula odaklanmayan eğitim süreçleri yoluyla edinilmektedir (Illich, 1971) . Yaşam boyu öğrenme bağlamında öğrenme kavramı yalnızca okul ve sosyal eğitim yoluyla yapılandırılmış öğrenmeyi değil, aynı zamanda spor, kültürel etkinlikler, hobiler, rekreasyon ve gönüllü faaliyetler gibi alanlarda yer alarak öğrenmeyi de kapsar. Yaşam boyu öğrenme okul öncesi yıllardan emekli olduktan sonraya kadar her türlü yetenek, ilgi alanı, bilgi ve niteliklerin kazanılması ve güncellenmesi ile ilgilidir (Laal, 2013). Bu çalışmada öğretmenlerin yaşam boyu öğrenme düzeyleri cinsiyet, branş ve

kıdem değişkenlerine göre farklılıklar bulunup bulunmadığı araştırılmıştır.

YÖNTEM

Araştırmanın çalışma grubu, 2017-2018 eğitim-öğretim yılında, Kocaeli/Kartepe ilçesinde ilköğretim ve ortaokulda görev yapan 233 kadın ve 130 erkek olmak üzere toplam 363 öğretmenden oluşmaktadır. Öğretmenlerin branşlarına bakıldığında 152'si (%41.9) sözel (din kültürü, İngilizce, okul öncesi, rehberlik, sosyal bilgiler, Türkçe), 83'ü (% 22.9) sayısal (fen bilimleri, matematik) 54'ü (%14.9) yetenek (beden eğitimi, bilişim, görsel sanatlar, müzik, teknoloji ve tasarım) 74'ü (%20.4) sınıf öğretmenlerinden oluşmaktadır. Öğretmenlerin kıdemlerine bakıldığında 85'i (%23.4) 1-5 yıl, 115'i (%31.7) 6-10 yıl, 65'i (%17.9) 11-15 yıl, 53'ü (%14.6) 16-20 yıl, 45'i (%12.4) 21 yıl ve üzerinde görev yapmaktadırlar.

Yaşam boyu öğrenme ölçeği (YBÖÖ)

Araştırmadaki öğretmenlerin yaşam boyu öğrenme düzeylerini ölçmek için Kirby, Knapper, Lamon ve Egnatoff tarafından geliştirilen, Arslan ve Akcaalan (2015) tarafından Türkçe'ye uyarlanan Yaşam Boyu Öğrenme Ölçeği kullanılmıştır. Bu araç, kâğıt kalem testi biçiminde uygulanan, katılımcıların kendi durumlarını betimlediği bir kendini değerlendirme ölçeğidir. Ölçek, 5'li Likert derecelendirmeye göre 1-5 arasındaki rakamlardan biri işaretlenerek yanıtlanmaktadır. Her sorunun karşısında bulunan; (1) Kesinlikle katılmıyorum (2) Katılmıyorum (3) Kararsızım (4) Katılıyorum ve (5) Kesinlikle katılıyorum anlamına gelmektedir. Ölçeği oluşturan 14 madde tek boyutta toplanmakta ve genel bir yaşam boyu öğrenme puanını ifade etmektedir. Yaşam boyu öğrenme puanının yüksek olması katılımcıların yaşam boyu öğrenme düzeyinin yüksek olduğunu göstermektedir (Arslan ve Akcaalan, 2015).

Öğretmenlerin yaşam boyu öğrenme düzeylerine dair bulgular

Öğretmenlerin yaşam boyu öğrenme düzeylerine ait bulgular Tablo 1'de verilmiştir.

Tablo 1 Öğretmenlerin Yaşam Boyu Öğrenme Düzeyleri

	N	Minimum	Maximum	Mean	Std. Deviation
Yaşam Boyu Öğrenme	363	2,43	6,36	3,8050	,39359
	363				

Öğretmenlerin yaşam boyu öğrenme becerileri açısından kadın ve erkek öğretmenler arasında fark var mıdır?

Yaşam boyu öğrenme düzeyleri açısından kadın ve erkek öğretmenler arasında anlamlı bir farklılığın tespiti için yapılan Mann-Whitney U testine ilişkin istatistikler Tablo 2'de verilmiştir.

Tablo 2 Yaşam Boyu Öğrenme Düzeyleri Açısından Kadın Ve Erkek Öğretmenler Arasındaki Farklılığa İlişkin Mann-Whitney U Testi İstatistikleri

	Grup	N	Ortalama	Ss	SH	U	P
Yaşam Boyu Öğrenme Düzeyleri	Kadın	233	3.785	0,318	0,023	14189	0,318
	Erkek	130	3.841	0,458	0,040		

Tablo 2'ye göre kadın ve erkek öğretmenlerin yaşam boyu öğrenme düzeyleri arasında anlamlı bir farklılık tespit edilmemiştir (U=14.189, p>.05).

Öğretmenlerin yaşam boyu öğrenme düzeyleri açısından branşları farklı öğretmenler arasında fark var mıdır?

Yaşam boyu öğrenme düzeyleri açısından branşları farklı öğretmenler arasında anlamlı bir farklılığın tespiti için yapılan Kruskal-Wallis testine ilişkin istatistikler Tablo 3'de verilmiştir.

Tablo 3 Yaşam Boyu Öğrenme Düzeyleri Açısından Branşları Farklı Öğretmenler Arasındaki Farklılığa İlişkin Kruskal-Wallis Testi İstatistikleri

Branşlar	N	Ortalama	Ss	χ^2	Sd	P
Sözel Branşlar	152	3.822	0,446			
Sayısal Branşlar	83	3.786	0,318	0,654	3	0.884
Yetenek Branşları	54	3.807	0,357			
Sınıf Öğretmenliği	74	3.790	0,386			

Tablo 3'e göre branşları farklı öğretmenlerin yaşam boyu öğrenme düzeyleri arasında anlamlı bir farklılık tespit edilmemiştir ($\chi^2(3) = 0,654, p>.05$).

Öğretmenlerin yaşam boyu öğrenme düzeyleri açısından kıdemleri farklı öğretmenler arasında fark var mıdır?

Yaşam boyu öğrenme düzeyleri açısından kıdemleri farklı öğretmenler arasında anlamlı bir farklılığın tespiti için yapılan Kruskal-Wallis testine ilişkin istatistikler Tablo 4'de verilmiştir.

Tablo 4 Yaşam Boyu Öğrenme Düzeyleri Açısından Kıdemleri Farklı Öğretmenler Arasındaki Farklılığa İlişkin Kruskal-Wallis Testi İstatistikleri

Kıdem	N	Ortalama	Ss	χ^2	Sd	P
1 ile 5 yıl arası	85	3.783	0,368			
6 ile 10 yıl arası	115	3.843	0,429			
11 ile 15 yıl arası	65	3.758	0,334	0,718	4	0,949
16 ile 20 yıl arası	53	3.836	0,403			
21 yıl ve üzeri	45	3.779	0,417			

Tablo 4' e göre kıdemleri farklı öğretmenlerin yaşam boyu öğrenme düzeyleri arasında anlamlı bir farklılık tespit edilmemiştir ($\chi^2(4) = 0,718, p>.05$).

SONUÇ, TARTIŞMA VE ÖNERİLER

Öğretmenlerin yaşam boyu öğrenme becerilerini inceleyen bu araştırmada; öğretmenlerin yaşam boyu öğrenme düzeyleri cinsiyet, branş ve kıdem değişkenleriyle incelenmiştir. Öğretmenlerin yaşam boyu öğrenme düzeylerinde değişkenlerin hiçbirinde anlamlı farklılık bulunmamıştır. Öğretmenlerin öğrenme etkinliklerini öncelikle ilgi duyulan -sevilen konulara göre ve mesleki açıdan getirisi olma durumuna göre planladıkları; öğrenme sürecini değerlendirirken bu süreçte öğrenme stratejilerini bilgiyi öğrenmedeki etkiye (kalıcı olma, hatırlamayı kolaylaştırma) göre belirledikleri, süreci değerlendirmenin bir alt boyutu olan öğrenme sonuçlarını değerlendirirken ise kendi kendine değerlendirme ve içsel doyumu tercih ettikleri bulunmuştur. Kadın ve erkek öğretmenlerin yaşam boyu öğrenme düzeyleri arasında anlamlı bir farklılık tespit edilmemiştir. Araştırmada cinsiyete göre öğretmenlerin yaşam boyu öğrenme düzeylerinde anlamlı bir fark olmadığı tespit edilmiştir. Bu bulguyu desteklemeyen araştırmaları inceleyecek olursak; Coşkun ve Demirel (2009), araştırma kapsamındaki bireylerin YBÖ eğilimlerinin cinsiyete göre farklılaştığını ve bu farkın da kız öğrenciler yönünde olduğunu tespit etmişlerdir. Araştırmada cinsiyet açısından anlamlı bir farklılığın tespit edilmemesi öğretmenlerin öğrenme deneyimlerinde cinsiyete dair bir önyargılarının olmadığı şeklinde yorumlanabilir. Branşları farklı öğretmenlerin yaşam boyu öğrenme düzeyleri arasında anlamlı bir farklılık tespit edilmemiştir. Araştırmada branşa göre yaşam boyu öğrenme eğilimlerinde anlamlı bir fark olmadığı tespit edilmiştir. Araştırmanın öğretmenlerin branşları açısından anlamlı farklılık içermemesi tüm branşların öğrenme deneyimlerinde yaşam boyu öğrenmeye eğilimli oldukları şeklinde yorumlanabilir. Öğretmenlerin mesleki kıdemlerinin yaşam boyu öğrenme düzeyleri üzerinde etkili olmadığı bulgusu ile Doğan ve Kavtelek (2015) tarafından yapılan araştırma sonuçları tutarlıdır. Yapılan araştırmada değişken olarak cinsiyet, branş ve kıdem kullanılmıştır. İleride yapılacak çalışmalarda mezuniyet, yaş, medeni durum gibi değişkenler kullanılarak farklı sonuçlara ulaşılabilir.

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TÜRKİYE’DE YABANCI DİL ÖĞRETİMİNE İLİŞKİN SORUNLAR

PROBLEMS OF FOREIGN LANGUAGE TEACHING IN TURKEY

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ÖZET

Bu araştırma durum belirlemeye yönelik olarak gerçekleştirilen nitel bir araştırmadır. Almanca öğretmen adaylarının Türkiye’de Almanca öğretimine ilişkin sorunların neler olduğuna yönelik görüşlerini almaya yönelik olarak gerçekleştirilen araştırmada, 2018 güz döneminde Almanca öğretmenliği 2. sınıfında öğrenim gören öğretmen adaylarının görüşleri alınmıştır. Örneklem amaçlı örnekleme yöntemlerinden tipik örnekleme yöntemine göre belirlenmiş ve 37 öğretmen adayından oluşmaktadır. Yapılandırılmamış görüşme formunun kullanıldığı araştırmada verilerin analizinde içerik analizi yöntemi kullanılmıştır. Yapılan içerik analizi sonuçlarına göre Almanca öğretmenliğinde öğrenim gören öğretmen adaylarının Türkiye’de Almanca öğretiminde yaşanan sorunlara ilişkin görüşlerinin “öğretim programları”, “önem”, “öğretmen”, “Eğitim yönetimi”, “Dilin özelliği” ve “öğrenci” olmak üzere altı ana temada toplandığı belirlenmiştir.

Anahtar kelimeler: Dil Öğretimi, Almanca öğretimi, Almanca öğretimindeki sorunlar, Yabancı dil öğretimindeki sorunlar

ABSTRACT

This research is held a kind of qualitative research that is a situation determination. In the research was carried out to determine of opinions of German Language teacher condidates about German Language Training in Turkey. The research’samply has been determined according to typical sampling method which is a kind of aimed sampling methods. 37 German Language Teacher candidates studying 2rd grade of Education faculty in 2018 were in the samply. A unstructured interview form was used to collect data.by researcher. The collected datas was analyzed through content analysis method. Occording to result of analyze were determined 6 topics that were problems. Determined 6 topics were "curriculum", "importance given German Language", "Teacher", "Educational Administartion", Characteristic of German Language" and "Student".

Keywords: Language Teaching, German Language Teaching, Problems of German Language Teaching, Problems of Foreign Language Teaching.

