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Indonesia

March 2 - 3, 2024

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E&S 2024

**11th Eurasian Conference on Economics and Social Sciences**

hosted by

Ahmad Dahlan University, INDONESIA

March 2 - 3, 2024

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ECLSS  
International

The 11th edition of **International Conference on Economics and Social Sciences (E&SS2024)**, hosted by Ahmad Dahlan University, Indonesia, March 2 – 3, 2024, was a great inspiring, motivating and exciting online experience with all our distinguished guests, participants and listeners.

There were a total of 85 papers from 14 countries, namely *Albania, Azerbaijan, India, Israel, Italy, Kosovo, Kazakhstan, Malaysia, Lithuania, North Macedonia, Indonesia, Poland, Germany and Turkey*.

85 papers were registered and presented during plenary sessions (only 27 papers by participants from Turkey, and 58 by participants from other countries; **32 % Turkish, 68 % International participants**).

We had participants from 14 countries, listed in the table and visualized in the graph below.

Hope to meet you again in our upcoming conferences!

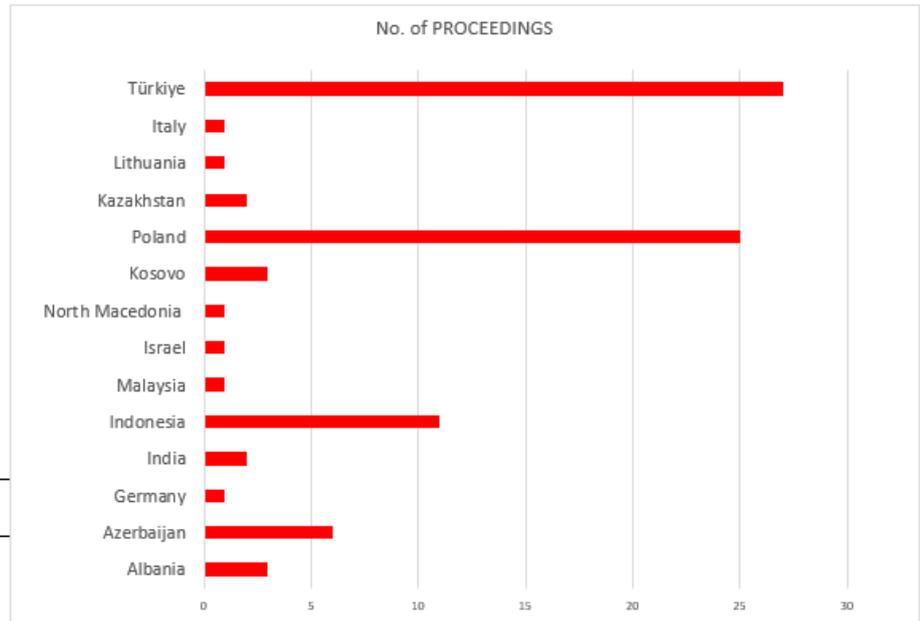
Thank you for your support and collaboration.

**Organizing Committee**

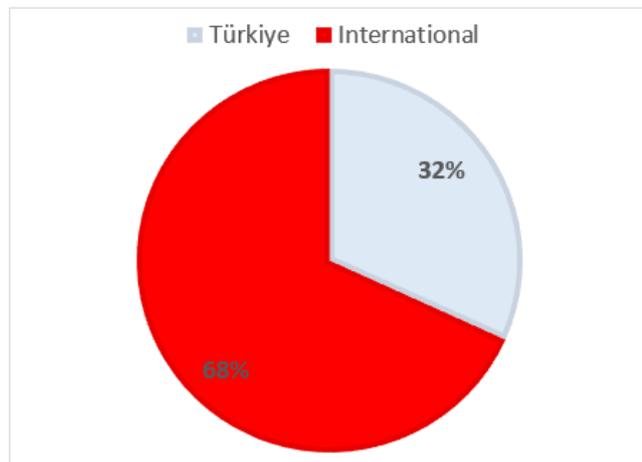
**Table 1. Countries and Number of Proceedings in E&SS2024, INDONESIA**

<b>COUNTRIES</b>	<b>No. of PROCEEDINGS</b>
Albania	3
Azerbaijan	6
Germany	1
India	2
Indonesia	11
Malaysia	1
Israel	1
North Macedonia	1
Kosovo	3
Poland	25
Kazakhstan	2
Lithuania	1
Italy	1
Türkiye	27
<b>Total</b>	<b>85</b>

**14 Countries**



	<b>No. of Proceedings</b>	<b>Percentage</b>
Türkiye	27	31,76
International	58	68,24
<b>Türkiye</b>	<b>31,76</b>	
<b>International</b>	<b>68,24</b>	





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# Optimizing the Proficiency of Elementary School Teachers in the Use of PMM (Platform Merdeka Mengajar) as an Application of IoT (Internet of Things)

**Eko Bayu GUMILAR**

STAI Muhammadiyah Blora, [ekobayugumilar@gmail.com](mailto:ekobayugumilar@gmail.com), Blora Central Java, Indonesia

**Kristina Gita PERMATASARI**

STAI Muhammadiyah Blora, [kristinagita@gmail.com](mailto:kristinagita@gmail.com), Blora Central Java, Indonesia

## Abstract

The Merdeka Mengajar Platform (PMM) is a platform that makes it easy for teachers to access features used by teachers in teaching, providing student assessments and also providing training to increase competency for both teachers, students and colleagues. With this platform, teachers can improve performance by developing teacher creativity. However, in practice there are several obstacles in accessing the platform, including teachers' lack of knowledge in accessing the PMM platform, teachers' lack of skill in operating the platform so that teachers are not optimal in implementing learning in the independent curriculum. Given these obstacles, researchers have made various efforts to optimize teachers to be able to adapt to the use of PMM, which is one of the applications of IoT (Internet of Things). This research categorizes teachers based on their productive age, namely at the age of 50 years, consisting of several schools in the regional coordinator of the city of Blora as a sampling who are given special assistance so that it can result in teachers being able to use and optimize the application of IoT (Internet of Things) by accessing and utilizing the features contained in the Merdeka Mengajar Platform (PMM) so that you can carry out learning and be able to implement the independent curriculum (KM).

**Keywords:** Internet Of Things (IoT), Platform Merdeka Mengajar (PMM), Teachers, Elementary Schools, Curriculum Merdeka (KM).

## INTRODUCTION

Technological developments have occurred long before the Covid-19 pandemic, the existence of digitalization technology which is often known as the Internet of Things (IoT) has had a major impact in various sectors and fields (Dinh et al., 2021). Among them is in the world of education, many institutions from elementary to tertiary level have made many major changes. The Internet of Things (IoT) itself is a concept where connecting various hardware devices such as computers and other devices can be connected via the internet and become a device that provides information,



communication personally and also in groups in real-time even without requiring physical interaction between humans but can be connected virtually (Nimodiya & Ajankar, 2022). Now the world of education has been able to switch to IoT systems in all lines to facilitate access to information in education (Babayiğit, 2020 & Cizrelioğulları et al., 2019). In this case, education at the elementary level is going through this slowly with the aim of being a change in advancing the education system (Alfiras et al., 2022).

The education system in Indonesia is currently in a transitional phase and transitioning into a learning system that prioritizes the role of students in the curriculum of teaching and learning activities, often referred to as the independent curriculum (Permatasari, 2022). As there is a transition, because education is one of the big factors in the development of a region or country. Therefore, education not only provides knowledge but there are values, practical skills but also contributes greatly to the development of the potential possessed by students so that they are able to prepare themselves to compete in the future (Gumilar, 2023).

Until now, although the independent curriculum has begun to run, it has not a little debate by educators and education experts. Aware that education is indeed a very important issue for humans because it is human survival (Kurniawan, 2017). Moreover, the younger generation does not have growth and development only through encouragement from the environment, the next generation needs input, advice and even guidance from outside education. Although humans have various aspects of life, not everything they have can be maximum and perfect in achieving it. The improvement of education quality is one of the supporting factors and efforts in preparing future generations (Aprima & Sari, 2022).

Efforts to improve the quality of education until now continue to be carried out by various parties ranging from the government, educators and students. The government in this case is Minister of Education and Culture Nadiem Makarim in 2019 initiated the Merdeka Belajar program. The Free Learning Policy has been launched by the government in giving freedom and autonomy to educational institutions so that each educational institution is free from bureaucratization (Yamin & Syahrir, 2020). In that case, according to the decision of the Minister of Education and Culture of the Republic of Indonesia number: 262 / M / 2022 concerning changes to the decision of the Minister of Education and Culture and Technology Number 56 / M / 2022 concerning Guidelines for Curriculum Implementation in the Framework of Recovery of Learning Activities, the independent curriculum is a curriculum that provides freedom for teachers to get quality learning based on their needs and adjust their learning environment (Rahmadayanti & Hartoyo, 2022). The independent curriculum also teaches something according to the student's ability level, which means that the learning approach focuses on preparing students to learn, not only at the grade level (Lafendry, 2020).

The existence of Merdeka Belajar makes students' abilities more visible progress through the Implementation of the Independent Curriculum (IKM). Starting from face-to-face trainings obtained by teachers in learning the Implementation of the Independent Curriculum (IKM) (Giri & Anwar, 2023). Teachers are also required to carry out curriculum training which is indeed something important for teachers. However, the policy of the Ministry of Education and Culture and Technology related to this is in fact not in accordance with what is expected by teachers (Rahayu et al., 2022). In the independent curriculum, teachers are required to be independent in learning about the independent



curriculum. To implement IKM well in various schools in Indonesia, Merdeka Belajar episode 15 presents the Merdeka Mengajar Platform (PMM). PMM itself is a technology platform provided for teachers and principals in supporting learning in schools (Ambawani et al., 2023).

In order to access the Merdeka Mengajar platform, teachers are required to log in using a learning account “*belajar.id*”. In the platform there are many features that are very useful for teachers such as student assessments, teaching tools, self-training, community, principal selection, LMS, competency reflection, videos, and proof of work. The purpose of PMM is to support IKM because teachers get a lot of references, inspiration, and understanding of the Independent Curriculum through the platform and also increase teacher professionalism (Ramdani et al., 2022). With the complete menus in PMM, it is hoped that it will be able to make teachers motivated and able to develop themselves independently by utilizing *belajar.id* accounts owned by teachers as access to PMM (Bayu, 2018).

However, in fact in practice in the field that the situation is not in accordance with expectations. Based on data obtained from the Blora Regency Education Office, Blora Regency consists of 16 sub-districts with 570 public elementary schools, and 22 private elementary schools. With a total of 4,372 teachers for the elementary level.

Many teachers in schools just log in to the platform and have not been able to adapt to the platform according to the needs of teachers without doing other activities and exploring the menu contained in it. Based on the results of the researcher's visit, several reasons were obtained, including: Teachers have entered retirement so they do not need it, almost 60% of teachers in Blora district are teachers with the age of 50 years so that productivity in learning PMM requires special time so that it can be truly understood completely, teachers are still classified as not mastering the use of the Internet and teachers are still not used to accessing PMM. This requires follow-up from the Blora District Education Office and also the Deputy Principal for curriculum as well as mobilizing teachers or other communities who care about IKM in Blora Regency to be able to facilitate this so that teachers get bright spots (Hartoyo, 2022).

The existence of the Merdeka Mengajar (PMM) platform certainly requires a lot of expertise possessed by teachers, especially understanding and adaptation in using and even accessing the internet so that it becomes a new habit and becomes a good thing in the process of teaching activities. As such, it is necessary to optimize the skills of elementary school teachers in the use of PMM (Platform Merdeka Mengajar) as an application of IoT (Internet of Things).

## PROBLEM FORMULATION

This article will examine the role of the application of IoT (Internet of Things) in the use of PMM (Platform Merdeka Mengajar) to be more optimal in the implementation of the Independent Curriculum (KM) for elementary school teachers. Encouraging teacher proficiency in implementing IoT in the use of PMM in the Blora City Regional Coordinator, as well as the challenges that occur how elementary school teachers are able to access various platforms well, so that they can apply all the features of implementing IoT (Internet of Things) can be an indicator of proficiency in applying learning to PMM (Platform Merdeka Mengajar) and other Education Platforms.



## **OBJECTIVE**

The purpose of this study is to investigate how PMM (Platform Merdeka Mengajar) can be implemented well in elementary school teachers, especially teachers aged 50 years and over in the coordinator of the Bora city area. So, the elementary school teacher can apply IoT (Internet of Things) well and is also able to operate various features in PMM and also other platforms in the world of education.

## **METHODS**

In this research methodology, researchers use a qualitative approach with case studies. With a focus on teacher proficiency in the use of PMM (Platform Merdeka Mengajar) so that the application of IoT (Internet of Things) can be implemented properly and also teachers can adapt to various features of PMM and also other educational platforms.

The sample will be selected is 10 elementary school teachers from 5 elementary schools under the Bora City Regional Coordinator, and data will be collected through in-depth interviews, direct observations and conducting tests on the use of PMM for these teachers to be able to determine the extent of teachers' understanding and proficiency in applying IoT (Internet of Things) to PMM.

## **RESULT AND DISCUSSION**

Platform Merdeka Mengajar (PMM) is a technology platform provided as a driving companion for teachers and principals in increasing knowledge and exploring information about the independent curriculum. Through the PMM, teachers know various information in the form of references, inspiration, and understanding in implementing the Independent Curriculum. Now, PMM has launched the Merdeka Belajar Episode 15 program which aims to be a reference and assist teachers in teaching according to students' competency abilities, there are training features to improve competence, work and also inspire colleagues. When teachers access PMM, it has become part of the application of IoT (Internet of Things) at a simple level because IoT is an activity of using a digital application or digital platform that is accessed by each user to obtain more information. In PMM there are 5 sections on the Homepage that will bring up information about products about the Independent Curriculum (KM), training on the Implementation of the Independent Curriculum, Teaching and Learning Activities, Personal Development and looking for and sharing inspiration. The first product "About the Independent Curriculum" contains an outline of the independent curriculum, learning and assessment, projects to strengthen the profile of Pancasila students, and several other things (Gumilar & Permatasari, 2023).

The second product, which is "Independent Curriculum Implementation training" contains a training series, this is a training targeted to be completed first, while the four topics in question are the independent curriculum, learning planning, differentiation in learning and assessment. The "Teaching and Learning Activities" product is divided into three (3) parts, namely student assessment, teaching



equipment and CP and ATP. Student or Student Assessment assists teachers in conducting diagnostic analysis of literacy and numeracy quickly so that they can apply learning in accordance with the stage of achievement and development of students. Teaching tools contain various things including teaching materials to support teaching and learning activities, such as modules and teaching materials, books and project modules. Finally, CP and ATP which contain CP and ATP with a choice of education levels and subjects. The product "Personal development", consisting of community, self-training, and selection of principals and LMS. As well as "finding and sharing inspiration" products, there is evidence of inspiring work and videos. This proof of work is a space for teachers to share the work that has been made and owned to be shared with other teachers throughout Indonesia. Evidence of these works is uploaded through various results in the form of articles, teaching materials, technical documents, school leadership, learning practices, good practices, lesson plans / teaching modules and other works (Syaputra et al., 2023).

Based on the description of some of the features of PMM (Platform Merdeka Mengajar) above, it can be seen that there are many features that will make some teachers understand, especially teachers with the productive age category of 25-49 years to be able to participate, but for teachers with the age category of 50 years and over even before retirement, they still have difficulty participating in the activities contained in the PMM. Although, several workshops, training and mentoring have been conducted, but there are still obstacles experienced. One of them is the difficulty in adapting to follow step by step, it does not even rule out the possibility for teachers with the age category of 50 years and over to ask for help from teachers with a productive age of 25-49 years. So that this situation will actually increase the workload for productive age teachers of 25-49 years, even the individual tasks of these teachers are left behind because of the lack of adaptation of teachers in the 50-year-old age category.

Based on the results of data collection based on interviews and independent data collection, it was found that several schools in the Blora City Regional Coordinator still experienced the same obstacles. The data collected by researchers in several schools under the Blora City Regional Coordinator in January 2024 are as follows:

**Table 1. School Data, Number of Active Students and Teachers (ASN-Non ASN)**

No	School Name	No. of Students	No. of Teachers	Teacher (30-45) yrs	Teacher (46-60) yrs
1	SD N 1 Tegalgunung	51	7	4	3
2	SD N 1 Karangjati	64	7	3	4
3	SD N 2 Karangjati	78	8	6	2
4	SD N Ngadipurwo	32	7	5	2
5	SD N 1 Beran	47	8	6	2



6	SD N 1 Pelem	37	9	6	3
7	SD N 1 Temurejo	51	7	4	2
8	SD N 2 Purwosari	59	8	6	2
9	SD N 2 Kunden	34	9	4	3
10	SD N 2 Jepangrejo	69	8	5	3

Based on the data above, researchers used 10 elementary schools in the suburbs to determine the extent to which these schools utilize the role of IoT in the use of PMM in the independent curriculum. The school consideration above is, based on the number of students in the school, it allows researchers to provide special assistance in introducing the role of IoT more optimally so that teachers can adapt well.

In conducting the study, researchers have interviewed teachers with the age category of 46-60 years to be able to find out the obstacles faced in accessing PMM, as well as some of the following obstacles:

**Table 2. Results of Teacher Interviews in Implementing IoT in PMM**

No	Questions	Respondent	Response
1	What are the obstacles in learning PMM	Teacher 1	Time constraints and the number of work that alternates, the more teaching hours, the more administration that must be done by the father and mother of the teacher until they have to bring school work home, it causes work in learning PMM is not optimal and does not even have time to access the PMM
		Teacher 2	Teaching hours are quite draining on my mind, especially having to study PMM, I often ask for help from juniors or my children to make assignments on PMM because there is no time
		Teacher 3	I am constrained by the internet network, but even if there is wifi, I am too bothered to learn PMM because the task of being a teacher is very dense
		Teacher 4	For now because I am already a senior, learning PMM is quite draining because there are so many features that must be understood while I don't really understand
		Teacher 5	The existence of PMM is indeed very helpful for teachers in improving skills and abilities in the world of digitalization, but for my age of 53 years old it is not able to keep up with the times
		Teacher 6	I have been taught the use of PMM, often participate in



No	Questions	Respondent	Response
			workshops and also mentoring from the community. However, I could not follow the progress of the PMM itself because my comprehension was slow and it took special patience
2	Do All You Understand the PMM Application?	Teacher 1	All teachers already understand because it is facilitated by the school, however, in working on PMM Teachers with the age of 52 years will be difficult to catch up, especially the tasks given must be in accordance with the dateline
		Teacher 2	Some teachers already understand, but those who understand faster are young teachers because they can keep up with the development of the digital world, if the old teachers are still often left behind
		Teacher 3	Already understand, but there are still many teachers who have not completed their assignments in PMM and dominated by my 50s
		Teacher 4	Already understand, but constrained by not being used to me doing tasks through cellphones or laptops, let alone to upload real actions
		Teacher 5	Already understand, but often miss because old age must require patience and habituation
		Teacher 6	All teachers should understand, only the abilities of each teacher are different. And also more senior teachers need more intense mentoring
3	What should be done to make it easier for teachers to use PMM?	Teacher 1	We were given more intense mentoring
		Teacher 2	Given even longer instructions
		Teacher 3	Assisted to teach the use of PMM slowly
		Teacher 4	Trained again so that we can adapt more to using PMM
		Teacher 5	We were given maximum assistance
		Teacher 6	Regular workshops or mentoring are held so that seniors can follow and be able to implement PMM without worry

In addition to information about the obstacles conveyed by the teachers above, researchers also monitor teachers in accessing PMM. With the intention to find out the extent to which the application



of IoT (Internet of Things) can be carried out in the use of PMM in each school. In the monitoring results, teachers still do not really master the PMM Platform, this is evidenced by the results of the researchers' observations on the behavior of teachers who are still confused in accessing PMM and even have to repeat questions to fellow junior teachers in order to help how to access the PMM.

Based on experience and direct observation, researchers provide input to these teachers to be able to take part in special assistance provided by the teaching community and also researchers in intensive mentoring activities so that tasks in PMM can be fulfilled according to the dateline and also the adaptation of the application of IoT (Internet of Things) in PMM can become a good habit, so that learning in the Independent Curriculum can be realized by maximum.

Meanwhile, the activities that researchers provide to teachers are by providing training in stages to provide material on the application of IoT (Internet of Things) in PMM by presenting a community of teachers who are members of the Mobilizer Teacher Community. Some things and causes that are considered by the Mobilizing Teacher Community (KGP) to be able to provide assistance to these teachers are:

1. There are problems on the network
2. Very limited teacher time
3. Many teachers have accessed PMM but are constrained in the process of making real actions where there is an active role and also teacher creativity in managing real actions and IoT (Internet of Things) is needed
4. The number of administrative tasks of teachers requires special concentration on optimal PMM management
5. There is no punishment for teachers in the use of PMM
6. There is still low awareness that the importance of using IoT (Internet of Things) in PMM is needed so that these adaptations and habits can be things that facilitate the use of PMM
7. The ability of each teacher is not the same so that teachers in the elderly category seem more pessimistic in following the development of digitalization
8. Teachers lack confidence and have not thought about being able to collaborate between teachers

This condition is common in schools that are located in the suburbs which may often be faced by teachers in other schools. Although for some time the education office and also organizations and even mobilizing teacher groups have held mentoring to workshops, most teachers with the age category of 46-60 years are teachers who are often left behind regarding communication in the implementation of PMM.

The biggest hope of PMM is actually to maximize teachers in improving the ability to manage communication technology and also make better use of IoT (Internet of Things) so that each teacher can use PMM as a provision in improving the quality of teachers and students.

In this case, researchers provide several efforts in overcoming the low access to PMM and also the lack of application of IoT (Internet of Things) in PMM as follows:



1. Providing assistance in the form of IHT (In House Training) related to the independent curriculum, here researchers collaborate with related organizations such as the Mobilizing Teacher Community (KGP) who master information about the independent curriculum
2. Disseminate by teachers who have attended IKM training so that teachers with the age category of 46-60 years do not experience confusion because they are accompanied directly by expert teachers
3. Establish a community of peer tutors to learn PMM at least once a week hold meetings
4. Assist school principals to remind various school activities and school activities both in meetings and other meetings to be able to learn PMM as an obligation and need of teachers
5. Provide input to the principal to apply for additional internet network assistance so that each teacher can access easily without problems at school

As another application, there is also a need for intervention from peer tutors from outside the school in order to help teachers in the age category of 46-60 years to be able to maximize the ability to learn PMM and apply IoT, because most educators do not understand what IoT is. In fact, every activity related to digitalization is a derivative of IoT itself and PMM is one of the applications of IoT which is currently still a PR for all teachers throughout Indonesia.