GİRİŞ

Bir iletişim aracı olan dil insanların bir birlerini doğru bir şekilde anlayabilmeleri, farklı toplumlardaki gelişmeleri takip edebilmeleri ve bu gelişmeleri kendi toplumlarına doğru bir şekilde transfer ederek kullanabilmeleri açısından oldukça önemlidir. Çok farklı coğrafyalarda çok farklı insan toplulukları bulunduğundan net bir şekilde sayısını vermek mümkün olmasa da dünya üzerinde 3000-5000 civarında kullanılan dil olduğu söylenebilir (Koç, 1996).

İnsanlar doğduğu anda bulunduğu ortamda ana dilleri ile iltişim kurar. Ancak ilerleyen yıllarda farklı toplumları tanıma, diğer toplumların sahip olduğu hem maddi hemde manevi özellikleri öğrenme isteği duyarak anadilinden farklı dilleri de öğrenme isteğine sahip olabilirler. Bu nedenle örgün eğitim kurumlarında anadilden farklı bir dilin öğretimine yönelik programlar oluşturulmuştur. Türkiye’de ilkokulun ilk yıllarından itibaren yabancı dil öğretimine ilişkin programların yer aldığı görülmektedir. Daha üst öğrenim kademelerine doğru birinci yabancı dilin yanı sıra ikinci bir yabancı dile ilişkin programlarda yer almaktadır. Türkiye’de öğrencilerin öğrenim hayatının ilk yıllarında İngilizce birinci yabancı dil olarak öğretilmeye başlanırken, özel okullarda daha önce başlamak ile birlikte ortaöğretimin ilk yıllarında ikinci bir yabancı dil öğretimine zaman ayrıldığı görülmektedir.

Türkiye’de ingilizceden sonra öğretilen ikinci yabancı dil olarak Almanca’nın 2., Fransızca’nın 3. sırada (Tümen, 2006) yer aldığı görülmektedir. İkinci bir yabancı dil bilmenin önemi Türkiye’de farkında olunmasına rağmen yabancı dil öğretiminde istenilen düzeye ulaşılmadığı ve halen birçok sorunların yaşandığı (Demirel, 2004; Aküzel, 2006; Çelebi, 2006; Akdoğan, 2010; Şavlı, 2014; Kuşçu, 2017; Uslu, 2017; Karabacak, 2018) çeşitli araştırmalar ortaya koymaktadır.

Demirel’e göre (2004) dil öğretiminde okuma, dinleme, yazma ve konuşma olmak üzere dört temel beceri vardır. Bu nedenle bireylerin o dili konuşabilmesi, o dilde yazabilmesi, o dilde okuduğunu veya dinlediğini anlayabilmesi gerekir. Birey bir dile ilişkin bu dört beceriye sahip ise o dil tam anlamı ile öğrenmiştir. Türkiye’de ise bu dört becerinin tam olarak öğretilmesi hususunda bir takım sorunların bulunduğu yukarıda ifade edilen araştırmalarda belirtilmektedir. Bu araştırma da yukarıda ifade edilen araştırmalara benzer şekilde özellikle Türkiye’deki ikinci yabancı dil olarak öğretilen Almanca öğretimine ilişkin sorunları öğretmen adaylarının görüşlerini alarak belirlemek ve çözüm önerileri ortaya koymak amacı ile gerçekleştirilmiştir.

Problem Cümlesi

Eğitim fakültesinin Almanca Öğretmenliği Anabilim Dalı'nda öğrenim gören öğretmen adaylarının, Türkiye'de Almanca öğretimindeki sorunlara ilişkin görüşlerini nelerdir?

Araştırmanın Önemi

Türkiye'de yabancı dil öğretiminde istenen seviyeye ulaşamadığı bilinen bir gerçektir. Bu konuda yukarıda ifade edildiği üzere bir çok araştırma gerçekleştirilse de halen sorunların giderilemediği görülmektedir. Bu araştırma bu noktada güncel sorunların ortaya konulması ve çözüm önerilerine yer verilmesi açısından önemli görülmektedir.

Sınırlılıklar

Araştırma yabancı dil öğretiminde Almanca öğretimi ve Almaca öğretmen adayları ile sınırlıdır.

YÖNTEM

Araştırmanın Modeli

Araştırma, nitel araştırma yöntemleri arasında yer alan durum araştırması modelinde gerçekleştirilmiştir. Durum araştırmaları var olanı veya oluşmakta olanı derinlemesine inceleme olanağı sağlayan (Christenson, Johnson ve Turner, 2015) araştırma modelidir.

Evren ve Örneklem

Amaçlı örnekleme yöntemleri arasında yer alan tipik örnekleme yöntemine göre örneklem belirlenmiştir. Örneklem, 2018 Güz döneminde eğitim fakültesi Almanca öğretmenliği anabilim dalının ikinci sınıfında öğrenim gören 37 Almanca Öğretmen adayından oluşmaktadır.

Veri Toplama Araçları ve Toplanması

Veri toplama aracı olarak yapılandırılmamış görüşme formu kullanılmıştır. Yapılandırılmamış görüşmeler ilgili alanda derinlemesine bilgi edinilmesini sağlar (Büyükoztürk, Çakmak, Akgün, Karadeniz ve Demirel, 2008). Öğretmen adaylarına "Size göre Türkiye'de Almanca öğretimine ilişkin sorunları söyler misiniz?" sorusu yönlendirilmiştir. Veriler dersler başladıktan sonra dönem boyunca öğretmen adayları ile görüşmeler gerçekleştirilerek toplanmıştır.

Verilerin Analizi

Verilerin analizinde içerik analizi yöntemi kullanılmıştır. Birbirine benzeyen veriler belirli kavramlar ve temalar çerçevesinde bir araya getirilmiştir. Daha sonra veriler anlaşılabilir şekilde düzenlenerek yorumlar da bulunulmuştur (Yıldırım ve Şimşek, 2013). Araştırmada içerik analizi yollarından "genel bir çerçeve içinde yapılan kodlama" kullanılmıştır. Bu kodlamada daha önceden belirlenmiş temalara göre kodlama yapılır. Bu kodlama türü ayrıca temalar içerisinde alt temalar var ise onlara da yeni kodlar verilerek incelenir ve düzenlenir (Yıldırım ve Şimşek, 2013). Yapılan içerik analizine göre Almanca öğretmenliğinde öğrenim gören öğretmen adaylarının Türkiye'de Almanca öğretiminde yaşanan sorunlara ilişkin görüşlerinin "öğretim programları", "önem", "eğitim yönetimi", "öğretmen", "dilin özelliği" ve "öğrenci" ana temalarında toplandığı belirlenmiştir. Bu ana temalar içerisinde alt temaların yer aldığı da belirlenmiş ve ana temaların içinde yer alan alt temalara verilen cevapların tekrarlanma sıklığına (frekans) yer verilerek yorumlarda bulunulmuştur.

Bulgular

İçerik analizine göre oluşturulan temalar ve alt temalara ilişkin bulgular aşağıda verilmiştir:

Tablo 1. Öğretim Programları

Tema ve Alt Temalar	f	%
Öğretim Programları	69	93,2
Gramer ağırlıklı olması	11	15,9
Almanca'ya ayrılan ders saatinin yetersiz olması/az olması	7	9,46
Konuşmaya yönelik pratiğin olmaması	8	10,8
Pratiğe yer verilmemesi/Pratik eksikliği	7	9,46
Okumaya yönelik pratiğin olmaması	5	6,76
Yazmaya yönelik pratiğin olmaması	5	6,76
Dinlemeye yönelik pratiğin olmaması	4	5,41
Programın yetiştirilmeye çalışılması	4	5,41
Uygun öğretim yöntemlerinin kullanılmaması	5	6,76
Aktif öğrenmeye yer verilmemesi	4	5,41
Ders kitaplarının yetersiz olması	3	4,05
Kağıt üzerinde öğretilmeye çalışılması	2	2,7
Geleneksel öğretim yöntemlerinin kullanılması (eski yöntemler)	2	2,7
Derslerde ağırlıklı olarak anlatım yöntemlerinin kullanılması	1	1,35
Değerlendirmenin yazılı sınav sonuçlarına göre yapılması	1	1,35
Görüş belirtmeyen	5	6,76
Toplam	74	100

Tablo 1’de Almanca öğretmeni adaylarının öğretim programları teması kapsamında dil öğretimine ilişkin sorunlara yönelik görüşleri yer almaktadır. 37 Öğretmen adayının 34 ü bu konuda iki sorun ifade ederken bir öğretmen adayı bir, iki öğretmen adayı ise hiçbir görüş belirtmemiştir. Tablo incelendiğinde öğretmen adaylarının %15,9’u gramer ağırlıklı olmasının Almanca öğretimindeki temel sorunlarından birisi olarak görmektedir. %9,46 sı Almanca için ayrılan ders saatinin yetersiz olduğunu, %10,8’i konuşmaya yönelik pratiğin olmamasını, %9,46’sı pratiğe yer verilmemesini, %6,76’sı okumaya, %6,76’sı yazmaya, %5,41’i dinlemeye yönelik pratiğe yer verilmemesini Almanca öğretimindeki önemli sorunlardan kabul etmektedir. Öğretmen adaylarından %5,41’i programın yoğun olmasından dolayı yetiştirilmeye çalışılmasını, %6,76’sı uygun öğretim yöntemlerinin kullanılmamasını, %5,41’i aktif öğrenmeye yer verilmemesini, %4,05’i ders kitaplarının yetersiz olmasını Almanca öğretimindeki sorunlardan görmektedir. Öğretmen adaylarının %2,7’si Almancanın kağıt üzerinde öğretilmeye çalışılmasını, %2,7’si geleneksel öğretim yöntemlerinin kullanılmasını, %1,35’i derslerde ağırlıklı olarak anlatım yönteminin kullanılmasını, %1,35’i değerlendirmenin sadece yazılı sınavlar ile yapılmasını sorun olarak görmektedir.

Tablo 2. Önem

Tema ve Alt Temalar	F	%
Önem	23	62,16
Almanca'ya az önem verilmesi/az rağbet görmemesi	7	18,92
Türkiye’de İngilizce’nin birinci yabancı dil olarak kabul görmesi	6	16,22
Almancaya ilginin az olması	4	10,81
Dil öğretimine gereken önemin verilmemesi	2	5,41
İnsanların kullanmayacakları dili öğrenme isteğinin olmaması	1	2,70
Diğer derslerin (matematik, Fizik vb.) yanında önemsiz görülmesi	1	2,70
Almanca dersine (kendi dersine) öğretmenlerin önem göstermemesi	1	2,70
Okullarda Almanca dersine yer verilmemesi	1	2,70
Görüş belirtmeyen	14	37,84
Toplam	37	100

Tablo 2’ye göre Almanca öğretmeni adaylarının %62,16’sına göre Almanca diline verilen önemden kaynaklanan sorunlar söz konusudur. Öğretmen adaylarının %18,92’sine göre Almanca’ya az önem verilmesi/rağbet görmemesi, %16,22’sine göre İngilizce’nin öncelikli yabancı dil olarak kabul edilmesi, %10,81’ine göre Almanca’ya ilginin az olması Almanca öğretimindeki sorunların başında gelmektedir. Bu öğretmen adaylarının %5,41’ine göre Türkiye’de dil öğrenimine gereken önemin verilmemesi, %2,70’ine göre, insanların Almanca’yı kullanmayacakları bir dil olarak görmesi nedeni ile öğrenmek istememesi, %2,70’ine göre Almanca öğretmenlerinin kendi derslerine gereken önemi göstermemeleri %2,70’ine göre okullarda Almanca dersine yer verilmemesi Almanca öğretimindeki sorunlardandır.

Tablo 3. Öğretmen

Tema ve Alt Temalar	f	%
Öğretmen	19	51,35
Öğretmenlerin yetersiz olması	9	24,32
Öğretmenlerin Almanca konuşamaması	2	5,41
Dersin önemsiz görülmesinden dolayı öğretmenlerin boş vermiş olması	2	5,41
Anadili Almanca olan öğretmenlerden faydalanılmaması	1	2,70
Öğretmenlerin Almaya'yı görmemiş olmaları	1	2,70
Öğretmenler tarafından gerçek hayatta kullanımı ile ilişkilendirilmemesi	1	2,70
Öğretmenlerin bireysel farklılıkları dikkate almaması	1	2,70
Öğretmenin bilgilerini aktarabilme gücünün olmaması	1	2,70
Öğretmenler tarafından derslerin Türkçe işlenmesi	1	2,70
Görüş belirtmeyen	8	21,62
Toplam	37	100

Tablo 3'de görüldüğü üzere Almanca öğretmeni adaylarının %51,35'ine göre Almanca öğretiminde öğretmenlerden kaynaklı sorunlar bulunmaktadır. Hali hazırda görevde bulunan Almanca öğretmenlerinin yetersiz olması (%24,32'sine göre), bu temada yer alan en önemli sorun kaynağıdır. Almanca öğretmeni adaylarının %5,41'ine göre öğretmenlerin Almanca konuşamaması, %5,41'ine göre Almanca öğretmenlerinin boş vermişliği, %2,70'ine göre Anadili Almanca olan öğretmenlerden faydalanılmaması, %2,70'ine göre Öğretmenlerin Almancayı gerçek hayat ile ilişkilendirememeleri, %2,70'ine göre, öğretmenlerin bireysel farklılıkları dikkate almaması, %2,70'ine göre öğretmenlerin bilgilerini aktarabilme gücüne sahip olmaması, %2,70'ine göre öğretmenlerin dersleri Türkçe işlemeleri Almanca öğretimindeki sorunların kaynaklarındandır.

Tablo 4. Eğitim Yönetimi

Tema ve Alt Temalar	f	%
Eğitim Yönetimi	13	35,14
Sınıfların kalabalık olması	4	10,81
Okullardaki kaynak eksikliği	3	8,11
Küçük sınıflardan itibaren öğretilmeye başlanmaması/9. sınıftan başlaması	2	5,41
Okullardaki yetersizlikler	1	2,70
MEB'in sorunları tespit ederek gidermeye çalışmaması	1	2,70
Uzun vadeli planlamanın iyi bir şekilde yapılmaması	1	2,70
Almanca derslerinin tam olarak işlenmemesi (derslerin iptal edilmesi)	1	2,70
Görüş belirtmeyen	24	64,86
Toplam	37	100

Tablo 4'de görüldüğü üzere öğretmen adaylarının %35,14'üne göre Almanca öğretiminde yönetsel sorunlarda söz konusudur. Öğretmen adaylarından %10,81'ine göre sınıfların kalabalık olması, %8,11'ine göre okullardaki kaynak sıkıntıları, %5,41'ine göre küçük sınıflardan itibaren Almanca öğretimine başlanmaması, %2,70'ine göre okullardaki yetersizliklerin giderilememesi, %2,70'ine göre MEB'in sorunları tespit ederek gidermeye çalışmaması, %2,70'ine göre uzun vadeli planlamanın iyi bir şekilde yapılmaması, %2,70'ine göre de genellikle Almanca derslerinin tam olarak işlenmemesi (iptal edilmesi) Almanca öğretimindeki sorunlar arasında yer almaktadır.

Tablo 5. Dilin Özelliği

Tema ve Alt Temalar	f	%
Dilin Özelliği	10	27,03
Almancayı öğrenmenin zor olması	4	10,81
Kültürel farklılıklar	3	8,11
Şive farklılıkları	1	2,70
Almanca'nın zor bir dil olması	1	2,70
Türkçe ile aynı dil grubundan olmaması	1	2,70
Görüş belirtmeyen	27	72,07
Toplam	37	100

Tablo 5'de görüldüğü üzere öğretmen adaylarının %27,03'ü Almanca öğretiminde sorunlardan birisi olarak da "dil özelliği"ni görmektedir. Öğretmen adaylarından %10,81'ine göre Almanca öğrenmenin zor olması, %8,11'ine göre Alman ve Türk kültürleri arasındaki farklar, %2,70'ine göre şive farkları, %2,70'ine göre Almanca'nın zor bir dil olması ve %2,70'ine göre de Almanca ve Türkçe'nin aynı dil grubunda olmaması Almanca öğretimindeki sorunlar arasında yer almaktadır.

Tablo 6. Öğrenci

Tema ve Alt Temalar	f	%
Öğrenci	6	16,22
Öğrencilerin dil öğrenme korkusunun (ön yargılı olmaları) olması	3	8,11
Öğrencilerin Almanca Öğrenmeye Motive olmaması	3	8,11
Görüş belirtmeyen	31	83,78
Toplam	37	100

Tablo 6’da görüldüğü üzere Almanca öğretmeni adaylarının %16,22’sine göre “öğrenci” kaynaklı sorunlar Almanca öğretimine ilişkin sorunlar arasında önemli bir yere sahiptir. Öğretmen adaylarından %8,11’ine göre öğrencilerin dil öğrenme korkusunun başka bir ifade ile ön yargısının bulunması ve %8,11’ine göre ise öğrencilerin Almanca öğrenmeye motive olamaması bu tema altında yer alan sorunlardır.

SONUÇ VE TARTIŞMA

Almanca öğretmeni adaylarından Almanca öğretimine ilişkin sorunlara yönelik görüşlerinin alındığı bu araştırmada, öğretmen adaylarının öğretim programlarından kaynaklanan sorunlara ilişkin oldukça net görüşler ortaya koydukları görülmüştür. Öğretmen adaylarının %93’üne göre Almanca öğretim programından kaynaklı sorunların bulunduğu görüşündedir. Bu nedenle öğretmen adaylarının birinci sırada gösterdiği sorun “eğitim programları” temasını oluşturmaktadır. Özellikle derslerin gramer ağırlıklı olması ve ders saatlerinin yeterli olmaması ön plana çıkan sorunlardır. Bu sorunların yanı sıra dil öğretiminin temelini oluşturan okuma, yazma, binleme ve konuşma becerilerini arttırmaya yönelik pratik yapma çalışmalarına yer verilmemesi ve geleneksel öğretim yöntemlerinin kullanılarak, aktif öğrenmeye yönelik ve dil öğretimine uygun yöntem ve tekniklerin kullanılmaması da Almanca öğretimindeki önemli sorunlar arasında yer almaktadır. Akdoğan’a (2010) göre de dil öğretiminde ders saati sayısının az olması önemli bir sorundur. Karabacak’a (2018) göre de özellikle dil becerisinde önemli olan okuma, yazma, konuşma ve dinleme gibi alanlarda öğrencilerin pratik şansını bulamamaları önemli sorunlar arasında yer almaktadır.

Almanca öğretimindeki önemli sorunlardan birisi de Almanca diline önem verilmemesinden kaynaklanmaktadır. Bu nedenle ikinci tema ise “önem” olarak belirlenmiştir. İngilizcenin öncelikli dil olarak kabul edilmesinden dolayı Almancaya gereken önemin verilmediği, insanların kullanacakları bir dil olarak görmedikleri için Almancayı öğrenmek istemedikleri sonucuna ulaşılmıştır.

Öğretmen adaylarının yarısından fazlası Almanca öğretmenlerinden kaynaklanan sorunların bulunduğunu ifade etmiştir. Bu nedenle Almanca öğretimindeki sorunların kaynakların birisi olarak “Öğretmen” teması da üçüncü sırada yer almıştır. Almanca öğretmenlerinin Almanca’yı iyi bir şekilde konuşamamaları, bu öğretmenlerin boş vermişlikleri, Almancayı günlük yaşamla ilişkilendirememeleri ve derslerin Türkçe işlenmesi Almanca öğretimindeki sorunlar arasında yer almaktadır.

Öğretmen adaylarına göre bir diğer sorun teması “Eğitim Yönetimi”dir. Öğretmen adaylarının üçte biri Almanca öğretiminde yönetim kaynaklı sorunların bulunduğunu ifade etmiştir. Bu sorunların başında iyi bir planlama yapılamaması nedeni ile sınıfların kalabalık olması, okullara yeteri kadar kaynak sağlanamaması, Almanca öğretimine geç başlanması, Almanca derslerinin sık sık iptal edilmesi gelmektedir.

“Dilin özelliği” teması Almanca öğretimindeki beşinci sorun grubunu oluşturmaktadır. Öğretmen adaylarının üçte birine yakını Almanca dilinin sahip olduğu özelliklerden dolayı Almanca öğretiminde sorunlar yarattığı görüşündedir. Öğretmen adaylarına göre Almanca zor bir dildir ve bu nedenle öğrenmesi zordur. Ayrıca Alman ve Türk kültürleri arasındaki farklar ve her iki dilin ayrı dil gruplarından olması da dilin özelliğinden kaynaklanan sorunlar arasında gösterilmiştir.

Almanca öğretimine ilişkin sorunların altıncı ve son teması “öğrenci”dir. öğretmen adaylarının %16,22’sine göre öğrencilerden kaynaklı sorunlar bulunmaktadır. Bu sorunlar ise öğrencilerin dil öğrenmeye ilişkin ön yargıları ve dil öğrenmeye motive olamamalarından oluşmaktadır.

Öneriler

Araştırma sonuçlarına göre aşağıdaki önerilerde bulunulmuştur.

1. Almanca öğretiminde gramer ağırlıklı öğretimden uzaklaşılmalı, aktif ve dil öğretimine uygun yöntem ve teknikler kullanılmalıdır.

2. Özellikle konuşma, okuma, yazma ve dinleme becerilerini geliştirecek pratik yapma şansı öğrencilere tanınmalıdır.
3. Türkiye'deki birinci yabancı dil olarak İngilizcenin kabul görmesi diğer dillere verilen önemini etkilemektedir. Bu nedenle sadece İngilizcenin değil diğer dillerin ve bu dillerin öğrenilmesinin önemi üzerine çalışmalar gerçekleştirilmelidir.
4. Dersi veren öğretmenlerin Almancayı etkili bir şekilde konuşabilmeleri sağlanmalı, dersler Türkçe olarak işlenmemelidir. Özellikle bu konuda Almanya'da belirli bir süre bulunmuş öğretmenlerden faydalanma yoluna gidilebilir.
5. Yabancı dil öğretimine ilişkin uzun vadeli planlar yapılmalı, bu uzun vadeli planlar dikkate alınarak okullara gerekli kaynak sağlanmalıdır.
6. Dil öğretiminde öğrenilecek dile ilişkin özelliklerin daha net bir şekilde görülebilmesi için Avrupa Birliği projeleri kapsamında gerçekleştirilen öğrenci değişim programlarına ağırlık verilmelidir.
7. İmkânlar ölçüsünde öğrenilecek yabancı dilin kullanıldığı ülkelerden gelen konuşmacılardan faydalanılabilir.
8. Öğrencilerin yabancı dil öğrenmeye ilişkin sahip oldukları ön yargıları ortadan kaldıracak rehberlik programları geliştirilebilir ve uygulanabilir.
9. Benzer araştırmalar, farklı dil grupları ile ve diğer öğrenim kademesindeki öğrenciler, veliler ve öğretmenler ile gerçekleştirilebilir.

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OKUL ÖNCESİ ÖĞRETMEN ADAYLARINA GÖRE YÜKSEKÖĞRETİMİN SORUNLARI

OPINIONS OF PRE-SCHOOL TEACHER CANDIDATES ABOUT HIGHER EDUCATION PROBLEMS

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Özet

Eğitim Fakültesi Okul Öncesi Öğretmenliği Anabilim Dalı'nda öğrenim gören öğretmen adaylarının yükseköğretimdeki sorunlara ilişkin görüşlerini almaya yönelik olarak gerçekleştirilen bu araştırma durum belirlemeye yönelik olarak gerçekleştirilen nitel bir araştırmadır. 2018 güz döneminde öğrenim gören öğretmen adaylarından yapılandırılmamış görüşme formu kullanılarak veriler toplanmıştır. Örneklem 48 öğretmen adayından oluşturulmuştur. Verilerin analizinde içerik analizi yöntemi kullanılmış ve elde edilen bulgulara göre öğretmen adaylarının yükseköğretimde yaşanan sorunlara ilişkin görüşleri belirlenmiş bu konuda çözüm önerilerinde bulunulmuştur. Yapılan analizler sonucunda okulöncesi öğretmeni adaylarına göre yükseköğretimin sorunları “eğitim programları”, “sosyal yaşam”, “rehberlik”, “öğrenci”, “planlama”, “yönetim” ve “öğretim elemanları”, ana temalarından oluştuğu belirlenmiştir.

Anahtar Kelime: Yükseköğretim, Yükseköğretimin Sorunları, Eğitim Fakültelerinin sorunları,

Abstract:

This study was carried out to determine of opinions of pre-school teacher candidates about higher education' problems in Turkey. This research is held a kind of qualitative research that is a situation determination. The research' samplly has been determined according to typical sampling method which is a kind of aimed sampling methods. 48 pre-school teacher candidates who studied at education faculty in 2018 were in the samplly. A unstructured interview form was used to collect data.by researcher. The collected datas was analyzed through content analysis method. Occording to result of analyze, there were determined 7 main problems. Determined 7 main problems were consist of “curriculum”, “social life”, “guding” “student” “planing”, “manegement” and “lecturer”.