After several activities provided by researchers, it can be produced that, the application of IoT (Internet of Things) in PMM can be implemented properly. However, awareness in using IoT (Internet of Things) itself must be emphasized because indeed learning PMM is a must and a necessity for every teacher regardless of age restrictions. And the main thing is the habituation or adaptation made by teachers to get used to accessing IoT (Internet of Things) in PMM in order to maximize the features contained in PMM and be able to apply it to student learning.

## CONCLUSION

The conclusion of this study is to highlight the important role of IoT (Internet of Things) in the use of PMM is still very small, this is due to the low human resources who are generally teachers with the age category of 46-60 years. So that the existence of PMM is still not widely applied in the process of learning activities optimally in the Implementation of the Independent Curriculum.

The main challenge of the low application of IoT in using PMM experienced by teachers in the age category of 46-60 years is caused by several factors, namely limited time, network limitations, lack of interest from teachers in the age category of 46-60 years in accessing PMM, lack of concentration, many administrative tasks so that teachers do not have free time to access PMM and also the absence of punishment given by the principal.

To overcome these challenges, researchers have several efforts to improve the adaptation of teachers in the age category of 46-60 years in implementing IoT in PMM by providing assistance gradually, by involving the Mobilizing Teacher Community, the Education Office and also the involvement of school principals in assisting teachers in the age category of 46-60 years. Also, the involvement of peers, tutors, peers can make the IoT adaptation process on PMM more flexible. So that with this activity, the adaptation of the application of IoT in PMM can make teachers in the age category of 46-



60 years can follow the latest information related to digitalization in the world of education and can apply IoT to PMM into meaningful and meaningful learning for students.

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# World Industrial Revolutions and The Development Of Artificial Intelligence System

## Dünya Sanayi Devrimleri ve Yapay Zeka Sistemlerinin Gelişimi

**Khatira GULIYEVA**

**Doctor of Sciences in Philosophy. Associate Professor. Head of the Department of "Philosophy of Multiculturalism and Tolerance" at the Institute of Philosophy and Sociology of the Azerbaijan National Academy, Azerbaijan**

<https://orcid.org/0000-0002-4889-6569>

**Email:** [xatire\\_6262@mail.ru](mailto:xatire_6262@mail.ru)

### Abstract

The objective-scientific conclusions obtained from the researches conducted in various fields of science prove that era and worldview are in unity and are phenomena that determine one another, and era and worldview are the most important phenomena in the understanding of geniuses, historical events, including personalities who have left a mark on the history of politics, and every individual as a whole. and it is appropriate to briefly consider the problem in the context of Human and Personality factors. It is known that Man has tried to understand natural phenomena since the beginning of time. During this realization, as he solved the problems that were important or useful for his life, his contact with the material world had an effect on his consciousness, subconscious world, changed his worldview and formed. As cultural civilizations replaced each other, and material and spiritual development of all spheres of life took place, the event of periodization, which was caused by the content and essence of the progress events, took place and became a system.

If we take Europe, the people of the Ice Age of 300,000 years ago, who engaged in hunting to solve their hunger needs, in other words, the age of dinosaurs, have spread to many parts of the world from Africa, where they lived in order to survive and meet more of their daily needs. The extensive integration of agricultural Ice Age People into the Earth included farming, fishing, animal husbandry, hunting, as well as handicrafts, etc. has led to the revolutionary development of the fields.

As economic activities led these first inhabitants of the planet from caves to less comfortable shelters, then to good houses, then to palaces, labor activities in various occupations, including crafts, developed rapidly. Thus, the fads of the era who differed from the crowd (later this class will be called personalities, geniuses...-Kh.G.) began to appear.



If we approach the issue from the point of view of history, we witness that the world view determines the development in different periods. This idea can be expressed in such a way that each period can be considered to have developed or experienced a crisis according to the level of worldview.

In this direction of our thoughts, the question arises: So, what is the phenomenon of worldview of this era - XXI century? Based on the general content of the current events, characterized as the Globalization stage of the modern world, we can say that the outlook of the historical stage we live in is based on the achievements of the last stage of the industrial revolution.

In this article, by analyzing the history of the artificial intelligence system during the World Industrial revolutions, we will study both the concept of progress of the Industrial revolutions and the progressive and at the same time regressive development of the artificial intelligence system.

**Key words:** world, industrial revolutions, artificial intelligence, development

## Öz

Bilimin çeşitli alanlarında yapılan araştırmalardan elde edilen objektif-bilimsel sonuçlar, çağ ve dünya görüşünün birlik içinde olduğunu ve birbirini belirleyen olgular olduğunu, çağ ve dünya görüşünün dehalerin, tarihi olayların anlaşılmasında en önemli olgular olduğunu kanıtlamaktadır. Siyaset tarihine iz bırakan şahsiyetlerin ve her bireyin bir bütün olarak ele alınıp, sorunun İnsan ve Kişilik unsurları bağlamında kısaca ele alınması yerinde olacaktır. İnsanoğlunun zamanın başlangıcından bu yana doğa olaylarını anlamaya çalıştığı bilinmektedir. Bu idrak sırasında hayatı için önemli veya faydalı olan sorunları çözerken, maddi dünyayla olan teması onun bilincine, bilinçaltı dünyasına etki etmiş ve dünya görüşünü oluşturmuştur. Kültürel medeniyetler birbirinin yerini aldıkça ve hayatın her alanında maddi ve manevi gelişme yaşandıkça, ilerleme olaylarının içerik ve özünden kaynaklanan dönemselleşme olayı da gerçekleşmiş ve bir sistem haline gelmiştir.

Avrupa'yı ele alırsak, 300.000 yıl önceki Buzul Çağı'nın, açlık ihtiyacını gidermek için avcılıkla uğraşan, yani dinazorlar çağının insanları Hayatta kalabilmek ve günlük ihtiyaçlarının çoğunu karşılayabilmek için yaşadıkları Afrika'dan dünyanın birçok yerine yayılmışlardır. Tarımsal Buzul Çağı İnsanlarının Dünya'ya kapsamlı entegrasyonu çiftçiliği, balıkçılığı, hayvancılığı, avcılığı ve el sanatlarını vb. içeriyordu ve çok sayıda alanların devrim niteliğinde gelişmesine yol açmıştır.

Ekonomik faaliyetler gezegenin bu ilk sakinlerini mağaralardan daha az konforlu barınaklara, ardından iyi evlere, ardından saraylara yönlendirirken, el sanatları da dahil olmak üzere çeşitli mesleklerdeki emek faaliyetleri hızla gelişti. Böylece, çağın kalabalıktan farklılaşan modaları (daha sonra bu sınıfa kişilikler, dahiler...-X.Q denecek) ortaya çıkmaya başladı.

Konuya tarih açısından yaklaştığımızda dünya görüşünün farklı dönemlerdeki gelişimi belirlediğine tanık oluyoruz. Bu düşünce öyle ifade edilebilir ki, her dönem dünya görüşünün düzeyine göre bir kriz yaşamış ya da gelişmiş olarak değerlendirilebilir.



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Düşüncelerimiz bu doğrultuda şu soru ortaya çıkıyor: Peki bu dönemin - XXI. yüzyılın dünya görüşü olgusu nedir? Modern dünyanın Küreselleşme aşaması olarak nitelendirilen güncel olayların genel içeriğinden hareketle, içinde bulunduğumuz tarihsel aşamanın görünümünün, sanayi devriminin son aşamasının kazanımlarına dayandığını söyleyebiliriz.

Bu yazımızda yapay zeka sisteminin Dünya Sanayi devrimleri sırasındaki tarihini analiz ederek hem Sanayi devrimlerinin ilerleme kavramını hem de yapay zeka sisteminin ilerici ve aynı zamanda gerici gelişimini inceleyeceğiz. dünya, sına

**Anahtar kelimeler:** dünya, Sanayi devrimleri, yapay zeka, gelişim



## **Preeclampsia – do we know everything about this condition?**

**Anna ZWIERZYŃSKA-FURMANEK**

**Zakład Anatomii, Collegium Medicum, Uniwersytet Jana Kochanowskiego, Polska**

**Jakub GRUSZKA**

**Warszawski Szpital Południowy**

**Karolina KOMAR-GRUSZKA**

**Oddział Okulistyczny, Szpital Dziecięcy im. prof. dr. med. Jana Bogdanowicza**

**Olga ADAMCZYK-GRUSZKA**

**Katedra Ginekologii i Położnictwa, Uniwersytet Jana Kochanowskiego, Collegium Medicum;  
Klinika Położnictwa i Ginekologii, Wojewódzki Szpital Zespólny w Kielcach**

### **Abstract**

Preeclampsia is a pathology whose pathogenesis still poses many unexplained questions to researchers. Classifying women into risk groups is still a challenge for medical staff. Preeclampsia is characterized by hypertension after the 20th week of pregnancy, proteinuria and a threat to the well-being of the fetus. The causes of preeclampsia are found in abnormalities resulting from increased systemic vascular resistance, increased tendency of platelets to aggregate, activation of the coagulation system and endothelial dysfunction. Researchers also attribute the pathogenesis of preeclampsia to placental abnormalities. Due to the complexity of the pathogenesis of this condition, there are different classification criteria for specific types of preeclampsia. The pathogenesis of preeclampsia is not fully known. Many researchers point out its complex nature, taking into account both maternal and fetal risk factors. It is indicated that it is related to excessive anti-angiogenic proteins secreted by the placenta, but the genetic basis of this condition is increasingly being justified. It is estimated that over 1/3 of preeclampsia cases are related to genetic conditions. This background is confirmed not only by the latest molecular research. The study aimed to analyze the results of laboratory tests of pregnant patients in the context of early indicators that may help classify women into risk groups at the early stage of pregnancy or in the preconception period. The study revealed differences in the parameters of the coagulation system as well as in blood groups. Undoubtedly, conducting research on preeclampsia is of great importance for the well-being of both the mother and the fetus.

**Keywords:** preeclampsia, pregnancy, fetus



## INTRODUCTION

Medicine is a field of science that still poses many unexplained questions and challenges to researchers. Preeclampsia, which is a life-threatening condition for both the mother and the developing child, is one of them. The pathogenesis of this condition has still not been fully elucidated despite numerous years of research by the medical community. A huge challenge for medical staff is the classification of pregnant women into risk groups, which could translate into the prevention of this condition and the implementation of preventive measures at an early stage [1,2].

Preeclampsia is characterized by hypertension after the 20th week of pregnancy, proteinuria and a threat to the well-being of the fetus. Common abnormalities in laboratory tests include: thrombocytopenia, high creatinine concentration, increased activity of liver transaminases, and disturbances in the parameters of the coagulation system. But we have to remember that the clinical onset of preeclampsia is ambiguous and may vary. In the case of preeclampsia, we distinguish high- and medium-risk factors. High risk factors include: gestational hypertension occurring in the current pregnancy, chronic kidney disease, autoimmune diseases such as antiphospholipid syndrome, type 1 and type 2 diabetes and chronic hypertension. Medium-risk factors include first pregnancy, age  $\geq 40$  years, interval from the previous pregnancy  $> 10$  years, abnormal body mass index, family history of preeclampsia, and multiple pregnancy [1,3,4].

The causes of preeclampsia are presumed to be abnormalities resulting from increased systemic vascular resistance, increased tendency of platelets to aggregate, activation of the coagulation system and endothelial dysfunction. Researchers also attribute the pathogenesis of preeclampsia to placental abnormalities. Due to the complexity of the pathogenesis of this condition, there are different classification criteria for specific types of preeclampsia. Early-onset preeclampsia is diagnosed before the 34th week of pregnancy and affects approximately 20% of cases. It is related to abnormal invasion of the trophoblast into the spiral arteries of the uterus, which results in abnormal blood flow within the placenta. This type of preeclampsia may cause complications related to both the fetal life of the child and the course of pregnancy, (intrauterine fetal hypotrophy, CNS hypoxia, perinatal death, premature birth, respiratory system disorders) It also can be connected with diseases in adulthood, such as: circulatory system diseases and diabetes. The incidence of late-onset preeclampsia is estimated at 80% of cases. Its onset occurs after the 34th week of pregnancy. Its pathomechanism is related to diseases occurring in pregnant women in the preconception period. [1-6].

### Aim of the study

The aim of the study was to compare two groups of women - those who manifested symptoms of preeclampsia and those in whom this condition was not observed. Comparing typical deviations from reference values with the results of healthy pregnant women gives hope for detecting differences in earlier stages of pregnancy before clinical symptoms appear. This analysis aims to determine whether it is justified to conduct further statistical research in the studied population in terms of selected statistical methods and analyzed variables.

### Materials and methods

The study included patients hospitalized at the Department of Gynecology and Obstetrics. The preliminary analysis was based on the test results of 72 patients. The statistical analysis was performed



using the Statistica 13 software. The obtained results were subjected to the Chi<sup>2</sup> test, called the Pearson test. Cramer's V coefficients and Spearman's rank correlation were calculated. The Bioethics Committee of the Collegium Medicum of the Jan Kochanowski University has consented to the study under no. 64/2021. The information necessary for the study was obtained in accordance with the personal data protection policy.

## Results

The study analyzed cases of women of reproductive age. The research group consisted of 28 patients manifesting symptoms of preeclampsia - the blood pressure values obtained in the study exceeded the upper limit of normal: above 140 mmHg for systolic blood pressure and 90 mmHg for diastolic blood pressure, proteinuria was observed in this group - above 0.3 g. 44 patients were the control group. were healthy pregnant women with normal blood pressure and no comorbidities. The purpose of combining these groups and selecting appropriate grouping features was to make the research as reliable as possible. In the research group, 14 patients were primiparous. The remaining pregnant women were multiparous. In the case of the control group, 16 pregnant women became pregnant for the first time, 28 were multiparous.

Based on the statistical analysis it can be concluded that urine sediment parameters, i.e. the presence of erythrocytes, leukocytes and bacteriuria occur with a similar frequency in both groups of pregnant patients. Therefore, they have no predictive value. The statistical calculations of data revealed a significant correlation between the Rh factor and the occurrence of pre-eclampsia. It was noticed that among patients with preeclampsia, Rh-negative people were more common than among healthy women. No correlations were observed within the main groups. Based on the analyzed data a higher percentage of patients with anemia was observed in the group with preeclampsia than in the control group.

## Conclusions

1. In the study population, the Rh factor had statistical significance.
2. Hemoglobin concentration appears to be an important predictive factor.
3. It is necessary to conduct research on a larger number of patients to clearly determine whether blood type, Rh factor and anemia influence the occurrence of preeclampsia.

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## **Neurosurgical Therapeutic and Diagnostic Aspects in Craniosynostosis: Analysis of Impact on the Visual Organ and Implications for Ophthalmic Care**

**lek Karolina KOMAR-GRUSZKA**

**Szpital Dziecięcy im. Prof. Dr med. Jana Bogdanowicza w Warszawie, Polska**

**lek. Anna ZWIERZYŃSKA – FURMANEK**

**Zakład Anatomii, Collegium Medicum, Uniwersytet Jana Kochanowskiego w Kielcach, Polska**

**lek. Jakub GRUSZKA**

**Warszawski Szpital Południowy, Polska**

**lek. Agata WIŚNIEWSKA**

**Szpital Dziecięcy im. Prof. Dr med. Jana Bogdanowicza w Warszawie, Polska**

**dr n. med. Olga ADAMCZYK-GRUSZKA**

**<sup>4</sup>Katedra Ginekologii i Położnictwa, Collegium Medicum, Uniwersytet Jana Kochanowskiego w Kielcach, Polska**

### **Abstract**

Craniosynostosis, a condition characterized by premature fusion of cranial sutures, poses diagnostic and therapeutic challenges in pediatric patient care. Given the potential neurological complications, including visual impairments, neurosurgical interventions are often necessary. This study focuses on analyzing the impact of neurosurgical reconstructive interventions on the visual organ in patients with craniosynostosis. It presents the essence of various clinical aspects related to visual disorders, including strabismus, refractive errors, and neuropathy. A multidisciplinary medical team plays a crucial role in the care of these patients, with a pediatric ophthalmologist serving a significant function in monitoring and treating vision-threatening complications. The study underscores the importance of



collaboration between neurosurgeons and ophthalmologists in striving for optimal clinical outcomes and preventing permanent vision loss in patients with craniosynostosis.

**Keywords:** craniosynostosis, visual impairments, strabismus, refractive errors, neuropathy

## INTRODUCTION

Craniosynostosis refers to a group of congenital disorders characterized by the premature fusion of one or more cranial sutures. The incidence of craniosynostosis varies from 3.1 to 5.06 per 10,000 births (1). Single-suture craniosynostosis is more common than multiple sutures, with the most prevalent type being sagittal craniosynostosis, accounting for 40-60% of cases (2). Craniosynostosis is described in over 150 genetic syndromes (3). The most common mutations involve the fibroblast growth factor receptor (FGFR) gene, leading to constitutive activation of FGFR and uncontrolled osteoblast differentiation, resulting in premature suture fusion (3,4).

Craniofacial syndromes associated with FGFR mutations include Apert, Crouzon, Pfeiffer, and Muenke syndromes, while syndromes such as Saethre-Chotzen and Carpenter are linked to mutations other than FGFR (4). Secondary craniosynostosis may occur with metabolic disorders, hematologic disorders, developmental head defects, and teratogenic developmental defects. Depending on the affected cranial suture, symptoms presented by the patient vary, always resulting from the uneven development of the skull bones due to the growing brain (4).

Craniosynostosis symptoms involve multiple craniofacial systems. Visual complications are common and include secondary optic neuropathy, strabismus, refractive errors, exposure keratopathy, and visual impairment resulting from these symptoms. Ophthalmologists play a crucial role in the care of patients in this group, as they involve the rapid detection of increased intracranial pressure (ICP), early childhood vision impairment diagnosis, and treatment of other ocular symptoms that may arise. Visual development in the first 8 years of life requires stimulation from both eyes. Visual impairment occurs in one or both eyes when cortical neuron stimulation is inadequate. The frequency of this phenomenon in craniosynostosis is statistically difficult to determine (4).

Vision-deteriorating processes such as strabismus, refractive errors, corneal scars, are factors in the development of visual impairment. Ophthalmic management depends on the etiology. Strabismus, one of the most common causes of visual impairment, occurs in 39-76% of patients with craniosynostosis (5,6). The pathogenesis of strabismus is related to the abnormal shape of the orbit and disturbances in the function or number of extraocular muscles. Surgery is recommended after the second year of life because eye abnormalities may resolve after cranial reconstruction. Residual oculomotor dysfunction may occur post-operation, with abnormalities in the position or number of extraocular muscles.

Refractive errors, especially astigmatism, are common in this disease, being the main factor in visual impairment. Astigmatism above 1 diopter (D) occurs in 40%. The prevalence of anisometropia is 18% (3.5% in the general population). High astigmatism is observed in Apert, Pfeiffer, Crouzon syndromes, and craniofrontonasal dysplasia (7).



Hyperopia, a common refractive error associated with craniosynostosis, although its prevalence varies from 18-57% (8,9,10). Corneal pathology encountered in craniosynostosis is most often associated with exophthalmos caused by shallow eye sockets and resulting incomplete eyelid closure. Chronic corneal exposure and lack of adequate protection can lead to various symptoms such as corneal ulceration, corneal scarring, and even intraocular inflammation or perforation (8).

Optic neuropathy caused by increased ICP is a common ocular complication of craniosynostosis and a cause of vision loss. Increased ICP causes optic disc edema, leading to neuronal death, optic nerve atrophy, and permanent vision loss due to intraneuronal ischemia resulting from blood stasis. Optic disc edema occurs in 10-15% of craniosynostosis cases (9). Therefore, constant ophthalmic care is a fundamental aspect of craniosynostosis treatment (10,11).

### **Title of the Work**

The Impact of Neurosurgical Reconstructive Surgery on Eye Organs in Patients with Craniosynostosis.

### **Materials and Methods**

A retrospective analysis of medical records of 34 patients with congenital skull defects was conducted at the Ophthalmology Department of the Children's Hospital located at Niekłańska Street. Patients underwent neurosurgical reconstructive surgery. The study group consisted of 21 boys and 13 girls aged 3 to 34 months (median age: 12.5 months), including: 12 (35.29%) patients with frontal craniosynostosis, 17 (50%) with sagittal craniosynostosis, and 5 (14.70%) patients with plagiocephaly. The analysis included measurements of orbital width, ocular motility, presence of strabismus, and assessment of the fundus before and after neurosurgical intervention.

### **Results**

In all 34 examined patients, regardless of the type of neurosurgical operation, an increase in the interorbital distance was observed post-procedure, with an average of 24.87 mm (+/-3.82mm) between the medial angles and 67.61mm (+/-6.33mm) between the lateral angles before the surgery, and respectively 26.03 mm (+/-2.98mm) and 70.36mm (+/-5.02mm) after the surgery. Among all 34 consulted patients, strabismus was observed in a total of 4 cases (11.76%). In 2 patients, it was divergent strabismus associated with sagittal craniosynostosis, which resolved after the surgery. In one case, it was convergent strabismus in a patient with frontal craniosynostosis and convergent strabismus in a patient with sagittal craniosynostosis. Convergent strabismus persisted despite surgical intervention. Only 1 of all consulted patients exhibited impaired mobility in the form of impaired right eye abduction, which showed no changes after neurosurgical intervention. The fundus images of the patients before and after the surgery were normal in all 34 patients.



## Summary

Craniosynostosis poses a comprehensive problem that extends beyond neurosurgical aspects and may also manifest through various ophthalmic disorders. Despite preliminary analysis suggesting the influence of neurosurgical operation on parameters such as interorbital distance or the presence of divergent strabismus, further studies are needed due to the limited number of cases. The treatment of this condition requires a multidisciplinary approach involving multiple specialists, both surgical and medical, operating under the supervision of a care coordinator. Establishing an efficient and coordinated multidisciplinary team in the field of craniosynostosis presents a challenge, however, the pursuit of continuous improvement in outcomes and the provision of high-quality care to patients is the ultimate goal.

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## Payment Methods in International Trade and Their Importance for the Logistics Sector

Orhan ÇOBAN

Gaziantep University, Faculty of Economics and Administrative Sciences, Department of Logistic, Gaziantep, Türkiye; [ocoban@gantep.edu.tr](mailto:ocoban@gantep.edu.tr) ; ORCID ID: 0000-0001-6137-8937.

Ayşe ÇOBAN

Gaziantep University, Oğuzeli Vocational School, Gaziantep, Türkiye; [aysecoban@gantep.edu.tr](mailto:aysecoban@gantep.edu.tr) ; ORCID ID: 0000-0002-7844-7633.

### Abstract

With the acceleration of globalization in world economies at the end of the 1980s, significant increases were recorded in commercial activities. Due to this increase, logistics began to develop and concepts on this subject began to be reinterpreted. Foreign trade transactions have an important place in the ever-increasing transaction volume in the world economy. Foreign trade has structural difficulties compared to domestic trade and competition increases day by day, making payment methods important. With the introduction of International Banks and Payment Institutions, payment methods that protect Importers and Exporters have been developed. The aim of this study is to reveal the payment methods in foreign trade in terms of both exports and imports in a theoretical framework.

**Keywords:** Payment methods, international trade, letter of credit

### Introduction

Foreign trade not only provides products that countries cannot produce or products that can be obtained cheaper from other countries, but also provides income by selling the products they produce to other countries. Foreign trade has a very important place in increasing the development and welfare levels of countries (Alabayır ve Muzır, 2016; Sezen, 2019). An example can be given to better explain foreign trade. If we compare a country to a business, thanks to foreign trade, that country can turn the whole world into a market where it can sell, or it can supply goods or raw materials from all over the world at a higher quality and cheaper price instead of a limited area. Foreign trade enables products to be sold to more customers. Therefore, production and sales increase thanks to foreign trade. Increasing production also increases employment. Increasing sales will result in more raw materials and goods



entering, thus reducing prices and ensuring more profits. Foreign trade will also increase the quality of produced products.

It is the removal of a good from Turkey's customs territory or to free zones in accordance with the current export legislation and customs legislation, or other exits and transactions that will be accepted as exports by the Undersecretaries. Exporting companies are natural and legal persons who are members of the General Secretariat of the relevant Exporters' Associations and have a tax number, depending on the goods to be exported, and partnerships that are authorized to make legal dispositions in accordance with the provisions of the current legislation, although they do not have legal entity status (MTO, 2007). In this context, customs declarations are documents filled out by the exporter when the goods leave the customs border of the exporter's country or by the importer when the goods enter the customs border of the importer's country and submitted to the customs administration. Export transactions in banking applications; A number of legal regulations such as foreign exchange legislation and Law No. 1567 on the Protection of the Value of Turkish Currency (TPKK) are taken into account. In this context, export prices are realized within the framework of the rules determined in the sales contract and international commercial practices. The aim of this study is to reveal theoretical information about international payment methods in both exports and imports.

### **Export and Payment Methods in Export**

When the payment methods in international trade are considered on the export axis, 7 different payment methods come to the fore (Bağrıaçık, 2003; Ağsakal ve Erkan, 2016)

*Cash Payment:* In this form of payment, the importer pays the price of the goods to the exporter before the goods are shipped. The exporter does not assume any risks; risks such as shipment delay or goods not conforming to the order are entirely undertaken by the importer.

*Payment Against Goods:* In this form of payment, the importer pays the price of the goods to the exporter after receiving the goods. After the exporter ships the goods on behalf of the buyer, he sends the documents representing the goods to the importer either directly or through the bank on condition of free delivery. In this payment method, the risk is generally assumed by the exporter.

*Payment Against Documents:* It is a form of payment that allows the exporter to deliver the goods to the importer via the bank after the exporter ships the goods in accordance with the sales contract made with the importer, in exchange for the collection of the price of the goods.

*Acceptance Credit Payment:* With an agreement between the importer and the exporter, the payment of the prices of the goods to be imported is postponed for a certain period of time after the shipment of the goods. In this form of payment, there is a policy/bill that undertakes and guarantees the payment of the price of the goods within a certain period of time.

*Letter of Credit with Acceptance Credit:* It is a form of payment that allows the shipping documents to be released in letters of credit opened in accordance with international rules and legislation, following



the acceptance of the policy presented with these documents by the importer's bank or the correspondent bank, and the costs to be paid at the maturity of the policy.

*Document Receipt with Acceptance Credit:* It is a form of payment in which the price of the goods is paid to the exporter at the maturity of the policy after the bank delivers the shipping documents to the importer following the acceptance of the policy attached with these documents by the importer.

*Goods Against Acceptance Credit:* It is a payment method in which the price of the exported goods is paid at the policy maturity after the importer receives the goods and accepts the policy.

*Payment by Letter of Credit: Letter of Credit:* A payment made by a bank (issuing bank) upon the request and instruction of the buyer (importer) or acting on its own behalf, to the seller (exporter) up to a certain amount, within a certain maturity, in return for certain documents and provided that the stipulated conditions are met. It is a written commitment to the seller that he will do so, that he will accept or negotiate the policies issued by the seller and pay them on maturity, or that he will enter into a deferred payment obligation and make payment on maturity.

There are 4 parties in the letter of credit payment method. These (Ağsakal ve Erkan, 2016):

Letter of Credit Supervisor: Buyer (importer)

Issuing Bank: The bank that opened the letter of credit (importer's bank)

Letter of Credit Beneficiary: Seller (exporter)

Intermediary Bank: Bank of the beneficiary (exporter).

Letter of credit transactions in international trade are carried out in accordance with the procedures and rules specified in the Uniform Procedures and Implementation Rules for Letters of Credit UCP 600 published by the International Chamber of Commerce and the Uniform Rules for Interbank Rambuement for Letters of Credit URR No. 725 Brochures.

## **Letter of Credit Types**

Types of letters of credit in international trade are discussed under 5 headings as explained below.

*Pay-on-Sce (On Presentation of Documents) Letter of Credit:* In this type of payable letter of credit, payment is made by the issuing bank, based on the authority given by the issuing bank, or by the confirming bank, if any, upon the beneficiary (exporter) presenting documents in accordance with the terms of the letter of credit within the maturity of the letter of credit..

*Term Letter of Credit:* In accordance with the agreement made between the importer and the exporter, the term letter of credit allows the importer to pay the price of the goods within a certain period of time after the documents representing the goods subject to the letter of credit are received. In a term letter of credit, there is also a payment term in addition to the letter of credit term. Payment terms can be freely determined between the importer and exporter. The difference between a term letter of credit



and a cash on sight letter of credit is; The price of the goods subject to the letter of credit is paid on the due date, not on presentation of the documents.

*Letter of Credit with Acceptance Credit:* The difference between letters of credit with acceptance credit and cash on sight and term letters of credit is that the presentation of the policy is required. These letters of credit can be deferred or they allow payment at sight. The policy can be discounted after it is accepted by the bank.

*Mixed Payment Letter of Credit:* Mixed payment letters of credit allow the letter of credit to be paid with more than one payment method. Some of the letters of credit may require payment upon presentation of documents, some may require payment within a certain period of time, and some may require advance payment.

*Letter of Credit:* It means that, upon presentation of appropriate documents, the documents and/or policies are purchased by the responsible bank by paying the fees to the beneficiary on or before the business day of the bank in charge.

*Prepaid Letters of Credit:* It is a type of letter of credit that allows the exporter company to make payments at a specified rate after the letter of credit is opened, without loading yet. In some cases, the letter of credit may include a requirement for full advance payment. It is an advance payment and is generally used to provide financial support to exporting or manufacturing companies.

### **Import and Payment Methods for Import**

Persons or organizations resident in the country bring the goods they purchase from people or organizations abroad in accordance with the relevant legislation and pay for them, which is called import. The importer who carries out this activity can carry out import transactions with any real or legal person who has a tax number given within the framework of the provisions of the Tax Procedure Law, and partnerships of persons who are authorized to make legal dispositions in accordance with the provisions of the current legislation, although they do not have legal entity status.

Import transactions can be paid by the following methods within the framework of international rules and banking practices (Ayaz, 2020):

*Prepaid Import:* Cash payment is a form of payment in which the importer company pays the price before the goods are shipped, and the exporter company ships the goods after collecting the price. In case a part of the price of the goods is paid in advance, it is possible to pay the remaining part according to other payment methods.

*Import Against Documents:* Import against Documents is a form of payment that envisages the delivery of documents to the importer in exchange for the collection of the price of the goods. The importer's bank, which collects the cost of the goods and delivers the documents, transfers this fee in accordance with the instructions of the exporter's bank.



*Import Against Documents with Acceptance Credit:* Import against Documents with Acceptance Credit is the payment method in which the documents sent to the bank with the collection instruction are delivered to the importer after the acceptance of the policy(s). The importer and the exporter agree that the import will be made by payment against documents with acceptance credit. The exporter ships the goods in accordance with the agreement made with the importer and sends the bill of exchange, issued by him and containing a certain maturity, with documents attached to the collection instruction, directly or through his bank, to the importer's bank for collection.

Policy(s) can be accepted by the importer, the sending bank (exporter's bank) or the collecting bank (importer's bank). If the acceptance of the policy is made by the sending bank, the policy submitted by the exporter together with the shipping documents remains with the sending bank and this bank accepts the policy. It notifies the importer's bank that it has If the acceptance will be made by the importer's bank, after the policy that comes with the documents is accepted, it is kept until the payment date or returned to the exporter or his bank, by informing the sending bank that it has been accepted.

*Import with Letter of Credit:* Letter of credit is issued in the form of a notification letter written by the buyer's (importer's) bank to the seller, covering its own commitment. The seller, who is the addressee of the letter in question, has the authority to receive a certain amount of money from the bank if he submits the documents specified in the letter and fulfills the conditions.

In transactions with letters of credit, the international principles and rules included in the Brochures titled "Uniform Procedures and Implementation Rules for Letters of Credit UCP 600" and "Uniform Rules for Interbank Rambuement for Letters of Credit URR 725" published by the International Chamber of Commerce are applied in imports as well as in exports..

## Conclusion

It is observed that as international trade increases day by day, some problems arise. In this context, it is important for both exporters and importers to minimize risks by making payments in a healthy manner. By their nature, foreign trade transactions carry more risks than domestic trade. In case of problems that may arise in payment transactions, the countries that are parties to the transaction may have different practices. In order to eliminate this problem, standardization has been achieved in foreign trade transactions. Although there are different payment methods in foreign trade transactions, 4 methods are generally used. These; The payment methods are cash payment, payment against goods, payment against documents and letter of credit.

Among these payment methods in Turkey, payment against goods, that is, payment after delivery of the goods, is generally preferred in export transactions. In import transactions, payment is mostly made against goods. In foreign trade, cash payment is the method that reduces the risk of the seller, and payment against goods is the method that reduces the risk of the buyer. Transactions against letters of credit and documents are safer because they are made through banks, but they are more costly due to the commissions charged by banks.



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## The Center of Zionism in The Middle East: Israel

### Siyonizmin Ortadoğu'daki Merkezi: İsrail

Elif Veronika ÖZTÜRK

Hakkari University, Türkiye

#### Abstract

Zionist Jews, who had long-standing ambitions on the Palestinian lands in the Middle East region of the Ottoman Empire, which lost its power and was defeated at the end of the First World War, made plans to carry out operations on the Palestinian homeland and settle by usurping it from outside, with the support and encouragement of England, one of the powerful states of that time. and they implemented it. After the transition of the region to British hegemony in 1917 for the Zionist state, which was designed by the Zionist Congress held in Basel, Switzerland in 1897, Jews took more concrete and bigger steps and started to buy land and houses in the region. At one point, Sultan Abdülhamid Khan sensed this plan and bought back the lands from the Jews, but the situation could not be prevented. England, which has supported and encouraged the Zionist state from the very beginning, brought the issue to the United Nations in 1947 and took the lead in the transition of Israel, which can be considered the center of Zionism in the Middle East, to state status. Especially with the terror, intimidation-violence-oppression methods of the Zionist Jews, which started in 1947, the Palestinian people were killed or became refugees. With the help of Jews and Zionist supporters. Since then, the occupation position in Palestine has continued. Finally, the 2000s came when 85% of the Palestinian homeland was occupied by Israel, and a full Israeli blockade and embargo was maintained in non-existent areas such as Gaza, the West Bank and Jerusalem. The people of Palestine/Gaza, who have been struggling under siege and sanctions for 20 years, made the Hamas political movement a government, but could not come to power because of Israel. The Israeli terrorist state was inflicting all kinds of oppression on Palestinian and Gazan Muslims. Thereupon, one day, on the night of October 7, 2023, the Al-Qassam Brigades from Gaza entered Israel with an infiltration operation and took 250 prisoners or hostages. Maybe to save those who were unlawfully held and tortured in Israeli prisons. Using this one-day operation called the Al-Aqsa Flood as an excuse, the cruel state of Israel declared war on Hamas, established a war government, and destroyed cities in the Gaza strip with 80 thousand tons of bombs for more than 4 months, leaving no stone unturned. He committed all kinds of crimes against humanity and war. He made plans for a villa in Gaza. As of January 21, 2024, 25,105 Gazans, 70% of whom were children, babies and women, 26,750 as of January 30, and 30,000 as of February 11, committed genocide by killing Gazan civilians with bombs. In fact, during this genocide period, which Israel considered a war but not a war, but lasted more than 4 months and amounted to



massacres, the Occupation State could not achieve what it wanted, and the Palestinians from Gaza who did not leave their homeland at the expense of their lives and were killed could not be defeated. Al-Qassam Brigades killed over 500 Israeli soldiers and destroyed hundreds of tanks. The depopulation of Gaza has not occurred. A ceasefire and a fair peace agreement must be made as soon as possible for this long-standing and difficult process.

**Keywords:** Israel, Palestine, Gaza, Jerusalem, Ottoman Empire, West Bank, Zionism, Genocide, Migration

## Öz

Birinci Dünya Savaşı sonunda gücünü kaybeden ve yenik düşen Osmanlı Devleti'nin Ortadoğu bölgesinde yer alan Filistin toprakları üzerinde önceden beri emelleri bulunan Siyonist Yahudiler o zamanın güçlü devletlerinden İngiltere'nin de destek ve teşvikleri ile Filistin vatanı üzerinde operasyonlar ve dışardan gelip gasp ederek yerleşme planlarını yaptı ve uyguladılar. 1897'de İsviçre/Basel kentinde toplanan Siyonist Kongresi ile tasarlanan Siyonist devleti için 1917'de bölgenin İngiliz hegemonyasına geçişinden sonra Yahudiler daha somut ve büyük adımlar atmış, bölgeden arazi ve ev almaya başlamışlardır. Bir ara Sultan Abdülhamid Han bu planı sezerek Yahudilerden arazileri geri satın almışsa da duruma engel olunamamıştır. Baştan beri siyon devletine destek veren ve teşvik eden İngiltere 1947'de de meseleyi Birleşmiş Milletler 'e taşıyarak resmen Ortadoğu'da Siyonizm'in merkezi sayılabilecek olan İsrail'in devlet statüsüne geçişinde öncülük yapmıştır. Özellikle 1947'de başlayan Siyonist Yahudilerin terör ve yıldırma- şiddet- baskı yöntemleri ile Filistin halkı öldürülmüş veya mülteci durumuna düşürülmüştür. Yahudi ve Siyonistlerin destekçilerinin yardımlarıyla. İşte o zamanlardan beri Filistin'de işgal pozisyonu devam edegelmiştir. Nihayet öyle ki Filistin vatanının % 85'i İsrail tarafından işgal edilmiş ve edilmeyen Gazze ve Batı Şeria, Kudüs gibi bölgelerde de tam bir İsrail ablukası ve ambargosunun sürdürüldüğü 2000'li yıllara gelinmiştir. 20 yıldan beri kuşatma ve yaptırımlar altında zorluklarla mücadele eden Filistin/ Gazze halkı Hamas siyasi hareketini hükümet yapmış ama İsrail yüzünden iktidar yapamamıştır. İsrail terör devleti her türlü zulmü Filistinli-Gazzeli Müslümanlara yaşıyordu. Bunun üzerine bir gün 7 Ekim 2023'gecesi bir sızma harekâtıyla İsrail'e giren Gazzeli El Kassam Tugayları 250 esir veya rehine almışlardı. Belki İsrail hapis hanelerinde hukuksuz şekilde tutulup işkence edilen kişileri kurtarabilmek için. Aksa Tufanı adı verilen bu bir günlük operasyonu bahane eden zulüm devleti İsrail, Hamas'a savaş açtığını ilan ederek savaş hükümeti kurmuş ve 4 ayı aşkın süre boyunca Gazze şeridinde taş üstünde taş bırakmayacak şekilde kentleri 80 bin ton bomba ile yıkmıştır. Her türlü insanlık ve savaş suçlarını işlemiştir. Gazze'de villa planları yapmıştır. 21. Ocak 2024 tarihi itibarıyla % 70'i çocuk, bebek ve kadınlardan oluşan 25. 105, 30 Ocak itibarıyla 26.750, 11 Şubat itibarıyla 30.000 Gazzeli sivil halkı bombalarla öldürerek soykırım yapmıştır. Aslında İsrail'in savaş saydığı ama savaş değil bu 4 ayı aşkın katliama varan soykırım sürecinde İşgal devleti istediğine ulaşamamış, canları pahasına vatanlarını terk etmeyip öldürülen Gazzeli Filistinliler mağlup edilememişlerdir. El Kassam Tugayları toplam 500'ün üzerinde İsrail askerini öldürmüş ve yüzlerce tanklarını tahrip etmiştir. Gazze'nin insansızlaştırılması



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gerçekleşmemiştir. Uzun süredir devam eden bu zorlu süreç için en ivedi şekilde ateşkes ve adil bir barış antlaşması yapılmalıdır.

**Anahtar Kelimeler:** İsrail, Filistin, Gazze, Kudüs, Osmanlı Devleti, Batı Şeria, Siyonizm, Soykırım, Göç



## **Sustainability indicators to achieve circular economy: through Corporate Social Responsibility (CSR) and plastic waste recycling in MSMEs in Indonesia**

**SUKO RINA ADIBATUNABILLAH**

Muhammadiyah Yogyakarta University, [sr.adibatunabillah@gmail.com](mailto:sr.adibatunabillah@gmail.com), Indonesia

**IFTA FIRDAUSA NUZULA**

Aisyiyah Yogyakarta University, [Iftafirdausan@gmail.com](mailto:Iftafirdausan@gmail.com), Indonesia.

### **Abstract**

The introduction of the circular economy is a key objective in shifting the traditional economic paradigm to a sustainable and environmentally friendly model. The concept involves the practice of recycling, product reuse, and renewable energy utilization to optimize the use of natural resources and reduce negative impacts on the environment. Corporate Social Responsibility (CSR) plays an important role in driving circular economy, especially in the context of small and medium-scale enterprises (MSMEs). MSMEs in Indonesia, as the backbone of the economy, have a significant role in managing the plastic waste problem. Many MSMEs are directly or indirectly involved in the use of plastic as the raw material for the production of goods in the use of goods packaging. Thus, MSMEs have great potential to contribute to recycling and plastic waste management efforts.

**Keywords:** Corporate Social Responsibility (CSR), MSMEs, Circular Economy

### **INTRODUCTION**

The introduction of the circular economy is a concept that aims to change the traditional economic paradigm based on a production, use, and disposal model to one that is sustainable and environmentally friendly (Sauvé et al., 2016). In a circular economy, natural resources are utilized efficiently through recycling practices (Isiksal et al., 2022), product reuse (Simpson et al., 2019), and the use of renewable energy (Halkos & Gkampoura, 2020). This concept is important in the context of



sustainability as it helps reduce pressure on the environment and mitigate negative impacts on the global ecosystem (Everard et al., 2020; Pata, 2021; Sumaila & Tai, 2020). By implementing a circular economy, we can minimize waste (Romero-Hernández & Romero, 2018), reduce greenhouse gas emissions (Yang et al., 2023), and improve the efficiency of natural resource use (Yang et al., 2023). As a result, the circular economy can help extend the lifespan of natural resources, improve business competitiveness, and create sustainable economic opportunities for society. Therefore, understanding and implementing the concept of circular economy is crucial in achieving sustainable development goals at the global level.

The role of Corporate Social Responsibility (CSR) in driving the circular economy is crucial (Morea et al., 2023), emphasizing a company's responsibility towards the social, environmental, and economic impacts of its business (Huk & Kurowski, 2021; Voronkova et al., 2020). Companies in this context are MSMEs. Companies use CSR to promote sustainable business practices, such as investment in recycling technologies (Cui et al., 2022). Collaboration with other parties in the supply chain helps ensure the use of environmentally friendly materials (Hussain & Malik, 2020). Through CSR initiatives, companies create a business environment that supports the exchange of ideas to achieve circular economy goals. In addition, companies utilize CSR activities as a means to raise awareness about the importance of the circular economy among employees, customers, and the general public, encouraging the adoption of sustainable behaviors and supporting the company's sustainability mission (Niyommaneerat et al., 2023).

In Indonesia, the issue of plastic waste is a serious concern given that the country has one of the highest levels of plastic pollution in the world. According to a report from the National Plastic Action Partnership (NPAP) (2020), about 4.8 million tons (70%) of the total plastic waste in Indonesia is unmanaged. It's estimated that around 0.62 million tons (9%) of unmanaged plastic waste eventually pollute Indonesia's waters and oceans. Data presented the Indonesian Institute of Sciences (LIPI) states that around 0.27-0.60 million tons of plastic waste flows into the Indonesian sea every year (Cordova et al., 2019). Recycling plastic waste is a very important strategy to reduce its negative impact on the environment. Amid this challenge, the Micro, Small, and Medium Enterprise (MSME) sector has a significant role to play (Adibatunabillah et al., 2022; Siregar, 2020). MSMEs in Indonesia are not only the backbone of the economy (Kementrian KUKM, 2019), but also an important part of efforts to manage plastic waste.

MSMEs in Indonesia are often involved in plastic waste management, either directly or indirectly (Fikri & Naufal, 2023). Many MSMEs in the manufacturing sector use plastic as the main raw material in their production process (Bhattacharya & Ramachandran, 2021; Bisht et al., 2022; Sahu et al., 2021). In addition, most MSMEs also produce consumer products made from plastic. Thus, MSMEs have great potential to contribute to plastic waste recycling and management efforts.

However, a major challenge faced by MSMEs in Indonesia is the lack of access to technology and resources needed to support plastic waste recycling practices (Arisman & Fatimah, 2023; Sari et al., 2023; Wikurendra et al., 2024). Many MSMEs still use conventional production methods that are less efficient and environmentally friendly. In addition, inadequate infrastructure and lack of awareness of the importance of plastic waste management are also major barriers for MSMEs in adopting sustainable recycling practices. Therefore, efforts to support MSMEs in managing and recycling



plastic waste is an important step in driving a circular economy and achieving sustainability goals in Indonesia.