Keywords: Higher Education, higher education' problems, Education faculty's problems, Teacher Candidates' problems

GİRİŞ

Yükseköğretim bir ülkenin geleceğini inşa edecek olan nitelikli insan gücünün yetiştirilmesi açısından oldukça önemlidir. Bireylerin örgün eğitim kapsamındaki eğitim hayatının son dönemini teşkil eder. Her birey yükseköğretimden faydalanamayabilir. Sadece gerekli başarı ve becerilere sahip olanlar yükseköğretimde kendilerine yer bulabilirler.

Çok farklı coğrafyalardan ve kültürlerden öğrenciler geleceklere yön verecek eğitimi ilkökul yıllarından başlayarak en iyi şekilde alma eğilimindedirler. Gerek devlet gerekse özel öğretim kurumları da bu talebi karşılamak için çaba sarf etmektedir. Ancak Eğitim Reformu Girişimi, 2009 Eğitim İzleme Raporu (2010) Türkiye'deki tüm eğitim düzeylerinde kalite sorununun olduğunu ortaya koymaktadır. Bu kalite ve verimlilik sorununu kaldırmada Avrupa Birliği Eğitim Politikaları takip edilse de (Sağlam, Özdoğru ve Çayır, 2011) halen istenilen bir düzeye getirilemediği görülmektedir. Ülke çapında seçilmiş bireylerin bir arada bulunduğu yükseköğretim düzeyinde çözüme ulaştırılmayan sorunlar elbette ki olacaktır. Ama önemli olan bu sorunları en aza indirmek için çaba gösterilmesidir

Literatür incelendiğinde birçok araştırma, konferans, toplantı ve çalıştayların Türk Eğitimdeki Sorunlara yönelik olarak gerçekleştirildiği (Karabacak 2018; Erişti, Polat ve Erdem, 2018; Karataş ve Çakan, 2018; Abu Bacanak ve Gökdere, 2016; Sarıbaş ve Babadağ, 2015; Kösterelioğlu ve Bayar, 2014; Coşkun, 2013; Başdemir, 2012; Yılmaz ve Altinkurt, 2011, Gül, 2008) görülmektedir. Gedikoğlu (2005), Türk Eğitim Sistemi'nin okulöncesi, ilköğretim, ortaöğretim ve yükseköğretim kademelerinin her birinde sorunların bulunduğunu ortaya koymuştur. Abu, Bacanak ve Göktepe (2016), yapmış oldukları çalışmalarında Türk Eğitim Sistemi'nde yaşanan sorunları (1) genel sorunlar ve (2) öğretim kademelerine göre yaşanan sorunlar olmak üzere iki başlık altında toplanmıştır. Yılmaz ve Altinkurt'a (2011) göre bu kademelerden her hangi birinde görülen sorun, bütün kademelerde görülen ortak sorunlar olarak karşımıza çıkmaktadır. Yükseköğretim düzeyinde yapılan çalışmalarda yükseköğretim

müfredatının doğru ve bütüncül bir şekilde kurgulanmamış olması (Coşkun, 2013), yükseköğretime geçişte yapılan sürekli değişiklikler, programların ihtiyaç ve beklentilerin gözetilmeksizin paydaşlara danışılmaksızın bürokratik idare tarafından oluşturulması ve MEB ile yükseköğretimin eş güdüm içerisinde çalışmaması (Başdemir, 2012), yükseköğretimde barınma ve bilgi teknolojilerinden faydalanma (Gül, 2008), yükseköğretimde yer alan öğretim elemanların ne ölçüde donanımlı ve hazırlıklı olduklarının belirsizliği (Karabacak ve Öztunç, 2018; Erişti, Polat ve Erdem 2018) gibi sorunlar bulunmaktadır. Gerçekleştirilen bu araştırmada ise Okulöncesi öğretmenliğinde öğrenim gören öğretmen adaylarının yükseköğretimde yaşanan sorunlara ilişkin görüşlerini ortaya koymak amacı ile gerçekleştirilmiştir. Bu amaç doğrultusunda araştırmada aşağıdaki problem cümlesine cevap aranmaya çalışılmıştır

Problem Cümlesi

Okulöncesi öğretmenliği adaylarının Türkiye'deki yükseköğretimde yaşanan sorunlara ilişkin görüşleri nelerdir?

Araştırmanın Önemi

Öğretmen adayları öğrenci rolünden öğretmen rolüne doğru bir geçiş süreci yaşamaktadır. Yeşil ve Şahan'a (2015) göre de bu adaylar öğrenci rolünü üstlenmiş ve öğretmen rolünü üstlenecek bireylerdir. Öğretmen adaylarının halen yükseköğretimde olmalarından dolayı güncel sorunlar ile de sürekli karşı karşıya kaldıkları dikkate alındığında, hem öğrenci gözüyle hem de öğretmen adayı gözü ile yükseköğretimdeki sorunları en doğru şekilde ortaya koyacak bir kitleden görüşlerinin alınması anlamında araştırma önemli olarak görülmektedir.

Sınırlılıklar

Bu araştırma eğitim fakültelerinin okulöncesi öğretmenliği anabilim dalında 2018 güz döneminde öğrenim gören öğretmen adaylarının görüşleri ile sınırlıdır.

YÖNTEM

Araştırmanın Modeli, Evren, Örneklem,

Bu araştırma bir durum araştırması modeline göre gerçekleştirilmiştir. Durum araştırmaları nitel araştırma yöntemleri arasında yer alan, var olanı veya oluşmakta olanı inceleme fırsatı veren araştırmalardır (Glense, 2011; Christenson, Johnson ve Turner, 2015). Örneklem Eğitim Fakültesi, Okulöncesi Öğretmenliği Anabilim Dalı'nda öğrenim gören 48 Öğretmen adayından oluşmaktadır. Örneklem amaçlı örnekleme yöntemlerinden birisi olan tipik örnekleme yöntemine göre belirlenmiştir (Büyüköztürk, Çakmak, Akgün, Karadeniz ve Demirel, 2013).

Veri Toplama Araçları, Verilerin Toplanması ve Analizi

Veriler yapılandırılmamış görüşme formu kullanılarak toplanmıştır. Yapılandırılmamış görüşmede öğretmen adaylarına "sizce Türkiye'de yükseköğretimde yaşanan sorunlar nelerdir? Kendi yaşadıklarınızı da dikkate alarak genel bir değerlendirmede bulunabilir misiniz?" sorusu yöneltilmiştir. Görüşmeler derslerin başladığı ilk haftadan itibaren ders çıkışlarında ve öğrencilerin ders aralarında gerçekleştirilmiştir. Görüşme esnasında öğretmen adaylarının vermiş oldukları cevaplar görüşme formuna kayıt edilmiştir. Verilerin analizinde nitel veri analiz yöntemlerinden içerik analizi yöntemi kullanılmıştır.

BULGULAR

Aşağıda içerik analizi sonucunda elde edilen bulgulara yer verilmiştir:

Tablo 1. Eğitim Programları

Tema ve Alt Temalar	f	%
Eğitim Programları	34	70,83
Teorik/ezberci eğitime yer verilmesi	7	14,58
Derslerde uygulamalara az yer verilmesi	5	10,42
Mesleki odaklı eğitimin yetersiz olması	5	10,42
Belirgin bir sınav sisteminin olmaması	3	6,25
Devamsızlıktan kalma	2	4,17
Verilen eğitimin gerçek hayat ile ilişkilendirilmemesi	2	4,17
Yabancı dil öğretiminin iyi bir şekilde verilmemesi	2	4,17
Bölümlerle ilgisi olmayan derslere yer verilmesi	2	4,17
Araç, gereç ve materyal eksikleri	1	2,08
Yeterli düzeyde eğitimin verilmemesi	1	2,08
Gereksiz konularda da eğitim verilmesi	1	2,08
Dersliklerin uygun bir şekilde tasarlanmamış olmaması	1	2,08
Yeterli düzeyde donanıma sahip bireylerin yetiştirilememesi	1	2,08
Derslerin işlenişi	1	2,08
Görüş belirtmeyen	14	29,17
Toplam	48	100

Okulöncesi öğretmen adaylarının %70,83'üne göre yükseköğretimin sorunlarının başında eğitim programları ile ilgili sorunlar yer almaktadır. Öğretmen adaylarının %14,58'ine göre programların ezberci ve teorik eğitime göre yürütülmesi, %10,42'sine göre derslerde uygulamalara az yer verilmesi, %10,42'sine göre mesleki odaklı eğitimin yetersiz olması, %6,25'ine göre belirli bir sınav sisteminin olmaması bu alandaki önemli sorun kaynaklarındandır. Öğretmen adaylarının %4,17'si verilen eğitimin gerçek hayatta ilişkilendirilmemesini, %4,17'si devamsızlıktan kalmayı, %4,17'si yabancı dil öğretiminin iyi bir şekilde gerçekleştirilememesini, %4,17'si bölümlerle ilgisi olmayan derslere yer verilmesini sorun olarak görmektedir. Bu bulguların yanı sıra araç, gereç ve materyal eksikliğini (%2,08), yeterli düzeyde eğitimin verilmemesini (%2,08), gereksiz konulara eğitim verildiğini (%2,08), dersliklerin uygun bir şekilde tasarlanmamış olmasını (%2,08), yeterli düzeyde donanıma sahip bireylerin yetiştirilememesini (%2,08) sorun olan olarak ifade eden öğretmen adayları olmuştur.

Tablo 2. Sosyal Yaşam

Tema ve Alt Temalar	f	%
Sosyal Yaşam	12	37,5
Sosyal etkinlik ve faaliyetlere yer verilmemesi	5	10,42
Sanatsal alanların yetersizliği	2	4,17
Kulüplerin aktif bir şekilde faaliyet göstermemesi	1	2,08
Öğrenciler için sosyal alanların olmaması	1	2,08
Alanında tanınmış/ünlü kişilerin söyleşilerine yer verilmemesi	1	2,08
Sosyalleşme ortamlarının olmaması	1	2,08
Öğrencilerin kendini ifade edebileceği ortamların oluşturulmaması	1	2,08
Görüş belirtmeyen	36	62,5
Toplam	48	100

Öğretmen adaylarına göre yükseköğretime ilişkin sorunlardan ikincisi “sosyal yaşam”dır. Öğretmen adaylarının %37,5'ine göre yükseköğretimde sosyal yaşama ilişkin sorunlar bulunmaktadır. Bu öğretmen adaylarından %10,42'sine göre yükseköğretimde sosyal etkinlik ve faaliyetlere yer verilmemesi, %4,17'sine göre sanatsal alanların yetersizliği, %2,08'ine göre öğrenci kulüplerinin aktif bir şekilde faaliyet göstermemesi, %2,08'ine göre öğrenciler için sosyal alanların olmaması, %2,08'ine göre alanında tanınmış kişilerin söyleşi ve konferanslarda bulunmamaları, %2,08'ine göre sosyalleşme ve öğrencilerin kendilerini rahatlıkla ifade edebilecek yerlerin olmaması önemli sorunlar arasında yer almaktadır.

Tablo 3. Rehberlik

Tema ve Alt Temalar	F	%
Rehberlik	12	37,5
Oryantasyon/uyum	3	6,25
Öğrencilerin soruları ile ilgilenilmemesi/görüşülmemesi	2	4,17
Öğrencilere psikolojik destek verilmemesi	2	4,17
Mesleki hayatta karşılaşılabilecek sorunlara ilişkin bilgi verilmemesi	1	2,08
Kişisel gelişimin sağlanamaması	1	2,08
Hayata atılacak öğrencilere bu konuda destek verilmemesi	1	2,08
Öğrencilerin istediği alana yönlendirilmemesi	1	2,08
Mezunların sahip olduğu iş bulma kaygısı	1	2,08
Görüş belirtmeyen	36	62,5
Toplam	48	100

Öğretmen adaylarına göre yükseköğretimin sorunlarından birisi de “rehberlik” konusudur. Öğretmen adaylarının %37,5'ine göre yükseköğretimde “rehberlik” konusunda sorunlar bulunmaktadır. Bu sorunların başında da oryantasyon/uyum (%6,25) sorunu gelmektedir. Bu sorunun yanı sıra öğrencilerin sorunları ile ilgilenilmemesi, öğrenci sorunlarının görüşülmemesi (%4,17) ve öğrencilere psikolojik destek verilmemesi (%4,17) de önemli sorunlardandır. Ayrıca öğretmen adaylarının %2,08'ine göre, öğrencilerin mesleki hayatlarında karşılaşılabilecek sorunlar hakkında bilgi verilmemesi, %2,08'ine göre kişisel gelişimin sağlanamaması, %2,08'ine göre, öğrencilerin istediği alana yönlendirilmemesi ve %2,08'ine göre de mezunların sahip olacağı iş bulma kaygısını gidermeye yönelik çalışmaların yapılmaması bu alandaki diğer sorunları oluşturmaktadır.

Tablo 4. Öğrenci

Tema ve Alt Temalar	F	%
Öğrenci	13	27,08
Siyasi yapılanmanın/gruplaşmanın öğrenciler arasında etkin olması	3	6,25
Siyasi olaylara öğrencilerin karışması	2	4,17
Öğrencilerin farklı fikirlere kapalı olmasının yarattığı sorunlar	2	4,17
Öğrencilerin kendilerini geliştirmeye çalışmaması	1	2,08
Farklı ülkelerden gelenler ile kültür çatışması	1	2,08
Sadece mesleki bilgi edinme amacı taşıyan öğrenciler	1	2,08
Maddi kaygılar nedeni ile bölüm seçilmesi (istediği değil, iş imkanı olan)	1	2,08
Gelecek kaygısı taşıyan öğrencilerin olması	1	2,08
Öğrencilerin maddi olarak sıkıntıları	1	2,08
Görüş belirtmeyen	35	72,92
Toplam	48	100

Tablo 4’de görüldüğü üzere öğretmen adayların %27,08’ine göre yükseköğretimde “öğrenci” kaynaklı sorunlar bulunmaktadır. Bu öğretmen adaylarından %6,25’ine göre siyasi yapılanma/gruplaşmanın öğrenciler arasında etkin olması, %4,17’sine göre öğrencilerin siyasi olaylara karışması, % 4,17’sine göre ise öğrencilerin farklı fikirlere kapalı olması “öğrenci” teması içerisinde yer alan sorunlardır. Öğretmen adaylarının %2,08’i öğrencilerin kendilerini geliştirmeye çalışmamasını, %2,08’i farklı ülkelerden gelen öğrenciler arasında fikir çatışmasının bulunmasını, %2,08’i sadece mesleki bilgi edinmeye çalışan öğrencilerin olmasını, %2,08’i maddi kaygılardan dolayı öğrencilerin bölüm seçmek zorunda kalmalarını, %2,08’i öğrencilerin maddi sıkıntılar içerisinde olmasını ve %2,08’i de gelecek kaygısı taşıyan öğrencilerin bulunmasını sorun olarak görmektedir.

Tablo 5. Planlama

Tema ve Alt Temalar	f	%
Planlama	11	22,92
Ders saatleri arasında geniş zaman olması	8	16,67
Yerleştirme kontenjanlarının düşürülmesi	1	2,08
Bazı bölümlere çok fazla öğrenci alınması	1	2,08
Meslek, iş ve kariyer arayışını öne çıkartan sistem	1	2,08
Görüş belirtmeyen	35	72,92
Toplam	48	100

Okul öncesi öğretmeni adaylarının %22’si yükseköğretimde “planlama” konusunun önemli bir sorun olduğu görüşündedir. Bu öğretmen adaylarının %16,67’si ders saatleri arasında geniş zaman aralıklarının bırakılmasını, %2,08’i üniversiteye yerleştirme kontenjanlarının düşürülmesini, %2,08’i bazı bölümlere çok fazla öğrenci alınmasını ve %2,08’i meslek, iş ve kariyer arayışını ön plana çıkartan sistemi sorun olarak görmektedirler.

Tablo 6. Yönetim

Tema ve Alt Temalar	f	%
Yönetim (Üniversite/Fakülte)	11	22,92
Üniversitelerin kalitesi/niteliğinin arttırılamaması	5	10,47
Yükseköğretime yapılan yatırımların yetersiz olması	3	6,25
Öğrenci işleri ile ilgili hizmetlerin yetersiz olması	2	4,17
Belirsizlik yaratan kararlar verilmesi	1	2,08
Görüş belirtmeyen	37	77,08
Toplam	48	100

Öğretmen adaylarının %22,92’sine göre “yönetimsel” sorunlar yükseköğretimde yer almaktadır. Bu öğretmen adaylarının %10,47’si üniversitelerin kalitesi/niteliğinin arttırılamamasını, %6,25’i yükseköğretime yapılan yatırımların yetersiz olmasını, %4,17’si öğrenci işleri ile ilgili hizmetlerin yetersiz olmasını ve %2,08’i belirsizlik yaratan kararların yöneticiler tarafından alınmasını sorun olarak görmektedir.

Tablo 7. Öğretim Elemanları

Tema ve Alt Temalar	f	%
Öğretim Elemanları	7	14,58
Akademisyenlerinin egolarının yüksek olması	2	4,17
Hocalara ulaşmada zorlukların yaşanması	2	4,17
Öğretmenlerin hiç öğrenci olmamış gibi davranmaları	1	2,08
Bilgi bakımından yetersiz olmaları	1	2,08
Öğrencilerin bireysel farklılıklarının dikkate alınmaması	1	2,08
Görüş belirtmeyen	41	85,42
Toplam	48	100

Öğretmen adaylarının %14,58'sine göre bir diğer sorun öğretim elemanlarından kaynaklanan sorunlardır. Öğretmen adaylarının %4,17'sine göre akademisyenlerin egolarının yüksek olmasını, %4,17'sine göre öğrencilerin hocalara ulaşmada zorluklar yaşamasını, %2,08'i hocaların hiç öğrenci olmamış gibi davranmalarını (empati yapmamasını), %2,08'i öğretim elemanlarının bilgi aktarımında yetersiz olmalarını ve %2,08'i ise öğretim elemanlarının öğrencilerin bireysel farklılıklarını dikkate almamasını sorun olarak görmektedir.

SONUÇ VE TARTIŞMA

Eğitim Fakültesi Okulöncesi Öğretmenliği Anabilim Dalı'nda öğrenim gören öğretmen adaylarının yükseköğretimdeki sorunlara ilişkin görüşlerini almaya yönelik olarak gerçekleştirilen bu çalışmada, 2018 güz döneminde öğrenim gören öğretmen adaylarından yapılandırılmamış görüşme formu kullanılarak veriler toplanmıştır. Örneklem 48 öğretmen adayından oluşmaktadır. Verilerin analizinde içerik analizi yöntemi kullanılmış ve elde edilen bulgulara göre aşağıdaki sonuçlara ulaşılmıştır:

Okulöncesi öğretmen adaylarına göre yükseköğretimin sorunlarının başında “eğitim programları” kaynaklı sorunlar yer almaktadır (%70,83). Programların teorik ve ezberci bir şekilde yürütülmesi, mesleki bilgi bakımından yeterli olmaması, uygulamalara az yer verilmesi, verilen eğitimin gerçek hayatla ilişkilendirilmemesi, ölçme ve değerlendirme sisteminin doğru bir şekilde yürütülmemesi “eğitim programları” temasının barındırdığı önemli sorunlardandır. Karabacak ve Öztunç (2018) yapmış oldukları çalışmada benzer sonuçlara ulaşmıştır. Ancak sadece yükseköğretim değil Türk eğitim sisteminin temel sorunları arasında eğitim programlarının niteliği (Yeşil ve Şahan, 2015) ve eğitimde program geliştirme (Özyılmaz, 2013) oluşturmaktadır. Araştırmanın bu temaya ait sonuçları da hem Özyılmaz'ın hem de Yeşil ve Şahan'ın araştırma sonuçlarını destekler niteliktedir.

Öğretmen adaylarına göre yükseköğretime ilişkin sorunlardan ikincisini “sosyal yaşam” ana başlığı altında toplanmaktadır. Sosyal etkinlik ve faaliyetlere yeterli düzeyde yer verilmemesi, sanatla uğraşan öğrenciler için sanatsal alanların bulunmaması, öğrenci kulüplerinin aktif bir şekilde çalışmaması önemli sorunlardandır. Karabacak ve Öztunç'un (2018) araştırmasında da “sosyal yaşam” konusu ön plana çıkmıştır. O çalışmada özellikle sosyal faaliyetlerin olmaması ve sosyal kulüplerin önemsenmemesi ve işlenmesi ortaya konmuştur.

Yükseköğretimde karşılaşılan sorunlardan bir diğeri de “Rehberlik” konusudur. Oryantasyon/uyum, öğrencilerin sorunları ile ilgilenilmemesi ve dikkate alınmaması, mesleki ve psikolojik destek verilmemesi, öğrenim hayatı sonrası ile ilgili olarak rehberlik ve yönlendirmelerde bulunulmaması bu başlık altında ele alınan sorunlardan olduğu sonucuna ulaşılmıştır. Karabacak ve Öztunç'un (2018), araştırmasında da bu sonuçlara benzer sonuçlara ulaşılmıştır. Çok daha önce yapılan çalışmalarda da Türkiye'de eğitimde öğrenci kişilik hizmetleri (Özyılmaz, 2013) ve rehberlik (Yılmaz ve Akkurt, 2011) konusunda sorunlar olduğu ortaya konulmuştur. Bu araştırma da elde edilen bu sonuçları destekler niteliktedir.

Elde edilen bulgulara göre dördüncü ana başlığı “öğrenci” kaynaklı sorunlar oluşturmaktadır. Öğrencilerin siyasi faaliyetlerde bulunmaları ve buna bağlı olarak gruplaşmaları, öğrencilerin fikir ayrılıklarını doğal olarak karşılamamaları, öğrencilerin kendilerini geliştirmeye çalışmaması ve sadece mesleki anlamdaki bilgileri önemsemeleri bu alandaki önemli sorunlar arasında yer almaktadır. Ulaşılan bu sonuç Karabacak ve Öztunç'un (2018) araştırmasında elde edilen sonuçlar ile paralellik göstermektedir.

Yükseköğretimde “planlama” konusunda da sorunlar bulunmaktadır. Ders programlarının zamansal olarak doğru bir şekilde oluşturulmaması, doğru bir şekilde kontenjanların belirlenememesi ve bu nedenle bazı bölümlere gereğinden fazla öğrenci alınmaması bu alanda ortaya çıkan sorunlar arasında yer almaktadır. Bu araştırma sonucunda elde edilen “planlama” teması ile ilgili sonuçlar Karabacak ve Öztunç'un (2018) elde ettiği sonuçlar ile de örtüşmektedir. Yılmaz ve Akkurt'da (2011) özellikle insan gücü planlamasında sorunlar olduğu görüşündedir. Bu durum aynı zamanda Nartgün'ün (2008) ifade ettiği gibi YÖK ve Milli Eğitim Bakanlığı'nın eş güdüm içinde hareket etmemesinden dolayı da kaynaklanıyor olabilir.

“Yönetim” ile ilgili sorunlar da yükseköğretimde yer almaktadır. Üniversitelerin kalitesinin/niteliğinin arttırılamaması, yükseköğretime yapılan yatırımların yetersiz olması, öğrenci işleri ile ilgili hizmetlerin yetersizliği ve belirsizlik yaratan kararların yöneticiler tarafından alınması bu alandaki önemli sorunlardır. Bu bulgular Karabacak ve Öztunç’un (2018) elde ettiği sonuçlar ile de örtüşmektedir. Özyılmaz’a göre de (2013) Türk eğitim sisteminde ideolojik yaklaşım ve eğitim yönetimi sorunu bulunmaktadır. Başdemir’e (2012) göre de sürekli ve ani yapılan değişiklikler istikrarsızlığı sağlayan nedenlerdendir.

Son ana başlık ise “öğretim elemanları” kaynaklı sorunlardan oluşmaktadır. Öğretim elemanlarının yüksek egolu ve ulaşılmaz olmaları, hiç öğrenci olmamış gibi davranmalarını, başka bir ifade ile empati yapmamaları bu konu başlığı altında yer alan önemli sorunlardır. Ayrıca öğretim elemanları ile ilgili olarak bu başlık altında değerlendirilen iki nokta ise derslerdeki bilgi aktarımında yetersiz kalmaları ve öğrencilerin bireysel farklılıklarının dikkate alınmaması da önemli noktalar. Bu başlık altında elde edilen sonuçlar Karabacak ve Öztunç’un (2018) elde ettiği sonuçların bir bölümü ile örtüşmektedir. Öncelikli olarak öğretim elemanlarının mütevazı olmaları ve niteliklerinin yüksek olması gerekmektedir. Öztürk tarafından da (2010) istenen nitelikteki öğretmenleri yetiştirememenin temelinde öğrencilerin yanı sıra öğretim elemanlarının niteliğinin de önemli olduğu vurgulanmaktadır.