This study will focus on multiple MSMEs functioning in several sectors in Indonesia, primarily related to the manufacturing or use of plastics. The research will focus on analyzing the CSR practices undertaken by companies in collaboration with MSMEs, as well as the processes and challenges faced by MSMEs in adopting plastic waste recycling practices. Data was gathered through interviews with firm and MSME officials, direct observation, and the examination of pertinent documents such as CSR reports and documentation of MSME production processes. By limiting the scope to specific cases, it's hoped that this study can provide an in-depth understanding of the role of CSR and plastic waste recycling practices in promoting a circular economy at the local level.

## **PROBLEM FORMULATION**

This article will examine the role of Corporate Social Responsibility (CSR) in encouraging circular economy practices in the Micro, Small, and Medium Enterprises (MSMEs) sector in Indonesia, as well as the processes and challenges faced by MSMEs in adopting plastic waste recycling practices, to support sustainability and reduce negative impacts on the environment.

## **OBJECTIVE**

The objective of this study is to investigate the role of CSR in promoting circular economy practices, particularly in the context of plastic waste recycling in MSMEs in Indonesia. Through an in-depth analysis of CSR initiatives undertaken and recycling practices adopted by MSMEs, this study aims to identify factors that support or hinder the implementation of a circular economy at the local level. As such, this study will not only provide insights into how CSR can be a key driver in driving a circular economy but will also provide practical recommendations for companies and MSMEs to enhance their contribution to achieving sustainability goals.

## **METHOD**

This research methodology will utilize a qualitative approach with a case study, focusing on an in-depth analysis of the role of CSR in driving circular economy practices in the MSMEs sector in Indonesia. Samples will be selected from various MSME sectors related to plastic production or use, and data will be collected through in-depth interviews, direct observation, and document analysis. Data analysis will be conducted thematically and qualitatively, with verification and interpretation of results to generate a comprehensive understanding of circular economy practices in Indonesian MSMEs as well as the challenges faced in adopting plastic waste recycling practices.

## **RESULT AND DISCUSSION**

1. Selected circular economy indicators



To measure circular economy strategies and KPIs related to CSR, literature on CSR and CE guidelines needs to be studied. It is important to set the scope by prioritizing the business processes and CE initiatives that MSMEs want to highlight, to enable customization and screening of CE strategies through the use of appropriate KPIs, some example indicators were selected, and CE indicators (CEIs) were identified and put into three categories (Niyommaneerat et al., 2023):

a. Environmental sustainability assessment

Environmental sustainability assessment of MSMEs in Indonesia is becoming increasingly relevant in the context of CSR. While MSMEs are generally smaller in scale than large enterprises, the environmental impacts of MSME activities can be much more significant collectively, given their large numbers and spread across the country (Derhab & Elkhwesky, 2023). Therefore, assessing the environmental sustainability of MSMEs is crucial in the context of CSR (Dixit & Priya, 2023). However, MSMEs are often overlooked in large corporate CSR initiatives that focus more on large and prestigious projects. It is important to recognize that MSMEs also need support and guidance in adopting environmentally friendly business practices (Gunawan et al., 2020). Ridwan Maksum et al. (2020) in their research explained, that there is a need to increase awareness and understanding among MSME owners of the importance of social and environmental responsibility, as well as ways to integrate it into their operations. Effective CSR must consider the local context and provide appropriate resources for MSMEs to contribute positively to environmental sustainability (Das et al., 2020). Thus, the integration of MSMEs in the CSR initiatives of large companies can be a strategic and progressive step in the effort to preserve the environment in Indonesia.

In addition, one aspect that needs to be considered in assessing the environmental sustainability of MSMEs is waste management (Singh et al., 2021). MSMEs often generate significant amounts of waste as a result of their production processes (Derhab & Elkhwesky, 2023). This waste, if not managed properly, can be a serious source of environmental pollution (Derhab & Elkhwesky, 2023). Therefore, MSMEs need to adopt sustainable waste management practices, such as recycling, waste reduction, and selection of environmentally friendly raw materials.

To achieve a circular economy, MSMEs also need to pay attention to the life cycle of their products, from the production stage to the selection of raw materials, and product use, to the final stage of waste management (Bocken et al., 2016). Strategies such as recycling production waste into new raw materials, designing products to be recyclable, and reducing the use of hazardous materials can help MSMEs move towards a more sustainable economy. CE strategies can also drive innovative business models beyond product preservation (Murray et al., 2017).

Cooperation between MSMEs and related parties in the supply chain can also improve waste management efficiency. By sharing resources and knowledge, MSMEs can create a cooperative environment that supports circular economy practices (Pauliuk, 2018). Through this joint effort, MSMEs can play an active role in maintaining environmental sustainability while improving their competitiveness and business sustainability. A circular economy is a policy approach to minimizing the burden on the environment and stimulating the economy (Moraga et al., 2019).



b. Economic sustainability assessment

The assessment of the economic sustainability of MSMEs in Indonesia about CSR highlights the important role of MSMEs in inclusive and sustainable economic development. CSR in the context of MSMEs comprises not just social responsibility but also their long-term economic viability (Das et al., 2020; Derhab & Elkhwesky, 2023). While MSMEs in Indonesia contribute significantly to economic growth (Kementrian KUKM, 2019), they often face challenges such as limited access to capital, markets, and human resources (Naradda Gamage et al., 2020). In this context, CSR can be a means for large corporations and the public sector to support MSMEs in improving their competitiveness, market access, and managerial capacity. However, there are challenges in implementing effective CSR for MSMEs, such as limited resources and understanding of the CSR concept (Sedyastuti, 2018). Therefore, a holistic and inclusive approach involving collaboration between large corporations, governments, financial institutions, and civil society is needed to provide MSMEs with the necessary training, guidance, and access to resources to implement sustainable CSR practices and support their economic growth (Derhab & Elkhwesky, 2023; Gallardo-Vázquez & Lizcano-Álvarez, 2020). The global business sector is encouraged to support the achievement of SDGs through sustainable movements. MSMEs are one of the efforts of the business sector closest to the community and have an environment that outperforms large industries. CE is one of the efforts to increase the contribution of MSMEs in SDGs performance (Alfarizi, 2023). Thus, a review of the economic sustainability of MSMEs related to CSR shows the need for an approach based on inclusiveness and partnership to achieve sustainable economic development in Indonesia.

c. Social sustainability assessment

A social sustainability assessment of MSMEs in Indonesia linked to CSR highlights the important role of MSMEs in inclusive and sustainable community development (Permatasari & Gunawan, 2023). CSR in the context of MSMEs is not only related to environmental or economic aspects but also to their social responsibility towards the surrounding community (Dixit & Priya, 2023). MSMEs are often the backbone of local economies, providing jobs and supporting the sustainability of local communities. However, in many cases, MSMEs are face social challenges such as gender inequality, economic inequality, and lack of access to basic services such as education and healthcare (Bayumi et al., 2022). Therefore, MSMEs need to integrate CSR practices that focus on social aspects, such as local community empowerment, capacity building, and gender equality in their operations. However, effective implementation of social CSR among MSMEs is often hampered by limited resources, understanding, and support from other parties (Thanh et al., 2021). A concerted effort from the government, private sector, and civil society organizations is needed to provide MSMEs with training, access to resources, and guidance in implementing sustainable and socially positive CSR practices (Stekelorum, 2020). Thus, the assessment of MSME social sustainability related to CSR underscores the need for a broader integration of social responsibility in MSME business practices to support sustainable social development in Indonesia.



## 2. Evaluasi dan pemantauan CSR UMKM menggunakan indikator CE terpilih

Evaluation and monitoring of CSR for MSMEs can be conducted by considering indicators from the three aspects of analysis above: environmental, economic, and social. Here are some indicators that can be used (Rossi et al., 2020):

### a. Environmental Aspects:

- 1) Use of natural resources: Monitor the use of energy, water, and raw materials in production and identify efforts to reduce unsustainable consumption of natural resources.
- 2) Waste management: Measure the amount of waste generated and evaluate efforts to recycle, reduce, or manage waste in an environmentally friendly manner.
- 3) Environmentally friendly practices: Evaluate the implementation of business practices such as use environmentally friendly materials, improved energy efficiency, and reduced greenhouse gas emissions.

### b. Economic Aspects :

- 1) Revenue growth: Monitor revenue growth and net profit of MSMEs over time to assess their economic sustainability.
- 2) Engagement in local supply chains: Evaluate how much MSMEs are involved in local supply chains and contribute to economic growth at the local level.
- 3) Access to capital: Monitor MSMEs' access to capital and financial support for their business development.

### c. Social Aspects:

- 1) Local community empowerment: Measures the contribution of MSMEs in empowering local communities, such as through skills training, job creation, or community development programs.
- 2) Gender equality: Assesses the extent to which MSMEs apply gender equality principles in their operations, including in terms of pay policies, employment opportunities, and promotions.
- 3) Positive social impact: Evaluate the positive social impact of MSMEs in the surrounding community, such as their contribution to social welfare, education, or public health.

Using these indicators, MSMEs can conduct continuous evaluation and monitoring of their CSR implementation. This helps MSMEs to identify areas for improvement and ensure that their CSR practices positively impact the environment, economy, and local communities (Taufiq & Iqbal, 2021). In carrying out CSR activities, the company level has its umbrella. The umbrella includes ACES, which uses the Kawan Lama Foundation for education, social assistance, and the environment. ERAA uses Lentera- Era Jaya Peduli which focuses on education, health, and social welfare aspects (Yapiter et al., 2013).



### 3. CSR challenges for MSMEs in meeting CE strategies and Sustainable Development Goal targets

The challenges of CSR for MSMEs in fulfilling the Circular Economy (CE) strategy and the Sustainable Development Goals (SDGs) target include several aspects that need to be considered: *First*, Limited Financial and Technical Resources, MSMEs often face limited financial and technical resources needed to adopt sustainable practices that are in line with CE principles and SDGs (Suwignyo et al., 2021). For example, the initial investment in green technology or changes to more sustainable production processes may be too high for MSMEs with limited capital. There are also enabling factors, such as government programs (Fratini et al., 2019).

*Second*, Awareness and Education, Awareness of the importance of CSR, CE, and SDGs may be low among MSMEs. Many MSME actors do not have an adequate understanding of these concepts or how to apply them in their business operations. Economic growth itself will affect investment (Virmani et al., 2022). Greater education and outreach efforts are needed to increase understanding and awareness among MSMEs. *Third*, Regulatory challenges can also be a barrier for MSMEs in implementing CSR and CE practices (Fallah Shayan et al., 2022). Sometimes, unclear or complicated regulations can hinder innovation and the development of sustainable solutions. MSMEs need a supportive regulatory environment and the right incentives to encourage the adoption of sustainable practices (Pratama, 2023).

*Fourth*, Market Access and Competition, MSMEs may face difficulties in marketing their sustainable products and competing with products from larger companies that have greater resources. Effective marketing strategies and product differentiation are needed to attract consumers who care about sustainability (Lakatos et al., 2021). *Fifth*, Community Empowerment and Stakeholder Engagement, Local community empowerment, and stakeholder engagement are important aspects of CSR implementation and achievement of SDGs. However, MSMEs may face difficulties in building strong partnerships with local communities or other stakeholders due to resource and capacity constraints. *Sixth*, Data Reliability and Reporting, MSMEs may have difficulties in collecting the necessary data to monitor the impact of their CSR on CE and SDGs (Fratini et al., 2019). Consistent and transparent reporting is an additional challenge, especially for MSMEs with administrative and financial limitations. The main step of CE is to extract resources in a sustainable way, which requires investment in infrastructure, sustainable design, and optimization of the product life cycle (Suwignyo et al., 2021).

In the face of these challenges, MSMEs need comprehensive support from governments, non-governmental organizations, the private sector, and communities to facilitate the adoption of sustainable practices that contribute to the achievement of the SDGs and sustainable economic development. This includes providing training, access to resources, incentivizing, and creating a supportive business environment (Scarpellini, 2022).

## CONCLUSIONS

The conclusion of this article highlights the important role of Corporate Social Responsibility (CSR) in encouraging circular economy practices in the Micro, Small, and Medium Enterprise (MSME) sector in Indonesia. A circular economy offers a sustainable approach to efficiently utilize natural



resources, reduce waste, and extend the lifespan of resources. CSR is a key instrument in encouraging MSMEs to adopt sustainable practices, such as plastic waste recycling.

The main challenges faced by MSMEs in fulfilling circular economy strategies and achieving sustainable development goals include limited financial and technical resources, low awareness and education on CSR and circular economy, as well as regulatory challenges, and tough market competition. In addition, the importance of local community empowerment and stakeholder engagement in supporting MSMEs is also highlighted.

To overcome these challenges, comprehensive support from various parties, including the government, non-governmental organizations, the private sector, and communities, is required. Concrete measures such as providing training, access to resources, incentivizing, and creating an enabling business environment can help MSMEs implement sustainable CSR practices and support sustainable economic growth.

As such, this article emphasizes the need for cross-sector collaboration and concerted efforts to achieve sustainable development goals in Indonesia, with MSMEs as key actors in the shift toward a more sustainable and environmentally friendly economy.

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## Transfer Issues from Turkmen Turkish to Turkish Turkish -An Essay on Turkmen Folk Tales-

### Türkmen Türkçesinden Türkiye Türkçesine Aktarma Sorunları -Türkmen Masalları Üzerine Bir Deneme-

Ünal ZAL

Dr. Independent Researcher, Author

#### Abstract

After the collapse of the Soviet Union, political, social, economic, and cultural relations with the Turkic world have begun to increase. This rapprochement has also brought about mutual transfer of scientific, artistic, and cultural works. Transfer studies conducted so far have not been at the desired level. One of the obstacles to transfer between dialects is the use of different writing languages and systems that have emerged due to historical and political reasons.

As known, the Turkic writing languages currently used are based on basic dialects such as Oghuz, Kipchak, Uyghur, and Bulgar, which are divided into secondary dialects among themselves. Various sound, shape, word, and syntax differences have occurred in these dialects dependent on these sources due to various political, economic, geographical, and cultural reasons throughout history.

In addition, transferring between dialects is not as easy as it is thought. Differences in the word world, false equivalent words, differences in cultural elements, and words taken from Russian and Western languages are some of the other factors that make transfer difficult. Despite all these difficulties, relations between Turkey and the Turkic world are rapidly advancing not only politically, socially, and economically but also culturally.

In this study, the problems encountered in intra-language transfer or translations from Turkmen Turkish, one of the Oghuz group Turkic dialects, to Turkey Turkish and proposed solutions are discussed. As an example, twelve tales by Ak Welsapar, one of the representatives of modern Turkmen literature living abroad, were selected. These tales were first transferred to Turkey Turkish, and then the encountered problems were classified and exemplified under main and subheadings.

**Keywords:** Turkic dialects, Turkmen Turkish, Tale, Transfer issues.

#### Öz

Sovyetler Birliğinin yıkılmasından sonra Türk dünyası ile olan siyasi, sosyal, ekonomik ve kültürel ilişkiler artmaya başlamıştır. Söz konusu yakınlaşma bilim, sanat ve kültür eserlerinin karşılıklı olarak aktarımını da



beraberinde getirmiştir. Şimdiye kadar yapılan aktarma çalışmaları istenilen düzeyde değildir. Lehçeler arasındaki aktarma çalışmalarının önündeki engellerden biri de tarihi ve siyasi sebeplerden dolayı ortaya çıkmış olan farklı yazı dilleri ve sistemlerinin kullanılıyor olmasıdır.

Bilindiği gibi günümüzde kullanılan Türk yazı dilleri kaynak bakımından Oğuzca, Kıpçakça, Uygurca ve Bulgarca gibi temel lehçelere dayanmakta ve bunlar da kendi aralarında ikincil lehçelere bölünmektedir. Tarihi süreç içinde çeşitli siyasi, iktisadi, coğrafi ve kültürel sebeplerden dolayı bu kaynaklara bağlı lehçelerde bir takım ses, şekil, kelime ve söz dizimi farklılıkları meydana gelmiştir.

Bunun yanında lehçeler arası aktarma yapmak sanıldığı kadar kolay değildir. Kelime dünyasındaki farklılıklar, yalancı eşdeğer kelimeler, kültürel öğelerin farklılığı, Rusça ve Batı dillerinden alınan kelimeler aktarmayı zorlaştıran diğer unsurlardan bazılarıdır. Bütün bu zorluklara rağmen Türkiye ile Türk dünyası arasındaki ilişkiler siyasi, sosyal ve ekonomik alanda olduğu gibi kültürel yönden de hızla ilerlemektedir.

Bu çalışmada, Oğuz grubu Türk lehçelerinden biri olan Türkmen Tü.den Türkiye Tü.ne yapılan dil içi aktarma veya çevirilerde karşılaşılan sorunlar ve çözüm önerileri üzerinde durulmuştur. Örneklem olarak ise modern Türkmen edebiyatının yurtdışında yaşayan temsilcilerinden Ak Welsapar'a ait on iki masal seçilmiştir. Söz konusu masallar öncelikle Türkiye Tü.ne aktarılmış, ardından karşılaşılan sorunlar ana ve alt başlıklar halinde tasnif edilerek örneklendirilmiştir.

**Anahtar kelimeler:** Türk lehçeleri, Türkmen Türkçesi, Masal, Aktarma sorunları

## GİRİŞ

Sovyetler Birliğinin yıkılmasından sonra Türk dünyası ile olan siyasi, sosyal, ekonomik ve kültürel ilişkiler artmaya başlamıştır. Söz konusu bu yakınlaşma bilim, sanat ve kültür eserlerinin karşılıklı olarak aktarımını da beraberinde getirmiştir. Şimdiye kadar yapılan aktarma çalışmaları istenilen düzeyde değildir. Lehçeler arasındaki aktarma çalışmalarının önündeki engellerden biri de tarihi ve siyasi sebeplerden dolayı ortaya çıkmış olan farklı yazı dilleri ve sistemlerinin kullanılıyor olmasıdır.

Bilindiği gibi günümüzde kullanılan Türk yazı dilleri kaynak bakımından Oğuzca, Kıpçakça, Uygurca ve Bulgarca gibi temel lehçelere dayanmakta ve bunlarda kendi aralarında ikincil lehçelere bölünmektedir. Tarihi süreç içinde çeşitli siyasi, iktisadi, coğrafi ve kültürel sebeplerden dolayı bu kaynaklara bağlı lehçelerde bir takım ses, şekil, kelime ve söz dizimi farklılıkları meydana gelmiştir.

Söz konusu farklılıkların görüldüğü Türk yazı dili alanlarından biri de Oğuzca'dır. Oğuzca, doğuda Ceyhun nehrinden Balkanlara kadar uzanan bir coğrafyada yaklaşık yüz yirmi milyon kişinin konuştuğu önemli bir Türk lehçesidir. Bu lehçe, tarihi süreç içinde çeşitli sebeplerden dolayı farklı gelişim çizgileri takip etmiştir. Örneğin Anadolu'da beylikler döneminden itibaren başlayan ve İstanbul'un fethinden sonra gelişmiş ve ölçünlü bir yazı dili (yüksek dil) olma özelliği kazanan Oğuzca; Kuzey Azerbaycan hariç, İran ve Türkmen bölgelerinde ise bu aşamaya henüz gelememiştir. Bu bölgelerde konuşulan Oğuzca'nın bir yazı dili hâline gelememiş olmasının önemli sebeplerinden biri de Moğol istilası ve Rusların Türkistan bölgesini işgalidir. 13. yüzyılda çok güçlü bir devlet hâline gelen Moğolların Türkistan coğrafyasında gerçekleştirdikleri istilalar sebebiyle bölgede yaşayan birçok Türk boyu gibi Oğuzlar da kitleler hâlinde batıya doğru göç etmişlerdir. Bu göçler bölgedeki



siyasi istikrarı bozduğu gibi kültürel hayatı da etkilemiş ve Oğuzca'nın yazı dili olma süreci tam olarak gerçekleşmemiştir (Uğurlu 2011).

Bunun yanında lehçeler arası aktarma yapmak sanıldığı kadar kolay değildir. Kelime dünyasındaki farklılıklar, yalancı eşdeğer kelimeler, kültürel öğelerin farklılığı, Rusça ve Batı dillerinden alınan kelimeler aktarmayı zorlaştıran diğer unsurlardan bazılarıdır.<sup>1</sup> Bütün bu zorluklara rağmen Türkiye ile Türk dünyası arasındaki ilişkiler siyasi, sosyal ve ekonomik alanda olduğu gibi kültürel yönden de hızla ilerlemektedir.

Bu çalışmada, Oğuz grubu Türk lehçelerinden biri olan Türkmen Tü.den Türkiye Tü.ne yapılan dil içi aktarma veya çevirilerde karşılaşılan sorunlar ve çözüm önerileri üzerinde durulmuştur. Çalışma materyali olarak modern Türkmen edebiyatının yurtdışında yaşayan temsilcilerinden Ak Welsapar'a ait on iki masal seçilmiştir. Söz konusu masallar öncelikle Türkiye Tü.ne aktarılmış ve anlam kaybının en aza indirilmesi için yazar Ak Welsapar ile karşılıklı kontrol edilmiştir. Çalışmanın son aşamasında ise aktarma esnasında karşılaşılan sorunlar ana ve alt başlıklar hâlinde tasnif edilerek çeşitli örnekler verilmiştir.

## 1. Ak Welsapar

19 Ekim 1956'da Selçukluların ilk başkenti olan Türkmenistan'ın Marı şehrinde dünyaya gelir. 1973'te liseyi bitirir ve aynı yıl Türkmen Devlet Üniversitesinin Rus Filolojisi Bölümüne girer. Buradaki başarılı eğitiminden dolayı Moskova'da bulunan M. Lomonosov Üniversitesi, Gazetecilik Fakültesine gönderilir. 1979'da bu bölümü başarıyla bitirir ve Türkmenistan Devlet Televizyonunda göreve başlar. Buradaki yedi yıllık çalışması boyunca Türkmenistan'ın her yerini adım adım gezerek Türkmen halkının maddi ve manevi zenginliğine bizzat şahit olur. Bu seyahatin yazar üzerindeki en derin izlerinden biri, sömürgeci rejiminin Türkmenler üzerindeki acısını yakından görmüş olmasıdır.

Sovyet döneminde izlenen bu siyaseti "pamuk soykırımı" olarak nitelendiren yazar, Türkmen halkının kansızlık, bilimsizlik ve hukuksuzluktan dolayı çok acı çektiğini fark eder. Bu şartlar altında çalışan Türkmen çocuklarının Kasım ayına kadar okula gitme imkânından mahrum olmasının yanı sıra okullardaki kalite ve başarı oranının da oldukça düşük olması yazarı derinden sarsar. Rejimin acımasız ve sert tavrının devam ettiği o günlerde genç bir gazeteci-yazar olan Ak Welsapar, Türkmen halkına karşı yapılan bu haksızlığı ilk defa 1979'da Türkmen televizyonunun resmi toplantısında dile getirir. Bu toplantıdan sonra kendisine karşı başlatılan takip etme ve yıldırma politikası M. Gorbaçov dönemine kadar devam eder.