Sonuç olarak gerçekleştirilen bu araştırma da okulöncesi öğretmen adaylarına göre yükseköğretimde (1) eğitim programları, (2) sosyal yaşam, (3) rehberlik, (4) öğrenci, (5) planlama, (6) yönetim ve (7) öğretim elemanlarından kaynaklanan sorunlar söz konusudur. Elde edilen bu yedi ana başlık Karabacak ve Öztunç’un (2018) yapmış oldukları araştırma sonuçlarına ile birebir örtüşmektedir. Ancak Karabacak ve Öztunç’un 2018’de yapmış oldukları araştırmada “fiziki imkânlar ve donanım” ile “yerleşke” sorunlarının da yer aldığı görülmektedir.

Öneriler

1. Yükseköğretim için oluşturulan eğitim programları sadece teoride kalmamalı uygulamaya yönelik içeriğe de sahip olacak şekilde tasarlanmalıdır.
2. Öğrencilerin spor, sosyal ve kültürel aktivitelerde bulunabileceği ve hatta sanat ile ilgilenen öğrencilerin sanatsal faaliyetlerini rahatlıkla yürütebileceği fiziki mekânlar oluşturulmalıdır. Ayrıca öğrenci kulüplerinin acil olarak aktif bir şekilde işe koşulması gerektiği söylenebilir.
3. Öğrencilere üniversite ve çevresi ile ilgili doğru bir şekilde oryantasyon eğitimleri verilmelidir. Ayrıca eğitim süreci içerisindeki imkânlar ve fırsatlar ile mezuniyetlerinin ardından karşılaşılabilecekleri durum ve fırsatlar hakkında bilgi verilmelidir. Hatta bunun için bir ders önerilebilir. Bu derslerde iş alanlarında uzman kişilerden de faydalanılabilir.
4. Öğrencilerin, öncelikleri konusunda bilinçlendirilmesi yükseköğretimde istenen düzeye ulaşılmasında etkili olabilir.
5. İyi ve doğru bir şekilde planlama yapılmalıdır. Uzun ve kısa vadede eğitimin planlanmasında kalkınma planlarında yer alan faktörler başta olmak üzere diğer birçok unsurun dikkate alınması oldukça faydalı olabilir.
6. Öğretim elemanlarının öğrenciler ile sağlıklı bir şekilde iletişim kurmalarını sağlayacak ortamlar oluşturulabilir veya yollar geliştirilebilir. Ayrıca öğretim elemanlarının kendilerini geliştirmeleri için fırsatlar sağlanabilir.
7. Kamu/özel kurum ve kuruluşlarında veya sivil toplum örgütlerinde görevli olan kişiler, öğretim üyeleri ve öğretmenler ile benzer araştırmalar gerçekleştirilebilir.

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ÖĞRETMENLERİN ÖZ-YÖNETİMLİ ÖĞRENME DÜZEYLERİNİN ÇEŞİTLİ DEĞİŞKENLER AÇISINDAN İNCELENMESİ

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ÖZET

Bu çalışmada öğretmenlerin Öz-Yönetimli Öğrenme düzeyleri cinsiyet, branş ve kıdem değişkenlerine göre farklılıklar bulunup bulunmadığı araştırılmıştır. Araştırmanın örneklemini 2017-2018 eğitim-öğretim yılında Kocaeli/Kartepe’ de ilkököl ve ortaokulda görev yapan 233 kadın ve 130 erkek olmak üzere toplam 363 öğretmenden oluşmaktadır. Öğretmenlerin öz-yönetimli öğrenme düzeylerine değerlendirildiğinde, yaşam boyu öğrenme sürecinde bireysel gelişimlerini desteklemek amacıyla en çok sanat ve sosyo-kültürel etkinliklere (Satranç, sinema, tiyatro, halk oyunları, enstrüman, konser, ebru...) yöneldiği, mesleki gelişimlerini desteklemek için ise öncelikli olarak seminer, hizmet-içi ve uzaktan eğitimlere katıldıkları tespit edilmiştir.

ABSTRACT

In this study, it was investigated whether teachers “Self-Directed Learning” levels differed according to gender, branch and seniority variables. In the 2017-2018 academic year, the sample consists of a total of 363 teachers, including 233 women and 130 men, who worked in primary and secondary schools in Kocaeli/Kartepe. Teachers self-directed learning levels were evaluated when the process of lifelong learning in order to support their individual development in most artistic and socio-cultural activities (Chess, cinema, theatre, folk dances, instruments, concert, marbling,...) towards their professional development as a priority to support seminars, in-service and participating in remote training have been identified.

GİRİŞ

Hosmer (1847) kendi kendine eğitimi öğrenenin özelliklerine özellikle inisiyatif almasına bağlamaktadır. Lindeman, bireylerin öğrenmedeki öz-yönetimlerinin tek başına olamayacağını ve grup veya ortamdaki diğerlerinin eylemlerini ve ihtiyaçlarını dikkate alması gerektiğini ileri sürmektedir. Lindeman’ın vurgusu, literatürde özerklikle ilgili yaygın bir yanlış anlaşılmayı aydınlatır, yani özerk bir insan izole edilmiş çalışan ve başkaları tarafından manipüle edilmeyen kişi olması öz-yönetimle yanlış ilişkilendirilmiştir. Öz yönetimli ile ilgili özerklik, bireysel inisiyatif, motivasyon ve gelişim için seçimleri kontrol etme yeteneğinden kaynaklanan etkinliği artırmak için başkalarıyla birlikte çalışmayı amaçlayan bir faaliyettir veya kendini yönlendirme, kendini yönetme ve öğrenmeyi öğrenme, özerk öğrencinin inisiyatif gösterme, motivasyon, öğrenme süreçlerinin kontrolünü kabul etmeyi göstermesi ve proaktif olması, fikir üretmesi ve artan öz-yeterlilik için öğrenme fırsatlarına katılması anlamına gelir (Boud, 1988).

Houle’nin (1961) öz-yönetimli öğrenmenin izole edilerek gerçekleşmediği, ancak çevre ile etkileşim içinde olduğu ve insanların öğrenmeye katılımında ve sorumluluk almada üç kategorik nedeni olduğunu sonucuna vardı: a) eğitimi bir amacı gerçekleştirmek veya hedeflerine ulaşmak için kullanan hedef odaklı (b) sosyal faaliyetlere katılmak için faaliyet odaklı (c) yeni içerik öğrenme gereksinimi veya isteği ile uyarılmış öğrenme odaklı . Bununla birlikte, yetişkin öğrenme çabaları çalışmasında öz-yönetimli öğrenme için temel tanımlar ve varsayımlar sağlamaya başlayan Houle’in doktora adayı Tough (1971) idi. Tough araştırmasında, yetişkin öğreniminin sadece %70’inden fazlasının kendi kendine planlandığını ve yetişkinlerin kendi öğrenmelerini seçme, planlama ve yürütme konusunda oldukça yetenekli olduğunu keşfetti (Lew, 2006). Öz-yönetimli öğrenme, Tough’un öğrenme projeleri araştırmasının bir uzantısıdır. Tough’ a göre (1971), bir öğrenme projesini tanımlanmış bir bilgi ya da beceri alanı kazanmak ya da elde tutmak ya da başka bir şekilde değiştirmek için kasıtlı bir çabadır. Kidd’e (1973) göre, öz yönetimli öğrenme bir sonuç veya üründür. Kidd tarafından öz-yönetimli öğrenme’nin odağı, bir öğretmenin öz-yönetimli bir öğrenen olmasını istemeyi önermek gibi başkalarının veya öğrenenin arzulanan sonucu , nihai hedefi olarak belirlemiştir. Bu çalışmada öğretmenlerin Öz-Yönetimli Öğrenme düzeyleri cinsiyet, branş ve kıdem değişkenlerine göre farklılıklar bulunup bulunmadığı araştırılmıştır.

YÖNTEM

Araştırmanın çalışma grubu, 2017-2018 eğitim-öğretim yılında, Kocaeli/Kartepe ilçesinde ilköğretim ve ortaokulda görev yapan 233 kadın ve 130 erkek olmak üzere toplam 363 öğretmenden oluşmaktadır. Öğretmenlerin branşlarına bakıldığında 152'si (%41.9) sözel (din kültürü, İngilizce, okul öncesi, rehberlik, sosyal bilgiler, Türkçe), 83'ü (% 22.9) sayısal (fen bilimleri, matematik) 54'ü (%14.9) yetenek (beden eğitimi, bilişim, görsel sanatlar, müzik, teknoloji ve tasarım) 74'ü (%20.4) sınıf öğretmenlerinden oluşmaktadır. Öğretmenlerin kıdemlerine bakıldığında 85'i (%23.4) 1-5 yıl, 115'i (%31.7) 6-10 yıl, 65'i (%17.9) 11-15 yıl, 53'ü (%14.6) 16-20 yıl, 45'i (%12.4) 21 yıl ve üzerinde görev yapmaktadırlar.

Öz-yönetimli öğrenme ölçeği (ÖYÖÖ)

Çelik ve Arslan (2016) tarafından Türkçeye uyarlanan Öz-yönetimli Öğrenme Ölçeği'nin (Self-directed Learning Scale) uyarlanması sürecinde, çeviri aşamasında en çok tercih edilen ileri-geri çeviri işlemi uygulanmıştır. Bu işleme göre ilk olarak orijinal dilden (İngilizce) hedef dile (Türkçe) çeviri yapılmıştır. Bunun akabinde hedef dilden (Türkçe) orijinal dile (İngilizce) yeniden çeviri yapılmış ve orijinaliyle karşılaştırılmıştır. Bu sayede, Türkçe çevirideki hatalar, anlamdaki farklılıklar göz önünde bulundurularak kolaylıkla tespit edilmiş ve tam uzlaşma sağlanarak çeviri işlemi tamamlanmıştır (Çelik ve Arslan, 2016). Çeviri sürecinin ardından 25 İngilizce öğretmeni üzerinde yürütülen dilsel eşdeğerlik çalışması uygulanmıştır. Bir hafta arayla ilk önce ölçeğin İngilizce formu daha sonra ise Türkçe formu e-posta yoluyla katılımcı öğretmenlere gönderilerek uygulanmış ve uyarlanan ölçeğin orijinal ölçeğe eşdeğer olduğu tespit edilmiştir. Son olarak ise daha kapsamlı bir örneklem üzerinde ölçeğin güvenilirlik ve geçerlik çalışması yapılmıştır (Çelik ve Arslan, 2016).

BULGULAR

Öğretmenlerin öz-yönetimli öğrenme düzeylerine ait bulgular Tablo 1'de verilmiştir.

Tablo 1 Öğretmenlerin Öz-Yönetimli Öğrenme Düzeylerine Ait Bulgular

	N	Minimum	Maximum	Mean	Std. Deviation
Öz-Yönetimli Öğrenme Düzeyi	363	2,76	4,88	4,0287	,40319
Valid N (listwise)	363				

Tablo 1' a göre öğretmenlerin öz-yönetimli öğrenme düzeyi $X=4,02$ düzeyindedir.

Öğrenme ihtiyaçları alt boyutu açısından kadın ve erkek öğretmenler arasında anlamlı bir farklılığın tespiti için yapılan Mann-Whitney U testine ilişkin istatistikler Tablo 2'de verilmiştir.

Tablo 2 Öğrenme İhtiyaçları Alt Boyutu Açısından Kadın Ve Erkek Öğretmenler Arasındaki Farklılığa İlişkin Mann-Whitney U Testi İstatistikleri

	Grup	N	Ortalama	Ss	SH	U	P
Öğrenme İhtiyaçları	Kadın	233	4.4464	0,73479	0,04814	14.018.500	0,229
	Erkek	130	4.3477	0,54761	0,04803		

Tablo 2'e göre kadın ve erkek öğretmenler arasında öğrenme ihtiyaçları alt boyutu açısından anlamlı bir farklılık tespit edilmemiştir ($U=14.018.500$, $p>.05$).

Öğrenme ihtiyaçları alt boyutu açısından branşları farklı öğretmenler arasında anlamlı bir farklılığın tespiti için yapılan Kruskal-Wallis testine ilişkin istatistikler Tablo 3'de verilmiştir.

Tablo 3 Öğrenme İhtiyaçları Alt Boyutu Açısından Branşları Farklı Öğretmenler Arasındaki Farklılığa İlişkin Kruskal-Wallis Testi İstatistikleri

Branşlar	N	Ortalama	Ss	χ^2	sd	P
Sözel Branşlar	152	4.4553	0,82034	1.943	3	0,584
Sayısal Branşlar	83	4.4145	0,50344			
Yetenek Branşları	54	4.2889	0,54207			
Sınıf Öğretmenliği	74	4.4054	0,59309			

Tablo 3' e göre öğrenme ihtiyaçları alt boyutu açısından branşları farklı öğretmenler arasında anlamlı bir farklılık tespit edilmemiştir ($\chi^2(3) = 1.943$, $p>.05$).

Öğrenme ihtiyaçları alt boyutu açısından kıdemleri farklı öğretmenler arasında anlamlı bir farklılığın tespiti için yapılan Kruskal-Wallis testine ilişkin istatistikler Tablo 4’de verilmiştir.

Tablo 4 Öğrenme İhtiyaçları Alt Boyutu Açısından Kıdemleri Farklı Öğretmenler Arasındaki Farklılığa İlişkin Kruskal-Wallis Testi İstatistikleri

Kıdem	N	Ortalama	Ss	χ^2	Sd	P
1 ile 5 yıl arası	85	4.3576	0,5127			
6 ile 10 yıl arası	115	4.4800	0,49828			
11 ile 15 yıl arası	65	4.3415	0,58387	3.337	4	0,503
16 ile 20 yıl arası	53	4.3509	0,56556			
21 yıl ve üzeri	45	4.5067	1,26821			

Tablo 4’e göre öğrenme ihtiyaçları alt boyutu açısından kıdemleri farklı öğretmenler arasında anlamlı bir farklılık tespit edilmemiştir ($\chi^2(4) = 3.337, p>.05$).

SONUÇ, TARTIŞMA VE ÖNERİLER

Bu çalışmada öğretmenlerin öz-yönetimli öğrenme becerileri cinsiyet, branş ve kıdem açısından incelenmiştir. Cinsiyet değişkeni açısından kadın ve erkek öğretmenler arasında anlamlı farklılık bulunamamıştır. Araştırmanın cinsiyet açısından sonuçları bir çok araştırmayla tutarlıdır. Araştırmanın sonucu branş değişkeni açısından değerlendirildiğinde sadece süreci değerlendirme boyutu açısından anlamlı bir farklılık tespit edilmiştir. Sınıf öğretmenleri süreci değerlendirme boyutu açısından sözel branş öğretmenlerinden daha yüksektir. Bu durum sınıf öğretmenlerinin branş öğretmenlerine nazaran branşlarından kaynaklanan öğretim hayatlarındaki süreci değerlendirme sürekliliğini öğrenin yaşamlarına yansıtması şeklinde yorumlanabilir. Çalışmanın sonucu kıdem değişkeni bakımından değerlendirildiğinde; yine kıdemleri farklı öğretmenlerin süreci değerlendirme boyutu açısından aralarında anlamlı bir farklılık tespit edilmiştir. 21 yıl ve üzeri kıdemi olan öğretmenler, 6-10 kıdemi olan öğretmenlerden süreci değerlendirme boyutu açısından yüksektir. Bu durum mesleki tecrübe arttıkça öğretmenlerin kendi öğrenmelerinde süreci daha iyi değerlendirebildikleri şeklinde yorumlanabilir. Ayrıca, öğrenme ihtiyaçları boyutu açısından kadın ve erkek öğretmenlerin arasında anlamlı bir farklılık tespit edilmemiştir. Öğrenme ihtiyaçları boyutu açısından branşları farklı öğretmenler arasında anlamlı bir farklılık tespit edilmemiştir. Kıdemleri farklı öğretmenlerin öğrenme ihtiyaçları boyutu açısından aralarında anlamlı bir farklılık tespit edilmemiştir. Kadın ve erkek öğretmenlerin beceri kullanma boyutu açısından arasında anlamlı bir farklılık tespit edilmemiştir. Araştırma kapsamında, öz-yönetimli öğrenme öğretmenlerin çok hakim olduğu bir öğrenme süreci değildir. Öz-yönetimli öğrenme kavramı açısından öğretmenler için daha iyi anlaşılması için hem kendi bireysel ve mesleki gelişimleri hem de öğrencilerine bu yeterlilikleri kazandırmak adına öğretmenlere bu kavramları ve daha fazlasını tanıttıkları etkinlikler düzenlenebilir ve seminerler verilebilir.

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MEDYA VE TOPLUMSAL DEĞİŞİM KARŞISINDA AİLENİN DÖNÜŞÜMÜ

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ÖZET

Günümüzde aile kurumunda hızla değişimler yaşanmaktadır. Bununla birlikte ailedeki roller, fonksiyonlar ve yapısal faktörler yeniden inşa edilmektedir. Kurumsal olarak ailenin çöküşünün dillendirildiği bir ortamda, yıkımdan çok bir dönüşümün söz konusu olduğu ifade edilmelidir. Çeşitlilik arz eden modelleriyle günümüzün yeni aile yapıları, türlü koşulların etkisiyle hızla dönüşmektedir. Bu çalışma, Türkiye'nin toplumsal ve kültürel değişim sürecinde aile kurumunda ne gibi değişimlerin olduğunu açıklamaya yöneliktir. Toplumda değerler arasındaki farklılık, kuşaklar arası çatışma, aile yapısındaki farklılık, ebeveyn ve çocuk arasındaki değişen iletişim biçimleri, medyanın olumsuz etkileri gibi birçok durum, aile bağlarını kuvvetlendirmeye ve sağlıklı bir toplum için sağlıklı bir aile yapısı oluşturma çabasını gerektirmektedir.

Anahtar Kelimeler: Aile, Türk Aile Yapısı, Değişim, Dönüşüm

GİRİŞ

1. Toplumsal Değişme ve Aile İlişkisi

Toplumsal değişme; "Toplumsal yapının ve onu oluşturan toplumsal ilişkiler ağının ve bu ilişkileri belirleyen toplumsal kurumların değişmesi" olarak tanımlanabilir (Tezcan, 1994, s.191).

Toplumdaki mevcut kurumlar ve birbiriyle ilişkilerine bakıldığında, farklı alanlardaki değişmelerin birbirlerinden soyutlanmadığı söylenebilir. Toplumsal değişme; sosyal kurumları, kültürü, bilinci, teknolojiyi, organizasyonları, yerleşim şeklini, alışverişi, otoriteyi ve karar vermeyi daha doğrusu tüm yaşamı etkilemekte ve yeniden yapılandırmaktadır. Bu değişme sürecinden aile de etkilenmektedir. Ailede ilişki biçimleri ve ekonomik faaliyetleri ile farklılaşıp değişikliğe uğrar (Karaca, 2014, s.150). Aile üzerine yapılan bu yönde çalışmalar; hem ailedeki hem de toplumdaki değişimi anlamaya, analiz etmeye ve açıklamaya önemli katkılar sağlayacaktır.

Aile, genel anlamıyla 'toplumun en küçük yapı taşı' olarak tanımlanmaktadır. Bu çerçeveden değerlendirildiğinde; birbirlerine doğrudan akrabalık bağıyla bağlı olan, erişkin üyelerin çocuklara bakma sorumluluğunu üstlendiği bir insan topluluğu (Giddens, 2000, s.173) olarak tanımlanabilmektedir.

Aile denildiğinde; üyeleri arasında duygusal ilişkilerin yoğun olarak yaşandığı birincil grup olma özelliği nedeni ile *psikolojiktir*. Ürettiği kadar tüketen yapısıyla *ekonomik*, toplumsal düzenin korunmasına hizmet eden yönüyle *siyasal*, kuruluş şekliyle de *hukuksal* özelliği bulunan bir toplumsal alt kurumdur.

Aile, toplumsal örgütlenmenin ve toplumsal kurumlaşmanın temel birimidir. Birçok toplumsal kurum gibi aile de insanlık tarihi boyunca önemli değişiklikler geçirmiş, işlevlerinde farklılaşmalar olmuş, ancak hiçbir toplumda yerini, önemini ve değerini yitirmemiştir (Kır, 2011, s.399).

Türkiye İstatistik Kurumunun (TÜİK) "İstatistiklerle Aile 2018" bültenine göre; Şekil 1' de Türkiye'nin aile istatistiğine ait bazı bilgiler yer almaktadır.



Kaynak: www.aa.com.tr

Şekil 1: Türkiye'nin Aile İstatistiği

Bu verilere göre; Türkiye'de tek çekirdek aileden oluşan hanehalklarının oranı 2014 yılında yüzde 67,4 iken 2018'de yüzde 65,3'e gerilemiştir. Tek kişilik hanehalklarının oranı ise 2018 yılında yüzde 16,1'e ulaşmıştır. Bu oran, 2014'te yüzde 13,9 düzeyindeydi. En az bir çekirdek aile ve diğer kişilerden oluşan aile olarak tanımlanan geniş ailelerden oluşan hanehalklarının oranı 2014 yılında yüzde 16,7 iken 2018 yılında yüzde 15,8 olarak gerçekleşmiştir. Çekirdek aile bulunmayan birden fazla kişiden oluşan hanehalklarının oranı ise yüzde 2,8'e yükselmiştir. Bu oran 2014'te yüzde 2,1 idi.

2. Aile Yapısındaki Değişmeler

Kağıtçıbaşı (1984: 131-132), "Türkiye'de aile içi etkileşim ve ilişkileri incelemek, bir değişme sürecini incelemektir" der.

Gelişen tüm siyasi, toplumsal ve ekonomik olaylar, Türk ailesini de etkilemiş ve Türk ailesinin yapısında değişim ve dönüşümlere neden olmuştur. Literatür incelendiğinde bu değişim ve dönüşüme; göç, kentleşme, toplumsal değerler, teknoloji ve kadınların çalışma hayatına girmesi gibi unsurların etkili olduğu görülmektedir (Ekici, 2014, s.216).

Endüstrileşme toprağa bağlı üretimden ve kırsal alandan uzaklaşma eğilimini artırmış, bu durum da ülkenin sanayileşmiş bölgelerinde toplanan insanların hızlı bir kentleşmesine neden olmuştur. Modernleşme süreci ise, bir dizi değişken ekseninde gerçekleşmiştir. Sanayileşme, ulaşım ve iletişimin açtığı sınırlar aileyi de içine katacak kapsamlı dönüşümlerin önünü açmıştır.

Nüfus artışı, işsizlik, makineleşme vb. etmenler köyden kente göçü, iç göç de gecekondulaşmayı beraberinde getirmiştir. Kente göç, giderek kentin yapısını daha karmaşık bir hale getirmekte, birçok hizmetin verilmesi güç hale gelmiştir. Kente göç eden insanlar alıştıkları yüz yüze, samimi ilişkileri formel ilişkilerle değiştirirken bir yandan da kent hayatına uyum çabasına girmektedirler (Örn; apartman, site yaşantısı).

Türk aile yapısı tarihsel süreç içerisinde değerlendirildiğinde ise, aile yapısı ve tiplerinde farklılıklar görülmektedir. Tek ebeveynli, yalnız yaşayan yaşlı ve üvey anne baba bulunan ailelerin sayısında artış dikkat çekmektedir. İş ve mesleki kariyer gibi nedenlerden dolayı eşler ya tek çocuk sahibi olmayı ya da hiç çocuk sahibi olmamayı tercih etmektedir. Cinsiyet rollerinin değişime uğraması ve bulanıklaşmasıyla para kazanmak ya da ev dışında toplumsal bir yaşam sürdürmek gibi erkeğe özgü nitelikler de kendi tekelden çıkmıştır. Buna bağlı olarak

da evlilik stratejileri kademeli bir şekilde değişmektedir. Kadınların eğitim olanaklarından daha fazla yararlanması, evlenme yaşının yükselmesi, boşanma ve yeniden evlenme oranlarının artması toplumdaki aile yapısında ortaya çıkan değişimi gözler önüne sermektedir. Çalışma saatlerinin fazlalığı, serbest zaman sıkıntısı ve teknolojik gelişmeler aile yapılarını ve ilişkileri etkilemektedir.