Önceleri büyük bir sansüre maruz kalmasına rağmen yapılan bir edebi yarışmada *Gawunkelle* [*Kavun Kelle*] isimli romanı ile yılın en saygın edebiyat ödülünü kazanır. Bu eserin Ak Welsapar'a ait olduğu öğrenildikten sonra, ödül alan bütün roman ve hikâyeler basılmasına rağmen, bu kitap hiçbir yerde basılmaz. Yazar, romanının basılması için iki yıl uğraşır ve ilk baskısı Gorbaçov'un iktidara

<sup>1</sup> Lehçeler arası aktarma meseleleri ile ilgili olarak bkz. Ercilasun 1991, 1992, 1994, 1997; Duman 1991; Mahmudov 1994; Resulov 1995; Uğurlu 2000, 2001, 2002, 2004; Karadoğan 2004; Kirişçioglu 2005, Kara ve d. 2004; Kara 2009 vb.



gelmesinden bir yıl sonra yani 1986'da yapılır. Ak Welsapar için başlayan bu özgürlük yılları ne yazık ki dört yıl kadar sürer. Bu süre zarfında altı kitabı basılır.

Ak Welsapar 1989'dan başlayarak Türkmenistan'ın bağımsızlığı, Türkmen dilinin devlet dili statüsü kazanması, demokrasi ve insan hakları ile basın ve ifade özgürlüğünün genişlemesine dair fikirlerini bir grup arkadaşıyla birlikte daha açık bir şekilde ifade etmeye başlar. Sovyetler Birliği'nin yıkılmasından sonraki geçiş sürecinde hayallerinin kısa zamanda gerçekleşmeyeceğini görünce önce Moskova'ya gider ve orada kısa bir süre kaldıktan sonra ailesiyle birlikte İsveç'e yerleşir.

Eserlerini Türkmençe, Rusça ve İsveççe olmak üzere üç dilde yazan Ak Welsapar'ın şimdiye kadar roman, hikâye, şiir, masal gibi türlerde yazılmış toplam otuza yakın kitabı vardır.<sup>1</sup> Yazarın bu kadar üretken olması, ona ulusal ve uluslararası alanda birçok ödül kazandırır. Sovyet Türkmenistan Cumhuriyeti'nin kuruluşunun 60. yılı dolayısıyla yapılan edebiyat yarışmasında *Gawunkelle (Kavun Kelle, 1984)* romanıyla millî ödülünü, 1994'te İnsan Hakları İzleme Komitesi ödülünü; 1996'da İsveç Yazarlar Birliği üyesi ödülünü, 2012'de Rusça yayımlanan *Somneniy Veçnuh Bol (Ebedi Belirsizliğin Acısı)* adlı kitabı ile Rusya Federasyonu Yazarlar Birliği'nin Sergey Yesenin adlı "Altın Güz" ödülünü, 2014'te Ukrayna'da basılan *Smaragdoviy Bereg (Zümrüt Kenar)* adlı hikâye kitabıyla da Nikolay Gogol "Triumf" Edebiyat ödülünü, 2016'da *Legenden om Aypi [Aypi Efsanesi]* romanı ile İsveç Kültür ödülünü kazanır. Yazar, evli ve dört çocuk babasıdır.

## 2. Aktarma sorunları

### 2. 1. Kelime Hazinesindeki Farklılıklar

Bugün Türk dünyasında tarihî ve siyasî sebeplerle ortaya çıkan birçok Türk lehçesi veya yazı dili kullanılmaktadır. Bunlar, çeşitli yönlerden birbirlerinden az veya çok farklılık göstermektedir. Kelime hazinesi, bu bakımdan en dikkate değer kısmı teşkil etmektedir. Türk lehçelerinin kendilerine mahsus kelime hazineleri vardır. Ancak bu kelime hazineleri, belli bir oranda "temel lehçe" düzeyinde; bundan daha az bir oranda da "Genel Türkçe" düzeyinde birbiriyle örtüşürler. Türk lehçelerinin kelime hazinelerinin örtüşmesinde, kaynak bakımından aynı gruba girmenin yanı sıra, tarih boyunca toplulukların kendi aralarında kurdukları iktisadî, kültürel münasebetlerin ve dinî, siyasî yönlerden maruz kaldıkları yabancı etkilerin de önemli rolü vardır.

"Kelime eş değeri" terimiyle, iki ayrı lehçede bulunan kelimelerin birbirlerine "kavram alanı" bakımından denk olma durumu ifade edilmektedir. Türk lehçelerinin kelime hazinelerinin tam örtüşmemesi, kelime eş değeri konusunun önemini arttırmaktadır. Çünkü Türk lehçeleri arasında yapılacak aktarmaların başarılı olabilmesi, "kaynak lehçe"deki bir kelimenin "hedef lehçe"deki eş değerinin bilinmesi ve kullanılmasına bağlıdır. Kelime eş değeri yönünden; "bire bir", "bire çok" ve "bire hiç" durumu söz konusudur. Başarılı bir aktarma için bilhassa, bir kelimeye birden fazla kelimenin eş değeri olduğu duruma özen göstermek gerekir; zira böyle kelimeleri aktarırken hata yapma ihtimali yükselmektedir (Uğurlu 2004).

<sup>1</sup> Ak Welsapar ve hayatı ile ilgili geniş bilgi için bkz. Zal 2015a, 2015b, 2015 c.



## 2. 1. 2. Kaynak lehçedeki bir kelimeye, hedef lehçede bir kelime eş değer olabilir: 1 ≡ 1

Kaynak lehçedeki bir kelimenin ses ve yapı bakımından aynı olan veya lehçeler arası düzenli ses denklilikleriyle aynı kaynaktan geldikleri bilinen şeklinin hedef lehçede bulunmasıdır. Böyle durumlarda kaynak lehçedeki bir kelimenin kavram alanıyla hedef lehçede benzer bir kelimenin kavram alanı, tamamen veya kabul edilebilir bir şekilde örtüşebilir; bu durumda, “bire bir” eş değerlik söz konusudur. Aşağıdaki örneklerde görüleceği üzere kaynak lehçedeki kelimelerin hedef lehçede karşılığı vardır.

### Örnekler:<sup>1</sup>

1. Ttü. *bir* [KL] ≡ Türkm. Tü.nde. bir “*bir*” [HL]
2. *Bulary kim çagyrdy?* [KL] ≡ *Bunları kim çağırdı?* [HL]
3. *Salam! Men gyrgyzy serçe.* [KL] ≡ *Merhaba, ben kırmızı (tüylü) serçeyim.* [HL]
4. *Ir döwürde bir soltan bar eken...* [KL] ≡ *Eski zamanlarda bir sultan varmış.* [HL]
5. *Solmaz, gel meniň saçymy dara!* [KL] ≡ *Solmaz, gel saçımı tara.* [HL]

## 2. 1. 3. Kaynak lehçedeki bir kelimeye, hedef lehçede hiç bir kelime eş değer olmayabilir: 1 ≡ ∅

Kaynak lehçedeki bir kelimeye, hedef lehçede hiç bir kelime eş değer olmayabilir. Bu durumda “bire hiç” eş değerlik söz konusudur. Bunlar genellikle, kaynak lehçeyi konuşan topluluğun, kendine has kültürünü yansıtan kelimelerdir. Kaynak lehçedeki bir kelimenin hedef lehçede kabul edilebilir eş değerinin olmadığı durumlarda aktarma yapılırken; ya kelime aynen alınarak dipnot vb. şekilde açıklanabilir; ya da anlamına göre aktarılabilir.

### Örnekler:

1. Gyzlar baýyrlykda ýuwa-ýelmik, kömelek çöpläp, läle kakyp, *monjugatdy* oýnap, wagt geçirenler. [KL]  
\* Kızlar yemyeşil kırlarda *boncuk atı*<sup>2</sup> oynamış; çiçek ve mantar toplayarak zaman geçirmişler. [HL]
2. Oglan-gyzlar erk galada küşt depip, *ayterek-günterek* oynasa, gyz-gelinler *monjugatdy* oýnap, läle kakanlar. [KL]  
\* Gençler, dans sırasında birbirinin ellerini sıkıca tutup *ayterek-günterek*<sup>1</sup> oynarken, gelinlik kızlar *boncuk atı* oyunu oynayıp maniler söylüyormuş. [HL]

<sup>1</sup> KL= Kaynak Lehçe; HL= Hedef Lehçe

<sup>2</sup> Türkmen kültüründe kadınlar tarafından oynanan bir oyun türüdür. Bu oyunda bir kişi ebe olur, diğer kadınlar ellerindeki birer boncuğu içi görünmeyen bir kasenin içine atar. Bu sırada ebe kısa bir şiir okuduktan sonra elini kasenin içine atar ve boncuklardan birini çeker. Kimin olduğunu bilmediği bu boncuğu havaya kaldırarak onun rengini söyler ve okuduğu şiirin konusuyla bağlantı kurar. Bu arada ebenin konuşmasını duyan diğer kadınlar hep birlikte gülüşür.



3. Ana, şonda bir *Alabay* güjük ýüwrüp geldi-de, omaçany garbap alyp, gaçdy ötägitdi. [KL]

\* İşte o anda bir *Alabay*<sup>2</sup> köpek havlayarak geldi ve kemiği kapıp uzaklaştı. [HL]

#### 2. 1. 4. Kaynak lehçedeki bir kelimeye, hedef lehçede birden fazla kelime eş değer olabilir: 1<sup>n</sup> ≡ 1<sup>n</sup>

Kaynak lehçedeki bir kelimenin kavram alanını, hedef lehçede birden fazla kelimenin kavram alanıyla, tamamen veya kabul edilebilir bir şekilde örtebilir. Bu durumda “bire çok” eş değerlik söz konusudur. Mesela; Kaz. kol ≡ Kırg. kol ≡ Özb. kol kelimesinin kavram alanını, Ttü.nde kol + el kelimelerinin kavram alanları birlikte örtmektedir (LS: 208-209; 492-493). Ttü.nde bin- fiilinin kavram alanı ise, Kırg.nde hayvan için min- + vasıta için otur- fiilleri tarafından örtülmektedir (LS: 70-71)<sup>13</sup>. Ttü.nde evlen- fiilinin kavram alanı ise, erkek için Kırg. üylön- ≡ Özb. üylän- ≡ Tat. öylän- ≡ Türkm. öylen-; kadın için Kırg. erge tiy- ≡ Özb. turmuşgä çık- ≡ Tat. kiyävgä çık- ≡ Türkm. durmuşa çık- fiilleri tarafından örtülmektedir (LS: 228-229). Kırg.nde cün kelimesinin kavram alanı, Ttü.nde yün+yapağı tarafından örtülmektedir (LS: 1000; 964); burada, bire iki eş değerliği söz konusudur (Uğurlu 2004:34). Aktarılan masallarda bu duruma örnek sayılabilecek yapılarla da karşılaşmıştır.

#### Örnek:

Bir bar eken, bir ýok eken, gadym eýýamda, daglaryň düz, düzleriň dag, çölleriň deňiz, deňizleriň-de çöl wagtynda ýeriň üstünde adam taýpasy yaşapdyr. [KL]

\* Bir varmış, bir yokmuş; çok eski zamanlarda dağların ova, ovaların dağ; çöllerin deniz, denizlerin de çöl olduğu zamanlarda yeryüzünde insanoğlu yaşamış. [HL]

\*\* Bir varmış, bir yokmuş. Evvel zaman içinde kalbur saman içinde; develer tellal iken pireler berber iken ben annemin beşiğini tıngır mıngır salları iken az gittik, uz gittik; dere tepe düz gittik. Dönüp bir de baktık ki bir arpa boyu yol gitmişiz. [HL]

#### 2. 1. 5. Kaynak lehçedeki birden fazla kelimeye, hedef lehçede bir kelime eş değer olabilir: 1<sup>n</sup> ≡ 1

Kaynak lehçedeki birden fazla kelimenin kavram alanını, hedef lehçede bir kelimenin kavram alanı, tamamen veya kabul edilebilir bir şekilde örtebilir. Bu durumda da lehçeler arasında “bire çok” eş değerlik söz konusudur.

Çalışmamızda kaynak lehçe olan Türkmen Ttü.nde *evlen-* fiili erkekler için ≡ *öylen-*; kadınlar için ise ≡ *durmuşa çık-* fiilleri tarafından örtülmektedir (LS: 228-229). Aynı fiil Türkiye Ttü.nde sadece *evlen-* yapısıyla karşılanmaktadır.

#### Örnek 1:

- “Belki, saña *öylenmek* gerekdir?” diýip, mekir tilki onuň taryna kakyp gören.

<sup>1</sup> Türkmen kültüründe bir oyun türü olup sadece bekâr oğlanlar ile kızlar arasında oynanır. Bu sayede oyuncular arasında dostluk ve arkadaşlık gelişmiş olur.

<sup>2</sup> Türkmenistan’da yaşayan ve 2020 yılında Aşgabat meydanına heykeli dikilen cins bir köpek türü.



- “Belki de senin *evlenmen* lazım, öyle değil mi?” diyen hilekâr tilki, onun damarına basıp düşüncesini öğrenmek istemiş. [HL]

- *Öylenerdim welin*, towuklañ arasynda maña mynasyby ýok: [KL]

- *Evlenmesine evlenirdim* ama tavukların arasında bana layık birini bulamıyorum. [HL]

### Örnek 2:

- Onda gyzlar söýüşmeli dälmi? Gyz hiç kimi söymeli dälmi? Gyz gözünü ýumup *durmuşa çykmalymy*?<sup>1</sup> [KL]

\* O zaman kızların sevme hakkı yok mu, onlar hiç kimseyi sevmemeli mi? Kızlar böyle gözleri kapalı mı *evlenecek*? [HL]

### Örnek 3:

Ynha, allanäme, kakaña *durmuşa çykdym*, näme ýamanlyk gördüm?<sup>2</sup> [KL]

\* İşte bak, babanla harika bir *evlilik yaptım*. Ne kötülük gördüm? [HL]

### 3. İstem (Valenz) farklılıklarından kaynaklanan Aktarma Sorunları

Türk dilinde bitimli veya bitimsiz fiil tabanları gereklilik derecesine göre anlam yönünden bir takım boşluklar açar. Ortaya çıkan bu boşlukların sayısı ve niteliği fiilden fiile değişiklik gösterir. Fiil tabanının ilk boşluğu dolduran dil birliği ‘birinci tamlayıcı’, ikincisi ise ikinci tamlayıcı’ vd. olarak adlandırılır. Örneğin, etken bir fiil tabanının birinci tamlayıcısı cümle içinde özne; ikincisi nesne olarak vazife görürler. Tamlayıcılar olmadıkları zaman, fiilin anlamı eksik kalan ‘mecburi tamlayıcılar’ ve bulunmaları halinde fiilin anlamını biraz daha belirginleştiren ‘ihtiyari tamlayıcılar’ olmak üzere iki kısımda incelenir (Uğurlu 2001).

### Örnekler:

\* Hiç kimse gecenin tadına *doyamamıştı*. (Türkiye Türkçesi)

\* Hiç kim giicenin lezzetinden *doymayaandı*. (Türkmen Türkçesi)

\* Heç kim gecenin tadından *doymamıştı*. (Azerbaycan Türkçesi)

\* Heç kim keçäning geştigä *toymägä*ndi. (Özbek Türkçesi)

\* Eç kim keçeniñ kızıgına *kanıspadı*. (Kırgız Türkçesi)

Yukarıdaki örnekte Türk. Tü.nde *doy-* fiili kendisinden önce *yönelme hâli eki alırken* diğer lehçelerde *yönelme hali* ekinin yanında *ayrılma/uzaklaşma hâli eki* istemektedir.

En dikkate değer noktalardan biri ise aynı kaynaktan gelen Türkmen Tü.si ve Azerbaycan Tü.sinde bu fiilin kendisinden önce *ayrılma hâli eki* istemesidir. Bu yönüyle bakıldığında aynı kaynaktan gelmelerine rağmen her iki Türk lehçesinde istem konusunda bile % 100 örtüşme söz konusu değildir.

<sup>1</sup> Bkz. Welsapar, Ak (2017), Gawun Kelle, Gün neşirýaty, Stockholm., s. 48

<sup>2</sup> Bkz. Akwelsapar, a. g. e



Çalışmamızın malzemesini oluşturan Türkmen masallarının aktarılmasında söz konusu istem (valenz) sorunlarıyla karşılaşmıştır.

#### Örnek 1:

Towuk keteginde maña *düşünýän* ýok. [KL]

\* Kümesteki tavukların hiçbiri beni *anlamıyor*. [HL]

#### Örnek 2:

İne, meniň *gökden arap*, ýerde tapan söýgülim! [KL]

\* İşte benim *gökte arayıp* da yerde bulduğum sevgilim! [HL]

#### Örnek 3:

Oğul başyna *ata kekeci çykdy*. [KL]

\* Oğlum başında *erkeklik ibiği çıktı* (= Oğlum, evlenme zamanın geldi). [HL]

### 4. Yalancı eşdeğerlik:

Kaynak lehçedeki bir kelimenin ses ve yapı bakımından aynı olan veya lehçeler arası düzenli ses denklikleriyle aynı kaynaktan geldikleri bilinen şeklinin hedef lehçede bulunmasıdır. Fakat bu iki kelimenin anlam alanlarının birbirleriyle örtüşme oranı aynı değildir. Yalancı eş değer kelimeler birbirleriyle tamamen veya az bir oranda örtüşebildiği gibi hiç örtüşmeyebilir. Tam ve yarım yalancı eş değerlik olmak üzere ikiye ayrılır.

#### 4. 1. Anlam alanları tam örtüşmeyen kelimeler (= Kısmi veya yarım yalancı eş değerlik)

Kaynak lehçedeki bir kelimenin ses ve yapı bakımından aynı olan veya lehçeler arası düzenli ses denklikleriyle aynı kaynaktan geldikleri bilinen şeklinin hedef lehçede bulunmasına rağmen anlam alanlarının tam değil, kısmi oranda örtüşmesidir.

Aşağıdaki örneklerde görüleceği üzere, aktarması yapılan Türkmen masallarında söz konusu kısmi veya yarım yalancı eş değerlik sorunlarıyla karşılaşmış ve en az anlam kaybıyla hedef lehçeye aktarılmıştır.

#### Örnek 1:

Gyrmyzy *donuna sygman ýören serçäniň sussy basylyp*, ol müýnli seslenipdir. [KL]

\* Kırmızı *kıyafetlerine sığamayan serçenin morali bir hayli bozulmuş ve utangaç bir şekilde seslenmiş*. [HL]

Kaynak leh.de *don*, '*kıyafetlerin tümü*'nü karşılarken aynı kelime hedef lehçede bugün anlam daralmasına uğrayarak sadece '*iç çamaşırı*'ni karşılamaktadır.

#### Örnek 2:

Patyşany öwenler gowy yaşap, öwmedikler *tozupdyr*. [KL]



\* Padişahı övenler mutlu, övmeyenler ise *ortadan kaybolmuş*; sefil bir şekilde yaşamışlar!) [HL]

Kaynak leh.de *toz- fiili*, ‘*ortadan kaybolmak*; *sefil bir şekilde yaşamak*’ anlamında kullanılırken aynı kelime Tür. Tü.nde: ‘*Aklını yitirmek*; *ortadan kaybolmak*; *kar veya toz gibi olup savrulmak*’ vb. anlamlara da gelmektedir (<https://sozluk.gov.tr/>). Burada da kısmi bir örtüşme söz konusudur.

#### 4. 2. Tam yalancı eş değerlik

Kaynak metindeki bir yapı biriminin aynı olan veya dönemler arasında kolayca dönüştürülebilir şeklinin, hedef okur kümesinin dilinde de bulunması; ancak bu iki birimin görev bakımından hiçbir bağlamda eş değer olmaması durumudur. Bunlar, “tam yalancı eş değer yapılar” olarak adlandırılabilir (Uğurlu 2000).

Aşağıda verilen birkaç örnekte de görüleceği üzere, aktarması yapılan Türkmen masallarında söz konusu tam yalancı eş değerlik sorunlarıyla oldukça fazla sayıda karşılaşmış ve en az anlam kaybıyla hedef lehçeye aktarılmıştır.

##### Örnek 1:

Bezemen *gelniniň gujagynda* oturyp, jüýje-horaz ýene arkaýynlyga salypdyr. [KL]

\* Süslenen *damatlık koltuğunda* oturan küçük horoz, söylenenleri yine umursamamış. [HL]

Örnek 2: Şondan soň dana kişi uzak-uzak ýyllar ýurdy adyllyk bilen *dolandyrypdyr*. [KL]

\* Bu olaydan sonra bilge kişi, ülkesini uzun yıllar adaletle *yönetmiş*. [HL]

Örnek 3: Onuň *demligini gysyp*, öz söýgülisini döwüň äkidenini... bildi. [KL]

\* Onun *burnunu sıkarak* sevgilisini devin kaçırdığını... öğrenmiş. [HL]

#### 5. Dipnot kullanımı

Lehçeler arası metin aktarımında zaman zaman dipnot kullanma ihtiyacı ortaya çıkmaktadır. Özellikle, kaynak lehçedeki bir kelimenin hedef lehçede hiçbir kelime ile eş değer olmaması durumunda, kelimenin olduğu gibi bırakılıp dipnotla açıklanması başvurulacak en geçerli yoldur (Zal 2009). Aktarması yapılan masalarda *moncukaty*, *ayterek-günterek*, *alabay*, *sazak* vb. gibi dipnot gerektiren kelimelerle karşılaşmış ve dipnotta açıklanmıştır.

##### Örnek:

Şol wağt bir *Alabay* güjük ýüwrüp geldi-de, omaçany garbap alyp, gaçdy ötägitdi. [KL]

\* İşte tam o anda bir *Alabay* köpek havlayarak geldi ve kemiği kapıp uzaklaştı. [HL]

Yukarıdaki örnekte geçen *alabay* kelimesini dipnotta şöyle açıklayabiliriz: Türkmenistan’da yaşayan ve 2020 yılında Aşkabat meydanında heykeli dikilen cins bir köpek türü.



## 6. Formel yapıların aktarılması

Lehçeler arası masal aktarmalarında dikkat edilmesi gereken konulardan biri de formel yapılardır. Söz konusu yapılar, genelde giriş cümlelerinde olmasına rağmen bazen aktarılan metnin içinde de geçiyor olabilir. Aktarması yapılan masalların formel yapıları genelde kısa ve basittir. Bu yapıların aktarılmasında dikkat edilmesi gereken hususlardan bir diğeri, kalıp ifadelerde geçen yalancı eş değer kelimeler ve istem (valenz) meselesidir. Az sayıdaki masalın giriş cümlesinde uzun bir formel yapı kullanılmıştır.