Kadınlar çalışma hayatına katılmıştır. Bunların nedenleri arasında sayılan ekonomik zorunlulukların yanında; toplumsal yaşama katılmak, başarı kazanarak mutlu olmak, kişiliğini, kendine olan güvenini geliştirmek, boş zamanlarını değerlendirmek gibi sosyo-kültürel kazanımlar da mevcuttur (Doğan, 2009, s.52). Ekonomik geçim şartlarının ağırlaştığı ve sosyal politikaların destekleyiciliğinin sınırlı olduğu toplumda kadının çalışma hayatına katılımı ekonomik ve sosyal olarak aileyi rahatlatırsa da kadının iş-aile çatışması arasında kalmasına neden olmaktadır. Bu durum ise çocuk sahibi olma hususunda ebeveynleri özellikle hayatlarında temel değişiklikleri beraberinde getirdiği için kadınları tercih durumunda bırakmaktadır.

Geleneksel aile tipinin hakim olduğu toplumlarda erkek ve kadının statüsü ve rollerinde değişimler olmuş; açık rol farklılaşmasının olduğu bir yapıdan, rollerin paylaşıldığı bir yapıya geçiş sürecinde erkek mutfakta ve çocukların bakımı konusunda eşine yardım eden; kadın ise ailenin gelir getiren bir üyesi olarak modern dönemin şartlarına uygun davranış biçimleri geliştirmeye başlamıştır. Buna bağlı olarak aile içindeki hiyerarşik ilişkilerin yapısı da aynı oranda değişmiştir. Aile bireyleri arasında bir eşitlikten söz edilir olmuş-aile reisi kavramının kalkması, eşler arasında mal paylaşımı uygulaması (Medeni Kanun, 2002) gibi gelişmelerle aile içinde alınan kararlarda kadının etkisi, konumu güçlenmiş; kadın hem aile içinde hem de toplumsal alanda daha etkin hale gelmiştir (Bayer, 2013, s.104).

Eskicumalı ve Eroğlu'nun (2001) yapmış oldukları çalışmada, anne ve babaların eğitim düzeyleri çocukların davranış ve tutumlarında etkili olduğu görülmüştür. Sonuç olarak, eğitim seviyesi yükseldikçe annelerin ve babaların çocuklarına karşı daha olumlu ve bilinçli tutumlar sergiledikleri söylenebilir. Burada eğitimin aile yapısındaki etkisinin önemi ortaya çıkmaktadır.

Aile Yapısındaki Dönüşümün Olumsuz Etkileri

Küreselliğin, globalleşmenin iyice pekiştirdiği modernlik durumu moda, tüketim dürtüsü, özentiler, çekici dünyaların tahrikleri karşısında, aileyi kendi geleneğiyle karşı karşıya getirmektedir. Bu nedenle “günümüz Türk ailesi, hem Batı görünümüyle, hem geleneksel kalıpları içindekilerle tam bir geniş aile dönemi göstermektedir ve bu noktada (aile yapısının sağlamlığına ilişkin görüşlerin aksine) pek çok soruna sahip bulunmaktadır. Gerçekten değer bütünlükleri bozulduğu ve yeniden yapılanmalara gidilemediği için aile üyeleri eskiden olduğu gibi (günün şartlarını da gözetken) bir tip oluşturamamıştır” (Aydın, 1997, s.64).

İşyerleri ile aile mekanlarının birbirinden uzak olması, komşuluk ilişkilerinin ortadan kalkması, annenin çalışmak için uzun süre evin dışında kalması, çocukların bakımlarının başka kişilere veya uzman kurumlara bırakılması, teknolojinin olumsuz etkileriyle çocukla ebeveynlerinin dünyaları arasında bir uzaklaşmaya ve kopukluğa neden olmaktadır. Özellikle parçalanmış aileler ve onların kader kurbanı sorunlu çocukları, geleceğimizi tehdit eden büyük tehlikelerden biri olarak karşımızda duruyor. Örneğin boşanma veya parçalanma durumuna gelen ailede, çocukta güvensizlik duygusu artmaktadır. Düzensiz ve uyumsuz bir yaşamı sürdürmeye başlana bu tip ailede anne-babanın, çocukları ile ilişkileri sağlıklı olmamaktadır. Oysa çocuğun sağlıklı bir kişilik ve ruh yapısı geliştirmesinde en önemli ve temel unsur, anne ve baba sevgisi ve ilgisidir. Kendileri sevgi ve ilgiye muhtaç olan eşlerin, çocuklarına bunu sağlayabilmeleri pek kolay değildir (Aslan, 2002, s.30).

Yalnız yaşayan bireylerdeki artış, bireyselleşme ve içe dönüşün yoğunlaşması, sosyalleşmesi ile insani kimliği belirlenmiş insanın tekrar asosyal bir tarza bürünmeye başlaması ve mutsuz kalabalıklar.

Hızlı şehirleşme, apartman hayatı, radyo, televizyon, internetle birlikte sosyal medya gibi imkân ve haberleşme araçlarının ailenin barınmış olduğu konutunun içine daha çok girmesiyle birlikte, ailenin tüketim eğilimlerinde ve beğenilerinde de değişimler meydana gelmiştir. Değişim ergen için babanın mutlak otoritesi ve etkisinden, akran gruplarının etkisine kayma şeklinde olmuştur. Bunun bir nedeni de artan genç nüfus ve okul gibi sistemler ile ailelerden daha fazla, akranlarla bir arada olma zorunluluğudur. Ergenler, kendi ailelerinin büyüdüğü aile yapılarından farklı sistemlerde büyümeye başlamıştır. Ergenler, kendi ebeveynlerinin ergenlikte karşılaştıklarından farklı zorluklarla karşılaşmaktadır (Semerci, 2017). Hızlı sosyal değişim, ergenin karşılaştığı sosyal, ekonomik ve psikolojik zorlukları artırmıştır.

3. Aile ve Medya

Modernleşme her şeyden önce ailenin mahremiyetini dönüştürmektedir. Aileyi alenileştirerek kamusal olguya çevirmektedir. Son yıllarda aile ile ilgili “mahrem” konuların televizyon ve gazetelerde, sosyal medyada ve birçok mecrada yer almaktadır ve çocuklar da bu duruma maruz kalmaktadır. Aile içinde şiddet, boşanma durumları, aşk ilişkileri vb. konular kamuoyu önünde tartışılarak somut kişiler üzerinden ifade edilmektedir. Hatta evlilik konusu ve evlenilecek eşin seçimi de buna dahil olmaktadır. Eş seçimi, milyonlarca izleyici karşısında gösterilerek ilk flörtler medyatik halde icra edilmektedir (Bayer, 2013, s.105). Anthony Giddens'in (2010) “Mahremiyetin Dönüşümü” dediği olgu, küresel dönemde “mahremiyet patlamasına” dönüşmektedir.

Türkiye’de aile kurumu, televizyon ve internet başta olmak üzere kitle iletişim araçları; ailenin bölünmesi ve

parçalanması, aile içinde iletişimsizlik ortaya çıkmasıyla kimse kimseyle konuşma ihtiyacı duymamakta gittikçe yalnızlaşan bireyler meydana gelmektedir.

Tek ebeveynli ailelerin giderek artması, uyuşturucu kullanımının yaygınlaşması, metropollerde sokak çocukları olgusunun ortaya çıkması, bireysel, toplumsal ve aile içi şiddetin yaygınlaşması, kimlik bunalımı gibi bireyleri, dolayısıyla toplumu ilgilendiren problemleri ortaya çıkarmaktadır. Okuma alışkanlıkları yitirilmekte, insanlar zamanını verimli kullanamamaktadır.

Medyanın aileye olumsuz etkileri kapsamında çocuklar açısından ayrıca değerlendirme yapılması gerekmektedir. Neil Postman, "Çocukluğun yok oluşu" adlı kitabında, iletişim alanında yaşanan teknolojik gelişmelerin, insanları yaş, deneyim ve becerilerine göre, çocuk, genç ve yetişkin olarak sınıflandıran geleneksel anlayışı yıktığını, herkes için tek bir gerçekliğin ve yaşam biçiminin toplumlara egemen olduğunu ileri sürmektedir. "Çocukluk ile yetişkinlik arasındaki sınırı ortadan kaldırdığını söylemektedir. Postman; "Yetişkinlere ayrılmış olan enformasyonun yasak elmasını yiyen çocuklar, çocukluğun cennetinden kovulmaktadır. İnsan yaşamının kendine özgü bir dönemi olduğu anlaşılan "çocukluk" yıllarının göz ardı edilmesi, yetişkinler dünyasına hazırlıksız giren çocukların büyük sorunlar yaşamasına neden olurken, daha önce görülmemiş büyük sosyal tehlikeleri de beraberinde getirmektedir." saptamasını yapmıştır (ww.otekebakis.blogspot.com).

İyi bir boş zaman değerlendirme aracı olmakla birlikte; çocuk eğitiminde, eğer denetimli bir izleme sağlanamazsa, önemli sorunlar yaratabilir. Çünkü çocuklar gerçekle gerçek olmayanı ayırt etmekte güçlük çekerler (Yörükoğlu, 1984: 81). Kahraman olarak kabul gören bazı kahramanları çocuklar kendileriyle özdeşleştirmekte onun yaptıklarını da yapmaya çalışmaktadırlar. Kendini Spiderman sanan çocuk 5. kattan atlamış uçacağına inanmış ve ölmüştür.

Televizyonun önderliğindeki yeni medya çevresinin, herkese eş zamanlı olarak aynı enformasyonu ilettiğini, bu kadar yaygın bir hedef kitlenin tatmini için de, kültürü, zorunlu olarak bir eğlence biçimine dönüştürmektedir.

Sonuç ve Tartışma

Toplumsal düzen, bireyin sosyalizasyonu, mahremiyet ve özel sınırların korunması gibi özellikleriyle aile, bugün pek çok etkiye açık olacak şekilde sarsılmaktadır. Yeni aile stratejilerinin artık sınır tanımayan etkileri, Türk ailesini de kapsayacak şekilde hızla genişlemektedir. Mevcut etkilerin önünde direnebilmek mümkün müdür? Bu soru, hâlâ cevap bekleyen sorular arasında yer almaktadır.

Türk aile yapısının değişim ve dönüşümü ve bu değişim ve dönüşüme etki eden unsurların değerlendirilmesi amacıyla bu çalışma yapılmıştır.

Bu bağlamda tekrarlamak gerekirse küçük aile yapılarının ortaya çıkması, boşanma oranlarının hissedilir artışı, nikahsız evliliklerinin çoğalması, ev içi rollerin dönüşümü, komşuluk ve akrabalık gibi geleneksel ilişki formlarının zayıflatılması, dinin kuşatıcı doğasının aileyle irtibatının hissedilir düzeyde gevşemesi vb. gibi hususlar dikkat çekicidir (Subaşı, 2007, s.521).

Toplumda değerler arasındaki farklılık, kuşaklar arası çatışma gibi durumlar, aile bağlarını kuvvetlendirmeye ve sağlıklı bir toplum için sağlıklı bir aile yapısı oluşturma çabasını gerektirmektedir.

Eğitim kurumlarında 'değerler eğitimi' konusunun müfredatlarda yer alması gerekmektedir. Ebeveynlere yönelik de eğitim programları hazırlanarak çocukların değer düzeylerinin artmasına katkı sağlanabilir.

Medya politikaları kapsamında yayınlarda ve içerik hazırlamada hassasiyet gösterilmeli, gerekli denetimlerin sağlanması da medyanın aileler ve çocuklar üzerindeki olumsuz etkilerin giderilmesinde son derece etkili olacaktır. Çocuğun kişisel gelişimi, sosyal çevreyle etkili iletişim kurulmasının sağlanması önem arz etmektedir.

Ailenin değişimini felaket senaryoları üzerinden okumak yerine bu gerçekliği kabul ederek ekonomik ve sosyal destek mekanizmalarını işler hâle getirmek daha uygun bir çözüm olarak durmaktadır.

Teknoloji reddedilmemekte; ancak bunu daha bilinçli ve denetlenebilir bir şekilde kullanılması gerekmektedir.

Önemli olan, insanın bireysel ve toplumsal kimliğini sorgulaması, gören ve tüketen bir obje olmaktan çıkıp bilen ve anlayan bir özne olabilmesidir.

Öğrenme ve anlama yeteneği yeniden keşfedebilmeli, bu da ancak eğitimle mümkün olabilir.

Anne ve babaların da başlıca görevi, yeni iletişim medyalarından gelen enformasyon bombardımanı karşısında savunmasız kalan gençlere, haberler arasından bir seçim yapabilme becerisi kazandırmak, bu yeniliklerin gerçeği nasıl değiştirdiğini açıklamak ve olası olumsuz etkilerden korunma yollarını öğretmektir.

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