### Örnek 1:

*Bir bar eken, bir ýok eken, bir obada garryja mama ýaşar eken. [KL]*

\* Bir varmış bir yokmuş, köyün birinde yaşlı bir kadın yaşarmış. [HL]

### Örnek 2:

*Bir bar eken, bir yok eken, gadym eýýamda, dağların düz, düzlerin dağ; çöllerin deniz, denizlerin çöl wağtynda yerin üstünde adam taýpası ýaşaptyr. [KL]*

\* Bir varmış, bir yokmuş. Eski zamanlarda dağların ova, ovaların dağ; çöllerin deniz, denizlerin çöl olduğu dönemde yeryüzünde insanoğlu yaşarmış. [HL]

### Örnek 3:

Yukarıda ifade edildiği gibi, formel yapılar bazen de olay akışına göre masalın içinde geçmektedir.

*Ol az ýöräp, köp ýöräp, bir gün üstünde ot bitmeyän ýylçyr dagyň alkymyna geldi. [KL]*

\* Az gitmiş uz gitmiş; dere tepe düz gitmiş. Günlerden bir gün üzerinde ot bile bitmeyen yalçın bir dağın eteğine varmış. [HL]

## 7. Atasözlerinin aktarılması

Atasözleri, kuşaktan kuşağa aktarılan, kısa ve özlü sözlerdir. Genellikle halkın deneyimleri ve bilgeliğini yansıtan bu sözler, toplumların kültürel mirasının önemli bir parçasını oluşturur. Bilge insanların tecrübelerinden elde edilen hayat derslerini kapsamlı bir şekilde ifade eden atasözleri, hem eğitici hem de eğlendirici bir özelliğe sahiptir. Bu öğütler, aynı zamanda toplumların kültürel kimliği ile bilgelik birikimini koruma ve aktarma işlevi görür. Yapılacak çalışmalarda dikkat edilmesi gereken bir diğer nokta ise atasözlerinin aktarılmasıdır. Söz konusu çalışmamızda geçen atasözlerinin sayısı azdır. Bunlar da hedef lehçeye genelde atasözü ile aktarılmıştır.

### Örnek 1:

*Ağşamyn hayrından-ertirin şeri! [KL]*

\* Akşamın hayrındansa, sabahın şerri daha iyidir! [HL]



### Örnek 2:

*Tamdyra gyzanda ýap! diýlendir. [KL]*

\* “Hayırlı işlerde acele etmek lazımdır!” demişler. [= Demir tavında dövülür.] [HL]

### 8. Deyimlerin aktarılması

Deyimler, bir dilin zenginliğini ve ifade gücünü artıran kalıp sözlerdir. Bir konuşmayı veya yazıyı daha etkili ve ilgi çekici hale getirebilirler. Bir başka yönüyle deyimler, toplumların kültürü, inancı, hayata bakış açısı ve hayatı algılayış biçimlerini de yansıtır. Dilde işlenen bir deyim o toplum için önemli bir olayı işaretlerken başka bir millet için hiçbir şey ifade etmeyebilir.

Türk lehçeleri arasında yapılan aktarmalarda dikkat edilmesi gereken noktalardan biri de deyimlerdir. Özellikle yalancı eşdeğerlik tuzağına burada da düşmemek gerekir. Çalışmamızda çok sayıda deyimle karşılaşmış ve bu deyimler hedef lehçeye en uygun şekilde aktarılmaya çalışılmıştır.

### Örnek 1:

Bu sözlerden *göwni suw içmedik patşa...* [KL]

\* Bu sözlerden *gönlü tatmin olmayan padişah...* [HL]

### Örnek 2:

... renkleri *gözün ýagyny iýip baryan ýüpek hala hyrydar çykýar!* [KL]

\* ...renkleri *göz kamaştıran* bu ipek halıya sahip olmak istemiş! [HL]

### Örnek 3:

Toý gyzyp, gitdikçe märekäniň *kellesi göçdi.* [KL]

\* Eğlence ilerledikçe herkesin *aklı başından gitti.* [HL]

### 9. Yansıma kelimelerin aktarılması

Aktarmalarda dikkat edilmesi gereken noktalardan biri de yansıma kelimelerdir. Çalışmamızda *tigir-tigir* (=tingir mingir), *huk-cak* (=çıt çıt), *lak-luk* (=katır kutur), *wakgyldaşma* (*gık! gık! gık!*) şeklindeki yansıma kelimelerle karşılaşmış ve hedef lehçeye metnin bağlamına en uygun şekilde aktarılmaya çalışılmıştır.

### Örnek 1:

Towuklar havsalaly *wakgyldaşanlar.* [KL]

\* Tavuklar korku içinde ‘*gık! gık! gık!*’ diye ses çıkarmışlar. [KL]

### Örnek 2:

...in ızdarda-da ‘*hyk-cak*’ edip syçancyk gelýermiş. [KL]

\* ...en arkada ise ‘*çıt çıt!*’ sesler çıkararak gelen farecik varmış. [HL]



## 10. İkilemelerin aktarılması

Aktarmalarda dikkat edilmesi gereken bir başka nokta ise ikilemelerdir. Yaptığımız aktarmalarda *gün-günden* (=günden güne), *öten-geçen* (=gelmiş geçmiş), *aç-hor* (=aç susuz), *lemmer lemmer* (kat kat), *dumluk-duşdan* (=dört bir taraftan), *aldım-berdimli* (ölüm kalım) vb. gibi masal metinlerinin içeriğine uygun ikilemelerle karşılaşılmış ve hedef lehçeye en uygun şekilde aktarılmaya çalışılmıştır.

### Örnek 1:

*Aldım-berdimli* söweş başlady. [KL]

\* *Ölüm kalım* savaşı başladı. [HL]

### Örnek 2:

... *gün-günden* harlanyp baryaryn. [KL]

\* ...*günden güne* zayıflıyorum. [HL]

## 11. Eksik kelime kullanımı

Aktarması yapılan masalarda karşılaşılan sorunlardan biri de kaynak lehçedeki eksik kelime kullanımudur. Çalışmamızdaki bu tür eksik yapılar, hedef lehçedeki kullanım şekilleriyle aktarılmıştır.

### Örnek 1:

Sen öyde gal-da garrylara *göz bol*... [KL]

\* Sen ev de kal ve yaşlılara *göz kulak ol*. [HL]

### Örnek 2:

Ağşamyn hayrından-ertirin şeri!.. [KL]

\* Akşamın hayrındansa, sabahın şerri *daha iyidir!* [HL]

## 12. Normal cümleyi atasözüyle açıklama

Aktarılan masalarda dikkat edilmesi gereken noktalardan biri de kaynak lehçedeki bir cümlenin hedef lehçeye aktarılmasında deyim veya atasözü kullanımına ihtiyaç duyulmasıdır. Bu tür bir kullanımda kaynak metin, hedef lehçede en az anlam kaybıyla yeniden inşa edilmiş olur.

### Örnek:

Gülüberin bakaly! diyip, Günhanam *içini güldür*yer... [KL]

\* ‘Gülüverin bakalım’ diyen Günhan da içinden: ‘*Son gülen iyi güler!*’ diye geçirmiş. [HL]



## SONUÇ

Türk dünyası arasında kültürel birlikteliğin sağlanması için siyasi, ekonomik, sosyal ve kültürel alanda çeşitli çalışmalar yapılmaktadır. Kültürel alandaki birlikteliğin sağlanmasında yapılması gereken en önemli çalışmalardan biri de her iki lehçede yazılan edebi eserlerin karşılıklı olarak birbirine aktarılmasıdır.

Lehçeler arası aktarma yapmak görüldüğü kadar kolay değildir. Kaynak lehçede yazılan bir edebi metnin hedef lehçede yeniden inşasında çeşitli problemlerle karşılaşmaktadır. Üzerinde çalışılan masalların aktarılması esnasında çeşitli sorunlarla karşılaşmıştır. Söz konusu sorunlar arasında; *kelime eş değeri başta olmak üzere; istem (valenz) farklılıkları, tam ve yarım yalancı eş değeri, dipnot kullanımı, formel yapılar, atasözleri, deyimler, yansıma kelimeler, ikilemeler, eksik kelime kullanımı ve normal cümleyi atasözleri ile aktarma* sayılabilir.

İdeal bir aktarma yapabilmek için aktarıcının hem kaynak lehçeyi hem de hedef lehçeyi iyi biliyor olması gerekir. Aktarma yaparken zaman zaman hedef metin, kaynak metinden bağımsız olarak kontrol edilmeli ve metinde herhangi bir yönden bozukluk olup olmadığına bakılmalıdır. Çünkü aktarma hatalarından bir kısmı sadece hedef metne bakılarak bile tespit edilebilmektedir. Ayrıca, şüpheye düşülen kelimelerde mutlaka sözlüğe bakılmalı; kelimeler ihtimaller üzerine aktarılmamalıdır. Çünkü her an “yalancı eş değeri tuzağı”na düşmek mümkündür.

Çalışmamızda karşılaşılan sorunların aşılmasında; kaynak metinlerin yazarı Ak Welsapar ile bizzat görüşmüş ve söz konusu masallar, hedef lehçede en az anlam kaybıyla yeniden inşa edilmeye çalışılmıştır. Bu şekildeki bir çalışmanın hem aktarma sorunlarını en aza indireceğini hem de Türk dünyasının kültürel birlikteliğine daha fazla katkı sağlayacağını umuyoruz.

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## Teenage Criminal Behaviors and TV Crime Show Exposure: A Case Study of Pakistani Juvenile Delinquents

Zubair Hussain

University of Di Bari Aldo Moro, Italy.

### Abstract

The media has come under fire for promoting and glamorizing illegal activity, which has been accused of encouraging crime. The phenomenon is commonly referred to as a contagion or copycat. This study focuses on the dangerous habits that Pakistani teenagers who watch crime episodes on television may have developed into juvenile offenders. Pakistan and the rest of the world face a severe problem with juvenile delinquency. Research goals include determining which teenage television crime shows are the most watched, learning how Pakistani youth pick up criminal skills from these shows, and examining and characterizing the additional positive and negative (aggression) and positive (fear of punishment, hate of crime) effects of youth crime shows on youth behavior. to determine how socioeconomic factors affect the way that Pakistani teenagers learn about crime. This paper's conclusion was that the majority of research on the relationship between media and adolescent delinquency, particularly on TV's effects, focuses on aggression. When juvenile offenders are transitioning from childhood to adolescent, their deviant friends encourage them to commit significant crimes.

**Keywords:** Television crime shows; Crime learning behaviors; Pakistani Juvenile Delinquents



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## Lojistik Sektörünün Rekabet Gücü: Türkiye Örneği

### Competitiveness of the Logistics Sector: The Case of Türkiye

**Orhan ÇOBAN**

Gaziantep University, Faculty of Economics and Administrative Sciences, Department of Logistic, Gaziantep, Türkiye; [ocoban@gantep.edu.tr](mailto:ocoban@gantep.edu.tr) ; ORCID ID: 0000-0001-6137-8937.

**Ayşe ÇOBAN**

Gaziantep University, Oğuzeli Vocational School, Gaziantep, Türkiye; [aysecoban@gantep.edu.tr](mailto:aysecoban@gantep.edu.tr) ; ORCID ID: 0000-0002-7844-7633.

#### Abstract

With the acceleration of globalization in world economies at the end of the 1980s, significant increases were recorded in commercial activities. Due to this increase, logistics began to develop and concepts on this subject began to be reinterpreted. Foreign trade transactions have an important place in the ever-increasing transaction volume in the world economy. Foreign trade has structural difficulties compared to domestic trade and competition increases day by day, making payment methods important. With the introduction of International Banks and Payment Institutions, payment methods that protect Importers and Exporters have been developed. The aim of this study is to reveal the payment methods in foreign trade in terms of both exports and imports in a theoretical framework.

**Keywords:** Payment methods, international trade, letter of credit

#### Giriş

Günümüz koşullarında lojistik işletmeleri, hizmet kalitelerini yükseltmek ve rekabet şartlarına adapte olmak zorundadırlar. Dolayısıyla lojistik işletmeleri, var olan hizmet kalitesinden üst seviyede bir hizmet kalitesi sunmalı ve müşterilerinin ihtiyaçlarına yerinde ve zamanında cevap vermelidir. Lojistik işletmelerinin, ana lojistik faaliyetlerini iyileştirmesi, işletmenin bütün faaliyetlerinde kaliteye etki edeceğinden işletmelerin lojistik faaliyetlerinde rekabet, ilk olarak gelmektedir. Doğru ürün, zaman ve yer faktörleri lojistik işletmeleri adına kritik faktörler olduğundan bu faktörlerin birleşmesi ile rekabet önceliği ortaya çıkmaktadır (Yıldırım, 2013: 1).

Türkiye'deki lojistik işletmelerinin, lojistik faaliyetlerini diğer işletmelerin önüne geçirebilmesi adına müşteri ihtiyaçları ve kalite kavramları ön plana çıkabilmektedir. Müşterinin ihtiyaçlarına, koşullar



çerçevesinde doğru bir şekilde yanıt vermek, lojistik alanında o işletmeyi diğerlerinin önüne geçirebilmektedir. Bir diğer faktör ise kalitedir. Kaliteli ürün/hizmetin oluşturulması; üretim fonksiyonu, insan kaynakları fonksiyonu, Ar-Ge fonksiyonu, yönetim ve pazarlama fonksiyonu gibi diğer işletmenin fonksiyonlarının da katkıda bulunduğu bir olaydır. İşletme, bu fonksiyonlarına gerekli yatırımlarını yaptığı takdirde kaliteli ürün/hizmet ortaya çıkabilecektir. Bunun sonucunda lojistik işletmeleri, rakiplerine rekabet üstünlüğü sağlayabilecektir.

Türkiye'deki lojistik işletmelerinin rekabet üstünlüğü elde edebilmesi adına bir diğer yatırımı insan kaynağına yapması onu alanında öncü yapabilir. Küresel düşünerek hareket etmesi gereken lojistik işletmeleri; çalışkan, inovatif düşünebilen, zeki, alanında gereken bilgi ve tecrübeye sahip kısacası entelektüel sermaye sahibi işgörenleri kendi bünyesine katması veya yetiştirebilmesi rekabet üstünlüğü sağlamasına yardımcı olabilir.

### ***Türkiye Lojistik Sektöründe Rekabet Gücü Ve Analizi***

Bu başlık altında lojistik kavramı ve önemi, lojistik faaliyetlerinin katkıları, Türkiye'de lojistik faaliyetleri, Türkiye lojistik sektörünün rekabet analizi ve rekabet analizine grafiklerle bakış başlıkları yer almaktadır.

### **Lojistik Kavramı ve Önemi**

Lojistik (Logistics) kelimesinin köküne göz atıldığında Latin dilinden Logic (mantık) ve statics (istatistik) kelimelerinin bir araya gelmesinden ortaya çıkmıştır. Kelime anlamı itibarıyla Lojistik, "mantıklı istatistik" anlamını taşımaktadır. 1905 yılında ilk defa lojistik "orduya ait malzeme ve personelin taşınma, tedarik bakım ve yenilenmesi" olarak askeri bir amaçla kullanılmıştır. II. Dünya savaşının patlak vermesiyle lojistik kavramının önemi herkesçe kabul görmüş ve lojistik kavramı, bilimsel anlamda irdelenmeye başlanmıştır. Bu bilgiler ışığında dünyada lojistiği gelişiminin kronolojik olarak şu şekilde sınıflandırmak mümkündür (Bakkal ve Demir, 2011: 2-3):

- Lojistik aşamasını kurma (1940-1960 yılları arası),
- Lojistik düşüncesinin kabul görmesi ve önemsenmesi (1960-1970 yılları arası),
- Önceliklerin ve modellerin değişim çağı (1970-1980 yılları arası),
- Ekonomik ve teknik değişimini yeni çağı (1980 ve günümüz)

Lojistik kavramı ile ilgili farklı tanımlar yer almaktadır. Akademik alan yazınında kabul gören lojistik tanımı ise şu şekildedir: "Lojistik, tüketici ihtiyaçlarını karşılayabilmek amacıyla hammaddelerin, süreç içindeki envanterin, nihai mamülün veya ilgili bilginin çıkış noktasından nihai tüketim noktasına kadar etkin ve masrafları en aza indirilmiş şekilde varabilmesi için yapılan planlama, uygulama ve kontrol sürecidir" ([www.logisticsworld.com](http://www.logisticsworld.com), 02.04.2022).

Lojistik, çeşitli bölümlere hizmet etmekle birlikte lojistik sektörünün çevre ve boyutları çok farklı değildir. Lojistiğin asıl amacı, iç içe geçmiş bir sisteme sahip olmaktır. Dolayısıyla günümüzde lojistik kavramının içeriğinin çeşitlilik gösterdiği gözlenmektedir. Günümüzde lojistik kavramının içeriğinin çeşitlilik göstermesinin altında yatan sebeplerden bir tanesi de, dünyadaki ticaret alanında meydana



gelen gelişmelerdir. Öte yandan bir işletme adına lojistik faaliyetlerinin yerine getirilebilmesi için depolama ve taşımanın varlığı tek başına yeterli olmamakla birlikte depolama ve taşıma unsurlarına minimum bir unsurun daha eklenmesi gerekmektedir. Bunun sonucunda lojistiğin o işletme için varlığından söz etmek kolay olacaktır. Lojistik kavramının içerdiği birçok işlem vardır. Bunlar (Dinçel, 2016: 14-15):

- Nakliye,
- Sigorta
- Tahsilat,
- Danışmanlık,
- Pazarlama
- Müşteri hizmetleri

Lojistik kavramı taşımacılığın gelişmiş ifadesi anlamına gelmekle beraber günümüzde ekonomik şartların güçlenmesinde rol oynayan ciddi bir unsurdur. Ekonomik, sosyal, psikolojik, kültürel, stratejik, askeri ve politik açıdan lojistik unsuru ülkelere katma değer sağlamakla birlikte global çapta güçlü konumda olan ülkeler tarafından daha fazla benimsenmektedir. Öte yandan ülkemizde lojistik sektörünün gelişim gösterebilme potansiyeli göz önünde bulundurularak önemi kat ve kat artmış ve Lojistik Performans Endeksi (LPI) gibi lojistik performansını arttırmayı amaçlayan Türkiye bu sıralamada üst sıralara çıkmak için yoğun çaba içerisinde (Erkan, 2014: 44).

### **Lojistik Faaliyetlerinin Katkıları**

Lojistiğin faaliyetlerine alanlarına baktığımız zaman işletmelerdeki genel amacı, ilk madde malzeme, yarı mamul ve mamullerin zaman, yer ve miktar açısından etkin bir şekilde kullanılmasıyla minimum maliyet ve maksimum çıktı hedefleyen politikalarla tüketiciye ulaştırılmasıdır. Ancak hem maliyeti çok fazla düşürecek hem de hizmet kalitesini yukarıya çıkaracak bir yapı henüz oluşturulmamıştır. Dolayısıyla bir lojistik sisteminin amacı, üretim ve pazarlama fonksiyonlarının desteği ile minimum toplam maliyetle doğru bir biçimde ulaşım sağlamaktır (Tek ve Özgül, 2005: 539).

İşletmeyi tam anlamı ile ele almadığımız takdirde “rekabetçi avantaj” kavramı eksik kalabilir. İşletmelerde çeşitli uygulamalar bulunmaktadır. Tasarım, üretim, pazarlama teslim etme, ürün/hizmeti destekleyici politikalar gibi uygulamalar, işletme içerisinde karşımıza çıkabilir. İşletmeler bu faaliyetlerini yürütürken rekabetçi avantaj ortaya koyabilmeleri, bu faaliyetleri rakipleriyle karşılaştıracak olursak daha az maliyete ve daha aktif bir şekilde ortaya konulmasına bağlıdır. Söz konusu işletmelerin temel ve destekleyici uygulamalarını sürdürebilmeleri adına lojistik yönetimi kavramı karşımıza çıkmaktadır. Lojistik yönetimi, maliyet/verimlilik avantajı yaratılmasında işletmelere katkıda bulunmaktadır (Gümüş, 2007: 107-108).

Lojistik üzerinde uygulanan inovasyon faaliyetleri, yalnızca işletme ve buldukları sektöre katkı sağlamaz, aynı zamanda ülkelere de katkı sağlamaktadır. Dolayısıyla küresel anlamda büyük olan lojistik işletmeleri, inovatif uygulamalar ortaya koyabilme hususunda çekingenlik yaşamamaktadır. Lojistik üzerinde inovasyon yapılabilmesi adına sektörde öncü konumda olmak, küresel çapta başarı yakalamak ve ülkeler tarafından ortaya konan çeşitli inovasyonlardan fayda sağlamak önemli olmaktadır. Dolayısıyla işletmeler; sektörler ve ülkeler konusunda inovasyon çalışmalarını



hızlandırmalı; inovasyon için uygun olan ortam oluşturulup Ar-Ge'ye yapılan yatırımı arttırmalı ve patentli ürün çeşitliğini sağlayarak eğitim ve nitelikli işgücü olanaklarına eğilim göstermelidir (Bekmezci ve Aksungur, 2018: 187).

Duran ve Türkoğlu (2019: 89)'na göre lojistiğin katkıları şu şekilde açıklanabilir:

- Lojistik; ülkelerin ekonomik, sosyal, psikolojik, kültürel, stratejik, askeri ve politik alanlarına değer katmaktadır.
- Lojistik, ülkelerin milli gelirlerinin ve alım güçlerinin artmasını sağlamaktadır.
- Lojistik, istihdamın artması sonucu işsizliğin azalması bunun sonucunda moral ve motivasyonun artmasını sağlamaktadır.
- Lojistik, ülkelerin eğitim düzeylerinin artmasına ve ülkelerin jeo-politik/stratejik konumlarına değer katmaktadır.
- Lojistik, çoklu anlaşmalar, lojistik üsler, siyasi güç ve liderlik, stratejik ortaklık gibi alanlarda katkı sağlamaktadır.
- Son olarak lojistik; rekabet gücünün artması, ekonomik büyüme ve kalkınmanın gerçekleşmesi, dış ticaret hacminin artması, yabancı sermaye artışı, vergi gelirlerinin artması, gelir dağılımında adalet gibi konularda da fayda sağlamaktadır.

Ekonomik büyüme alanında lojistik faaliyetler etkin rol oynamaktadır. Dolayısıyla ülkelerin ekonomik büyüme oranlarının yükselmesinde dış ticaret ve ihracat faktörleri ön plana çıkmaktadır. İhracat gelirleri neticesinde oluşan döviz, ekonomik büyümeye katkı sağlamaktadır. Sonuç olarak ihracatın, ekonomik büyümede olumlu etkileri ülke ekonomisi perspektifinden kritiktir. Lojistik faaliyetleri sayesinde ihracat ve döviz gelirleri elde edilebilmektedir. Ülke sınırları içerisine dahil olan dövizlerle cari açığın önlenmesi, ülkenin büyümesi adına önem taşımaktadır (Arabacı ve Yücel, 2020: 82).

### ***Türkiye'de Lojistik Faaliyetleri***

Lojistiğin faaliyet alanları, firmaların yapılarındaki değişimler paralelinde gelişmiş ve gelişmeye devam etmektedir. Bunun en temel sebebi olarak ihtiyaçların gerek firmalar gerekse onların müşterileri açısından dinamik bir yapıda artması olarak gösterilebilir. Günümüzde lojistik, teknolojinin de desteğini alarak farklılaştırma ve inovasyon aracı olarak kullanılmaya başlamıştır (Can, 2019: 15). Gün geçtikçe işletme yönetimi altında lojistik yönetimi de önem kazanmaktadır. Çünkü işletme giderlerinin çoğunluğu taşıma ve lojistik masrafıdır. İşletmelerin lojistik planlama ve organizasyon işlerinin, bilimsel uygulamalara göre yapmadığı için lojistik ve ekipman israfı doruk noktalarına ulaşabilmektedir. Öte yandan küçük ve orta ölçekli işletmelerin kuruluş amacı, lojistik yönetimi ile birlikte taşıma ve malzeme israfını önleme ve bunların etkinliği sağlamaktadır (Özcan, 2008: 276).

E-lojistik uygulamalarının da bulunduğu ülkemizde baktığımız zaman lojistik sektörü, kendini tam anlamı ile bulamamıştır. Ülkemizde, taşıma işletmelerinin çoğu, lojistik faaliyetleri yaptığını savunmaktadır. E-lojistik faaliyetleri adına ihtiyaç duyulan altyapı eksikliklerinin ortadan kaldırılması, internetten yapılan uygulamaların gün geçtikçe güvenilir bir konuma getirilmesi Türkiye'deki lojistik faaliyetleri adına bir ihtiyaç olarak görülmektedir. E-lojistik uygulamaları adına, bilişim teknolojilerinin üstüne daha da fazla düşülmeli ve gerekli destekler sağlanmalıdır. Öte yandan e-



lojistik uygulamalarına geçişte insan kaynağı da önem arz ettiğinden insan kaynağına gerekli yatırımlar sağlanmalıdır (Gülenç ve Karagöz, 2008: 88).

Sosyal, ekonomik, psikolojik, kültürel, stratejik, askeri ve politik alanlarda ülkelere çeşitli kazanımlar sağlayan Lojistik faktörünün şu şekilde de katkıları olabilmektedir ([www.lojistikci.com](http://www.lojistikci.com), 06.04.2022):

- Milli gelirin artışı,
- Alım gücünün yükselmesi,
- İstihdamın artış göstermesi ve işsizliğin azalması,
- Ülkedeki refah seviyesinin artış göstermesi,
- Eğitim seviyesinde artış meydana gelmesi,
- Vergi gelirlerinin artması,
- Dış ticaret hacminin artması,
- Yabancı sermayenin artması şeklindedir

### ***Türkiye Lojistik Sektöründe Rekabet Gücü ve Analizine Bakış***

Lojistik uygulamalarını gerçekleştirebilecek güce sahip olan ülkeler, global değer zincirine etkin bir biçimde adapte olarak ihracatlarına yabancı yatırımcılar sağlayabilmektedirler. Uluslararası bilgi paylaşımı adına, dış ticaret ve doğrudan yabancı yatırım kanalları hayati önem taşımaktadır. Öte yandan beklentilerin altında kalan lojistik performansları, know-how ve son teknolojilere erişebilmenin önüne geçebilmektedir. Bunun sonucunda da üretim hızında düşüş meydana gelebilmektedir (Erkan, 2014: 54).

Türkiye ekonomisi dünya çapında ekonomik bir krize yakalansa da, ciddi derecede büyüme göstermektedir. Dolayısıyla lojistik sektörü de, ekonomideki büyümelere oranla gelişim göstermektedir. Bu gelişmeler esnasında lojistik sektöründeki rekabet seviyesinde de artış meydana gelebilmektedir. Yerli işletmelerin yabancı işletmeler karşısında rekabet güçlerini üst noktalara getirebilmeleri adına ciddi efor sarf etmeleri gerekmektedir (Saridoğan, 2013: 71).

**Tablo- 1:** Türk Lojistik Sektörünün SWOT Analizi

<b>GÜÇLÜ YÖNLER</b>	<b>ZAYIF YÖNLER</b>
Coğrafi konum, Yüksek operasyonel güç, Gelişmiş karayolu ağı, Yatırım potansiyeli, Kolay işgücü olanakları, Üniversitelerde lojistik bölümlerinin açılması	Teknolojinin etkili kullanılmaması Demiryolu ağının yetersiz olması Hukuki açıdan karışıklıklar Araç ve ekipmanların pahalı olması, Standart eksikliği,



FIRSATLAR	TEHDİTLER
Limana bağlantıları	Bürokratik engeller
Transit taşımacılığa uygun olması	Kota ve gümrük yükümlülükler
AB üyeliği	Ekonomik kriz riski
Serbestleşen ticaret politikaları	Ülkelerle ilişkilerin olumsuz yöndeki seyri

**Kaynak:** Can, 2019: 64.

Türkiye’de lojistik sektöründe faaliyet gösteren firmalar, bir takım stratejiler geliştirerek yurt içi ve yurt dışındaki rakipleriyle rekabet içerisinde. Dolayısıyla ülkemizde lojistik işletmelerinin rekabet edebilmeleri adına geliştirdikleri stratejilerin iyileştirilmesine yönelik bir takım önlemler sunulabilir (Babacan, 2003: 13):

Bir ülkenin ekonomik verileri, gelişmişlik ve kalkınma düzeyini ortaya koyan en önemli hususlardan birisidir. Bu veriler olumlu ise, ülkenin sosyo-ekonomik, psikolojik ve kültürel yapısına da katkı yapabilmektedir. Lojistikse, bahsi geçen ülkede ekonomik verileri yönlendiren ve bu verilerin değişimlerinde kritik bir rol üstlenmektedir. Son zamanlarda ekonomideki ilerlemeler sayesinde meydana gelen dış ticarete yönelimlerdeki yükseliş, uluslararası ilişkilerin güçlenmesinin yanı sıra dış ticaretteki uygulamaların karmaşık bir duruma evrilmesi, lojistik sektörünün önemini ortaya koymuştur (Yılmaz, 2019: 45).

Türkiye’nin Lojistik Performans Endeksi’nde hedeflediği ilk 15’te olma düşüncesini gerçekleştirebilmesi amacıyla lojistik performansını geliştirmesinin yanı sıra şunları da göz önünde bulundurmalıdır (Erkan, 2014: 63):

- İlk olarak teknolojik gelişmeler yakalanmalı,
- Yenilikçi bir üretim ve lojistik politikası takip edilmeli,
- Dünya pazarında söz sahibi olmaya çalışılmalı,
- Türkiye’nin lojistik alanındaki nitelikli insan kaynağına eğilmeli,
- Lojistik alanında stratejik planlamalar titiz bir şekilde düzenlenmeli,
- Lojistik sektörüne yönelik bir takım revizeler yapılmalı,
- Lojistik köyler ve organize lojistik bölgeleri alanında planlamalar çoğaltılmalıdır.

Yukarıda bahsedilenlerin göz önünde bulundurulması ile lojistik bir merkez olarak Türkiye, 2023 hedeflerini gerçekleştirebilecektir (Erkan, 2014: 63).

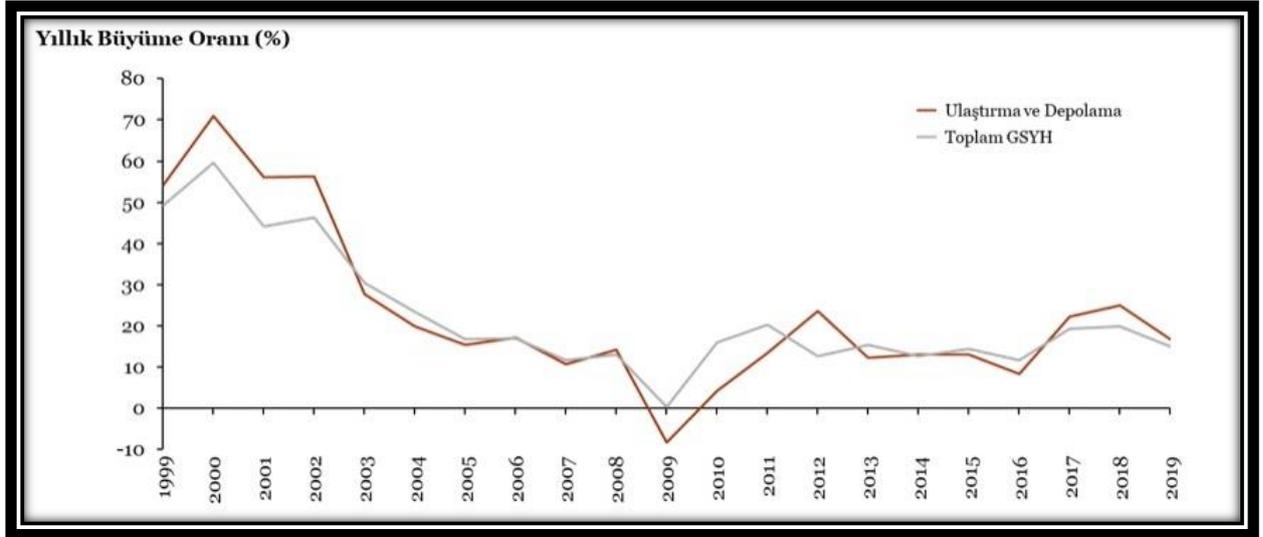
Özetle, günümüzde sıkı bir rekabet içerisinde olan Lojistik sektöründeki işletmeler, minimum maliyet maksimum çıktı prensibi ile hareket etmelidirler. Lojistik sektöründeki işletmeler, piyasa ile rekabet halinde bulunabilmek ve sürdürülebilirlik politikasına stratejik bir şekilde devam ettirebilmek için maliyet yönetimini etkin olarak uygulamalıdır. Dolayısıyla Porter’in rekabet stratejileri ve geliştirilen modern maliyet yönetimi kuramlarının işletmeler tarafından göz önünde bulundurulmasıyla



lojistik sektöründeki işletmeler; sürdürülebilir rekabet gücü ile kârlılık adına ciddi getiri imkânlar yaratacaktır (Saridoğan, 2013: 92).

### *Türkiye Lojistik Sektörü ve Analitik Rekabet Gücü*

Türkiye’de lojistik sektörünün yıllık büyüme oranına ilişkin veriler Şekil-1’de özetlenmiştir.

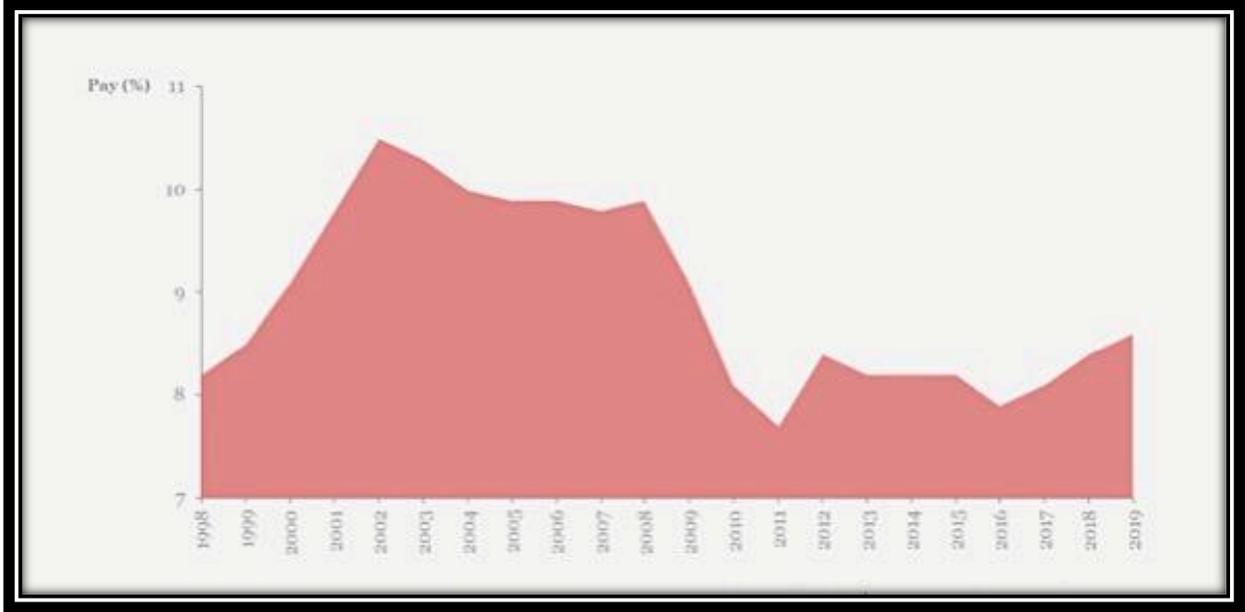


Şekil- 1: Ulaştırma ve Depolama Sektörü Yıllık Büyüme Oranları ve GSYH (%)

**Kaynak:** TÜİK, 2002.

Şekil-1 incelendiğinde, ulaştırma ve depolama, 2009 yılında %50-60 yıllık büyüme oranları arasında düşüş yaşamıştır.

Lojistik sektörünün milli gelir içindeki payı ise Şeil-2’de yer almaktadır.



Şekil- 2: Ulaştırma ve Depolama Sektörünün GSYH İçindeki Payı (%)

Kaynak: TÜİK, 2022.

Şekil 2 incelendiğinde, ulaştırma ve depolama sektörünün GSYH'deki payı yüzdelerle birlikte TÜİK araştırmaları ile birlikte gösterilmektedir. Ulaştırma ve depolama sektöründe 2011 yılında düşüş yaşanırken, 2001-2002 yıllarında artış göze çarpmaktadır.

Tablo- 2: Türkiye'nin Yıllara Göre LPI Değerleri

Yıl	Sıra	LPI Puanı	Gümrük	Altyapı	Uluslararası Sevkiyat	Lojistik Hizmetlerinin Kalitesi	Gönderi Takibi ve İzlenebilirliği	Gönderilerin Zamanında Teslimi
2007	30	3,15	3	2,94	3,07	3,29	3,27	3,38
2010	39	3,22	2,82	3,08	3,15	3,23	3,09	3,94
2012	27	3,51	3,16	3,62	3,38	3,52	3,54	3,87
2014	30	3,50	3,23	3,53	3,18	3,64	3,77	3,68
2016	34	3,42	3,18	3,49	3,41	3,31	3,39	3,75
2018	47	3,15	2,71	3,21	3,06	3,05	3,23	3,63

Kaynak: Utikad, 2022.



Tablo-3 incelendiğinde, yıllara göre Türkiye'nin LPI değerleri (Lojistik Performans Endeksi) göz önünde bulundurulmaktadır. Tablo incelendiğinde Türkiye açısından en verimli yılın 2012 yılı olduğunu söylemek mümkün olabilecektir.

### Sonuç

Lojistik hizmeti alan işletmeler adına son zamanlarda pozitif gelişmelerin yaşanabileceği varsayılmaktadır ve böylelikle işletmeler, ihtiyaçları doğrultusunda hareket ederek onlar için uygun tedarikçiyi de belirlemelidirler. Farklı pazar alanlarında lojistik faaliyetlerini sürdürmek isteyen işletmeler, entelektüel sermaye sahibi lojistik tedarikçileri bünyelerine katmak isterler. Dolayısıyla işletmelerin, lojistik kavramını öğrenerek kendilerini geliştirmesi bir ihtiyaçtır ve modern işletmelerinin başarılarının altında yatan nedenlerden bir tanesi lojistik unsurdur. İşletmeler, pazarlarında rakiplerine üstünlük sağlayabilmeleri adına pazarlama karması elemanları kullanmakta ve bu şekilde başarıya ulaşırlar. Sonuç olarak lojistik faktörü, işletmeler adına pazarlarında rakiplerine üstünlük sağlamada etkili olmaktadır.

2010 yılından itibaren Türkiye ekonomisi büyüme ile beraber ulaştırma ve lojistik sektöründe %12'den fazla bir gelişim göstermiştir. Uluslararası ticareti ve özellikle boru hattı ticaretini güçlendirme ile ülkelerarası işbirliğine yönelik politikaların çoğalmasıyla Türkiye'nin 2023 yılında dış ticaret hacmi ve ihracat politikalarının lojistik sektörüne büyüme olarak geri dönebileceği beklenmektedir. Ayrıca 2023 yılı ile birlikte Türkiye'nin sahip olduğu stratejik önem ve milli gelir içerisindeki pay yükselişe geçmesi ve lojistik sektörünün büyüme gösterebileceği ümit edilmektedir. İşletmelerin, lojistik alanında rekabet üstünlüğü elde edebilmesi için, minimum maliyet maksimum çıktı felsefesini izlemesi ve kendilerini farklılaştırabilme yetkinliğini karşı tarafa empoze etmesi gerekmektedir.

Lojistik faaliyetlerinin sürdürülebilirliği açısından kritik bir konu da gümrüklerin idaresidir. Covid-19 pandemisinin meydana gelmesi ve sonucunda alınan önlemlerle gümrük kapılarında bekleme sürelerini artması, teslimat sürelerinin uzamasına etki etmiştir ve sonuç olarak lojistik faaliyetlerin süreci negatif etki görmektedir. Gümrük faaliyetlerinin planlı ve atik bir şekilde uygulanması ile işletme ve işgörenlerde yaşanabilecek verimlilik kaybını da engelleyebilir.

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## Çevre Eğitimi ile İlgili Geliştirilmiş Olan Ölçme Araçları

**Neval BATMAZ**

**Gençlik ve Spor Bakanlığı, Türkiye**

**Haki PEŞMAN**

**Fırat Üniversitesi, Türkiye**

### Öz

Çevre eğitimi; hem bugünümüz hem de geleceğimiz için hayatımızda çok önemli bir yere sahiptir. Çevre eğitimi çevresel ve küresel sorunların tamamının ortadan kalkabilmesi için fazlasıyla önemli bir faktördür. Bu eğitim ile birlikte çevre konularında hassas, çevresel duyarlılığı ve farkındalığı yüksek ve çevresel bilince sahip kişilerin yetiştirilmesi hedeflenmektedir. Çevre eğitimi, sadece doğal dünyayla ilgili bilgilerin iletilmesini değil, aynı zamanda kişilerin çevreye olan duyarlılık düzeylerini ve sorumluluk duygularını geliştirmelerine yardımcı olarak bu duyarlılığın somut eylemlere dönüşmesini sağlamaya çalışır. Bu amaçla, çeşitli araştırmalarda çevresel konularla ilgili algıların ölçülmesi için özel ölçekler kullanılmıştır.

Bu çalışmanın temel amacı; çevre eğitimiyle ilgili yapılan çalışmalarda kullanılan veya geliştirilmiş olan ölçekleri tespit edip derleyebilmektir. Çevreye yönelik tutum ve motivasyon düzeyi, çevresel okuryazarlık, çevre bilinci ve çevresel duyarlılık ile ilgili ölçme araçlarını tarayarak ölçekleri belirlemek ve bunları bir araya getirmektir.

Çalışma sonucunda, çevresel konular üzerinde yapılmış araştırmalarda kullanılmış olan ölçekler; çevre bilinci düzeyi, çevresel duyarlılık düzeyi, çevre okuryazarlığı düzeyi ve son olarak çevreye karşı tutum ve motivasyon düzeyini ölçmek adına yapılan ölçekler olarak 4 gruba ayrılarak incelenmiştir.

**Anahtar Kelimeler:** çevre bilinci, çevre okuryazarlığı, çevresel duyarlılık, çevreye yönelik tutum.

### GİRİŞ

Çevre sorunlarının hızlıca artması sonucu bilim adamları ve uzmanlar çevre sorunlarına karşı önlem alabilmek adına birçok çalışma başlatmışlardır (Turan ve Güler, 2013). Bunlardan en önemlisi çevre



eğitimidir. Çevre sorunlarını düzeltebilmenin en güzel yolunun çevre bilinci gelişmiş, çevreye karşı duyarlı olan insanları yetiştirmek olduğu düşünülmüştür (Kışoğlu, 2009). Bireylere çevre eğitimin verilmesi ve çevresel konularda bilinçlendirme çalışmaları çevreye karşı duyarlı bireylerin geliştirilmesi için oldukça önemli bir adımdır.

Çalışmanın temel amacı; çevre eğitimiyle ilgili yapılan çalışmalarda kullanılan veya geliştirilmiş olan ölçekleri tespit edip derleyebilmektir. Çevreye yönelik tutum ve motivasyon düzeyi, çevresel okuryazarlık, çevre bilinci ve çevresel duyarlılık ile ilgili ölçme araçlarını tarayarak ölçekleri belirlemek ve bunları bir araya getirmektir.

Bu amaca yönelik alt başlıklar olarak aşağıdaki araştırma sorularına cevap aranmıştır:

- Çevre bilincini ölçmek adına yapılan veya geliştirilen ölçekler nelerdir?
- Çevresel duyarlılığı ölçmek adına yapılan veya geliştirilen ölçekler nelerdir?
- Çevre okuryazarlığını ölçmek adına yapılan veya geliştirilen ölçekler nelerdir?
- Çevreye karşı tutum ve motivasyonu ölçmek adına yapılan veya geliştirilen ölçekler nelerdir?

## YÖNTEM

Araştırmanın evrenini; çevresel okuryazarlık, çevre bilinci, çevreye yönelik tutum ve motivasyon düzeyi ve çevresel duyarlılık konuları hakkında yapılan araştırmalar, akademik makaleler ve tezler oluşturmuştur. Veri tabanı kullanılarak araştırma yapıldığı için evrenin belirlenmesi, uygun örneklem yöntemi ile sağlanmıştır. Yapılan araştırmanın analiz birimi, ilgili konularda çalışma yürüten araştırma raporlarıdır (makaleler, bildiriler, tezler).

Çevre sorunları ile ilgili yürütülen araştırmalarda kullanılmış olan ve tespit edilen ölçekler; çevre bilincini ölçmek için geliştirilmiş olan ölçekler, çevresel duyarlılığı ölçmek için geliştirilmiş olan ölçekler, çevre okuryazarlığını ölçmek için geliştirilmiş olan ölçekler ve çevreye karşı tutum ve motivasyonu ölçmek için geliştirilmiş olan ölçekler olarak 4 farklı gruba ayrılarak sınıflandırılmıştır.

Tespit edilen ölçeklerin; analiz birimleri, içerik analizleri, geçerlik ve güvenirlik çalışmaları ve ölçeklerin geliştirilme aşamaları hakkında da bilgilendirmeler yapılmıştır.

## BULGULAR

Yapılmış olan bu araştırmanın sonucunda çevresel konular hakkında yapılan araştırmalarda kullanıldığı veya geliştirildiği tespit edilen ölçekler şu şekilde sıralanabilir; İlköğretim II. Kademe Öğrencileri İçin Çevre Okuryazarlığı Ölçeği, Biyoloji Öğretmen Adaylarına Yönelik Çevre Tutum Ölçeği, Yetişkinler İçin Çevre Okuryazarlığı Ölçeği ( ELSA ), Biyoloji Öğretmen Adaylarının Çevre Bilinci ve Çevresel Duyarlılığı Ölçeği, Çevresel Bilgi Ölçeği, Orta Öğretim Öğrencileri için Çevresel Tutum Ölçeği, Çevre Sorunlarına Yönelik Tutum Ölçeği, Sürdürülebilir Çevre Bilinci Düzeyleri Ölçeği ve Çevresel Tutum Ölçeği.

**1. Çevresel Bilgi Ölçeği:** Araştırmada verilerin toplanabilmesi için uygulanan ölçeklerden biri de 2020 yılında Uzun ve Şenler tarafından geliştirilmiş olan; 'Çevresel Bilgi Ölçeğidir'. Bu ölçeğin amacı



öğrencilerin çevre ve çevre sorunlarıyla ilgili bilgi düzeylerini ölçmektir. 18 maddeden oluşan ölçek maddelere 3 şıklıdır. Bu şıklar her soru için; doğru, bilmiyorum ve yanlış seçenekleridir. Ölçek planlamasına göre doğruyu işaretleyenlere 1 puan, yanlış veya bilmiyorum şıkkını işaretleyenlere ise sıfır puan verilecektir. Yapılan pilot çalışmada KR 20 değeri yani çevresel bilgi ölçeğinin güvenilirliği 73 olarak bulunmuştur. Alt problemlerin araştırılmasının yapıldığı çalışmada ise KR 20 değeri 61 olarak bulunmuştur (Uzun, B. S. ve Şenler, B., 2020).

**2. Sürdürülebilir Çevre Bilinci Düzeyleri Ölçeği:** Kullanılan bu ölçek, 2015 yılında Derman ve Senemoğlu tarafından 10 farklı örnek durumundan oluşan ve her durum için 3 farklı seçenek olan bir ölçek olarak geliştirilmiştir. Sürdürülebilir çevre bilinci düzeyleri ölçeği için hesaplanmış olan Cronbach  $\alpha$  güvenilirlik katsayısı değeri 0.87 olarak bulunmuştur. Yapılan çalışmada toplanan verilerin analiz sürecinde yüzde, frekans, bağımsız t testi, aritmetik ortalama ve Anova'dan faydalanılmıştır (Derman, İ., 2015).

**3. Biyoloji Öğretmen Adaylarının Çevre Bilinci ve Çevresel Duyarlılığı Ölçeği:** Bu ölçek, Yeşilyurt, Gül ve Demir (2013) tarafından geliştirilmiştir. Ölçek 4 aşamada geliştirilmiştir. Bu aşamalar ölçek maddelerinin oluşturulması ile başlayıp uzman ve öğretmen adaylarının ölçek maddeleri için görüşlerinin alınmasıyla devam etmiş ve ardından uygulama aşaması yapılmış ve son olarak ölçeğin yapı geçerliliğinin belirlenmesi ve güvenilirlik hesaplama çalışmaları aşamasında yapılmasıyla son bulmuştur. Verilerin analizi SPSS programı kullanılarak yapılmıştır. Madde analizinin yapılması için madde toplam korelasyonu, güvenilirlik çalışmalarında ise Cronbach Alpha katsayısı ele alınmıştır. Faktör analizi ise ölçeğin yapı geçerliliğini tespit edebilmek için yapılmıştır. Cronbach Alpha iç tutarlılık katsayı değeri 0.921 bulunmuştur (Yeşilyurt, S., Gül, Ş. ve Demir, Y., 2013).

**4. Çevresel Tutum Ölçeği:** Bu ölçek 1995 yılında Berberoğlu ve Tosunoğlu tarafından geliştirilmiş olan 21 maddeli olan bir ölçektir. Ölçek için hesaplanmış olan Cronbach alfa değeri  $\alpha=0.77$  olarak bulunmuştur (Berberoglu, G., & Tosunoglu, C., 1995). Yükseköğretim düzeyinde yapılan çalışmada ise ölçeğin Cronbach alfa değeri ise  $\alpha=0.80$  olarak ölçülmüştür. Bu araştırma da verilerin analizinde t-testi, ortalama, sayı yüzde dağılımı ve varyans analizi (ANOVA) kullanılmıştır. Verilerin analizi için SPSS programı kullanılmıştır (Şenyurt, A., Temel, A. B., & Özkahraman, Ş., 2011). İlköğretim düzeyinde yapılan çalışmada ise kullanılan ölçeğin Cronbach alfa değeri  $\alpha=0.720$  olarak ölçülmüştür. Verilerin analizi için SPSS programı üzerinden yapılmıştır. Katılımcılara uygulanan anketler sonucunda elde edilmiş olan veriler; yüzdeler, standart sapma, frekans analizi, Cronbach Alpha ve ANOVA testi kullanılarak yapılmıştır (Değirmenci, M., 2012).

**5. İlköğretim II. Kademe Öğrencileri İçin Çevre Okuryazarlığı Ölçeği:** 2014 yılında Yavuz, Balkan Kıyıcı ve Atabek Yiğit tarafından geliştirilmiştir. Bu ölçek bir ölçek geliştirme çalışması olduğu için 5 farklı aşamayı içermektedir. İlk olarak literatür taraması, kullanılacak olan maddeler için geniş bir madde dosyası oluşturulması, alanında uzmanlaşmış kişilerin fikirlerinin alınması, ölçek için uygulama aşaması ve faktör analizi ve güvenilirlik çalışması olarak aşamalandırılmıştır. Bu aşamalar sonucunda toplamda 39 maddeden oluşmuş 5 likert tipine sahip bir ölçek oluşmuştur. Ölçeğin yapı geçerliliğinin tespiti açımlayıcı faktör analizi (AFA) ve doğrulayıcı faktör analizi (DFA) kullanılarak sağlanmıştır. Ölçeğin güvenilirliği ise Cronbach Alpha kat sayısı ile hesaplanmıştır.



**6. Yetişkinler için Çevre Okuryazarlığı Ölçeği ( ELSA ):** 2014 yılında Demirhan, Yiğit, Yavuz ve Köklükaya tarafından geliştirilmiştir. Ölçeğin geçerliliği için kanıt elde edebilmek adına Varimax rotasyonu temel bileşen analizi kullanılmıştır. Ölçek çevre birinci, çevre kaygısı ve çevre farkındalığı olmak üzere 3 ana başlıkta, toplam 20 maddeden oluşmaktadır. Ölçeğin güvenilirlik analizi sonucu ölçeğin tamamı için Cronbach Alpha katsayısını 0,881 olarak ölçmüştür. Geçerlik ve güvenilirlik çalışmalarının sonucuna göre, yetişkinler için çevre okuryazarlığı ölçeğinin yetişkinlerin görüşlerini ve çevre okuryazarlık düzeylerini belirlemek amacıyla kullanılabilirliği ispatlanmıştır. Ölçeğin yapı geçerliliğine saptayabilmek için açıklayıcı faktör analizi ve cronbach fakat sayısı kullanılmış ve güvenilirlik analizinin sonuçları alınmıştır (Atabek-Yiğit, E., Köklükaya, N., Yavuz, M., & Demirhan, E., 2014). Ölçeğin geliştirilme çalışmaları 3 aşamadan oluşmuştur. Bunlar; öğelerin oluşturulması ve içerik doğrulaması, çalışma grubu ve yönetim ve doğrulama ve güvenilirlik analizini oluşturmaktır.

**7. Biyoloji Öğretmen Adaylarına Yönelik Çevre Tutum Ölçeği:** Taflı ve Ateş tarafından 2016 yılında geliştirilmiş olan bu ölçek, verilerin toplanabilmesi için 24 madde olacak şekilde oluşturulmuştur. Verilerinin analizinin yapılması SPSS programı kullanılarak yapılmıştır. Çalışmanın geçerliliği doğrultusunda ölçüt, kapsam ve yapı geçerliliği için ise LISREL programı kullanılarak yapılmıştır ve doğrulayıcı faktör analizi (DFA) sonucunda ki-kare ve serbestlik derecesi oranı 1.43 olarak ölçülmüştür. Güvenilirlik çalışması için ise Cronbach alfa katsayısı kullanılarak 0.92 bulunmuştur. Çalışmanın verilerini analiz edebilmek için betimsel istatistik ve ANOVA kullanılarak çıkarıma dayalı analiz yöntemi kullanılmıştır. Betimsel istatistikte ise mod, medyan, aritmetik ortalama, standart sapma, ranj gibi kavramlar ile yorumlama yapılmıştır (Ağtaş, B., Bektaş, O., & Güneri, E., 2019).

**8. Orta Öğretim Öğrencileri için Çevresel Tutum Ölçeği:** Kullanılan ölçek, 2 ayrı alt başlıktan oluşmuştur. Bu alt başlıklardan biri çevresel davranış bir diğeri ise çevresel düşüncedir. Ölçek 2006 yılında Uzun ve Sağlam tarafından oluşturulmuştur. Ölçeğin iç tutarlılık sayısı 0,72 olarak bulunmuştur. İki yarı alt başlıktan oluşan ölçek toplam 27 maddeden oluşmuştur. Verilerin analizi, SPSS programı ile yapılmışken her verilen cevap için, cevapların ortalaması alınarak hesaplama yapılmıştır (Ercan, K. A. Y. A., Akıllı, M., & Sezek, F., 2009). Ölçek; çevresel bilinç, çevresel ilgi, çevresel görüş, çevresel kirlilik, çevresel duyarlılık ve çevresel sorunlar olmak üzere toplam 6 alt boyuttan oluşmuştur. Geçerlilik oranları, çevresel davranış alt ölçeğindeki yük değerleri; çevresel ilgi faktöründe .576 ve .740, çevresel duyarlılık faktöründe .596 ve .779, çevresel bilinç faktöründe ise .541 ve .790 değerleri arasında değişiklik göstermektedir. Çevresel düşünce alt ölçeğinde ise; çevresel görüş faktöründe ki yük değerleri .386 ve .699, çevresel kirlilik faktöründe .504 ve .728, çevresel sorunlar faktöründe ise .531 ve .819 değerleri arasında değişiklik göstermektedir. Güvenilirlik analizinde ise ölçeğin geneli için Cronbach alfa iç tutarlılık katsayısının sonucu .80 olarak hesaplanmıştır. (Uzun, N., ve Sağlam, N., 2006).

**9. Çevre Sorunlarına Yönelik Tutum Ölçeği:** Kullanılan ölçek, Aksu tarafından 2009 yılında geliştirilmiştir. Verilerin analizi ise SPSS programı kullanılarak yapılmıştır. Faktör analizi, yapı geçerliliğini araştırabilmek için kullanılmıştır. Tutum ölçeğinde bulunan KMO değeri 0,789 olarak hesaplanmışken Barlett testi sonucu ise 309,623 olarak hesaplanmıştır. Ölçekte öğrencilerin tutumlarının değişkenler açısından inceleyebilmek için ANOVA ( tek yönlü varyans analizi



)kullanılmıştır. ANOVA dan sonra çıkan farkları anlayabilmek için birde TUKEY Testi uygulanmıştır (Polat, A.G.S., & Kirpik, C., 2013).

## SONUÇ

Çalışmanın temel amacının çerçevesinde çevre eğitimi ile ilgili geliştirilmiş olan ölçekler derlenmeye çalışılmıştır. Çevre sorunları ile ilgili yürütülen araştırmalarda kullanılmış olan ve tespit edilen ölçekler; çevre bilincini ölçmek için geliştirilmiş olan ölçekler, çevresel duyarlılığı ölçmek için geliştirilmiş olan ölçekler, çevre okuryazarlığını ölçmek için geliştirmiş olan ölçekler ve çevreye karşı tutum ve motivasyonu ölçmek için geliştirilmiş olan ölçekler olarak 4 farklı gruba ayrılarak sınıflandırılmıştır.

Çevre bilincini ölçmek adına yapılan araştırmalarda kullanılan ölçekler; Çevresel Bilgi Ölçeği, Sürdürülebilir Çevre Bilinci Düzeyleri Ölçeği ve Biyoloji Öğretmen Adaylarının Çevre Bilinci ve Çevresel Duyarlılığı Ölçeği olarak belirlenmiştir.

Çevresel duyarlılığı ölçmek için yapılan araştırmalarda kullanılan ölçek; Çevresel Tutum Ölçeği olarak belirlenmiştir.

Çevre okuryazarlığını ölçmek adına yapılan araştırmalarda; İlköğretim II. Kademe Öğrencileri İçin Çevre Okuryazarlığı Ölçeği, Yetişkinler için Çevre Okuryazarlığı Ölçeği (ELSA) kullanılmıştır.

Çevreye karşı tutum ve motivasyonu ölçmek adına yapılan araştırmalarda; Biyoloji Öğretmen Adaylarına Yönelik Çevre Tutum Ölçeği, Ortaöğretim Öğrencileri için Çevresel Tutum Ölçeği ve Çevre Sorunlarına Yönelik Tutum Ölçeği kullanılmıştır.

Araştırma boyunca tespit edilen ölçekler hakkında bilgilendirmeler yapılmıştır.

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## The Implementation of Microlearning in Physics Learning: A Bibliometric Analysis

**IRNIN AGUSTINA DWI ASTUTI**

Universitas Negeri Jakarta, [irnin.agustina@gmail.com](mailto:irnin.agustina@gmail.com) , Indonesia

**BASUKI WIBAWA**

Universitas Negeri Jakarta, [bwibawa@unj.ac.id](mailto:bwibawa@unj.ac.id) , Indonesia

**MUHAMMAD JAPAR**

Universitas Negeri Jakarta, [mjapar@unj.ac.id](mailto:mjapar@unj.ac.id) , Indonesia

### Abstract

To enhance problem-solving abilities in physics learning, a learning strategy capable of visualizing physics concepts effectively is required. One learning approach that can be utilized is microlearning. This study aims to analyze the implementation of microlearning in physics learning through a bibliometric approach using VOSViewer software. The method employed in this research is bibliometric analysis. There are 6 classification clusters identified through the VOSViewer software. The research results indicate that articles using the keywords "physics learning" and "microlearning" have seen a rapid increase in 2020, 2021, and 2022. From the analysis using VOSViewer, the term "microlearning" frequently appears, indicating a substantial amount of research on microlearning. However, it is innovative when associated with physics learning, both in terms of teaching and learning media. Physics learning using microlearning represents an innovation in physics education, allowing students to better comprehend physics materials.

**Keywords:** microlearning, physics learning, learning media, bibliometric analysis.

### INTRODUCTION

21st-century learning is an approach to learning that focuses on developing the skills and abilities that students need to succeed in an increasingly complex and dynamic world in the 21st century. 21st-century learning emphasizes the development of skills such as critical thinking, creativity, collaboration, communication, and information technology skills (Zubaidah, 2016).

The ability to think critically is closely related to physics lessons because physics involves problem-solving and analysis that require critical thinking skills (Vari & Bramastia, 2021). In physics, students



must understand abstract and mathematical concepts and be able to apply these concepts in real-world situations. Physics lessons are considered difficult by some students because the material involves complex concepts and requires in-depth understanding (Rizky, Tomo, & Haratua, 2014; Ihsani et al, 2020). Many concepts in physics are abstract and difficult to understand visually (Korganci et al, 2015). Physics also involves complex and difficult mathematics, such as integration, differentiation, and differential equations. Some students may have difficulty understanding these mathematical concepts, which makes it difficult for them to understand physics as a whole.

Physics is one of the subjects that requires a lot of learning resources, such as textbooks, laboratories, videos, and simulation models. Therefore, schools should provide adequate learning resources to support effective physics learning. The learning resources or teaching materials created by teachers are tailored to the characteristics of the students (Wibawa & Kardipah, 2019). Physics learning should pay attention to its relevance to the real world so that students can see how physics concepts are applied in daily life (Volkwyn et al, 2020; Niss, 2012).

To improve problem-solving skills in physics learning, a learning model strategy that can visualize physics concepts well is needed. One learning approach that can be used is microlearning. Microlearning is a learning approach that focuses on delivering learning material in small and structured pieces (Giurgiu, 2017). This approach usually involves the use of technology such as videos, infographics, or interactive modules to facilitate learning. In physics learning, microlearning can be used to help students understand complex physics concepts through easily digestible pieces of information.

Microlearning is an effective way to enrich physics learning and help students understand complex physics concepts more quickly and effectively (Contreras et al, 2023; Netzer & Mittelstädt, 2021). Microlearning also helps students to access physics learning information easily and flexibly, anytime and anywhere. Microlearning aims to facilitate effective and efficient learning by presenting learning information in small, structured, and easily understood pieces (Bruck et al, 2012; Díaz Redondo et al, 2021). Microlearning helps students to engage in the learning process, improve information retention, optimize time and resources, and facilitate self-learning (Dolasinski & Reynolds, 2020). Microlearning in physics learning can be presented in short animated videos. Videos are suitable for conceptual knowledge content (Wibawa & Muhidi, 2021), and thus can display various physics concepts.

There are still many topics related to technology-based physics learning approaches that have developed over time. This study aims to analyze physics learning using microlearning with a bibliometric approach and using the VOSViewer software. Bibliometric visualization techniques are used to map the relationship groups between journals, co-authorship, researchers, and selected keywords to understand the development related to microlearning in physics learning

## **METHODS**

The method used in this study is bibliometric analysis. Bibliometrics is a quantitative study of scientific publications and literature used to analyze research performance and scientific development in a particular discipline (Supinah & Soebagyo, 2022). Generally, bibliometrics includes the collection, analysis, and interpretation of bibliographic data or bibliographic information collected



from bibliographic databases. This bibliographic data is then used to measure the productivity, influence, and impact of scientific works and research in a field of study. By using bibliometric analysis, researchers can study the contents of bibliographies and analyze the citations of each article taken from Harzing's Publish or Perish database (Ajinegara, 2022). Bibliometric metrics help understand publication trends and changes in a discipline, as well as compare the productivity and impact of scientific works among different authors or institutions (Royani & Rahayu, 2022). Therefore, researchers determined the research theme to be analyzed by bibliometric mapping, which is the application of microlearning in physics learning.

Bibliometric analysis was conducted by utilizing the Publish or Perish database sourced from Google Scholar consisting of 200 articles. The search for research articles was conducted using Publish or Perish with the keywords "physics learning" and "microlearning". All articles were collected from the Google Scholar database. To ensure the freshness of the articles, the researchers determined a search range of the last 6 years starting from 2017 to 2023. Metadata from Publish or Perish stored in RIS format was then processed using VOSViewer software to display visualization in a bibliometric map. Bibliometric visualization techniques are specifically designed to map the group relationships between journals, co-authorship, and the appearance of keywords to determine the development related to microlearning in physics learning. Keywords that appear as research themes were extracted from the title and abstract of a publication or can be taken from the keywords provided by the author in their article. VOSViewer software will display three types of visualizations, namely network visualization, overlay visualization, and density visualization.

## **RESULT & DISCUSSION**

The determination of the title "microlearning in physics learning" uses two keywords, namely microlearning and physics learning, in the software Publish or Perish. On Publish or Perish, the researcher sets the maximum number of results to 200 articles and selects the search period of the last 6 years (2017-2023). The source chosen by the researcher is the Google Scholar database. After obtaining the 200 articles, the researcher saves them in CSV format for Microsoft Excel and RIS format for VOSViewer software.

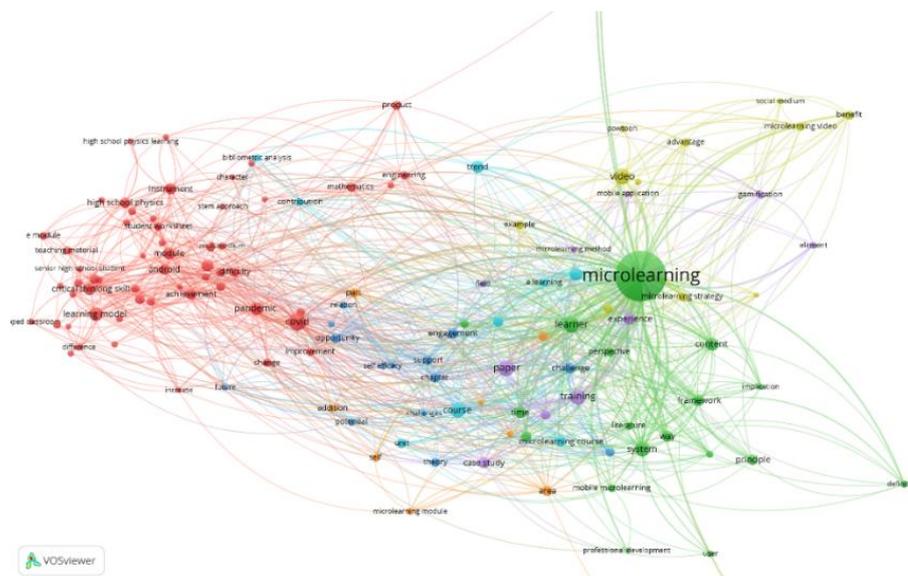
After filtering and processing the search results in the Publish or Perish (PoP) application, the researcher creates a publication table based on the period of 2017-2023 to present the number of publications for that period to readers.



**Table 1.** Search Results of Articles by Title and Keywords

Year	Physics Learning	Microlearning
2017	245	84
2018	214	110
2019	198	154
2020	178	191
2021	123	315
2022	28	141
2023	12	1
	998	996

In the analysis of the application of microlearning in physics learning using the binary method, 8763 words were obtained with a minimum occurrence limit set at 10 times, resulting in 88 words. These words were then grouped into 6 clusters.



**Figure 1.** Network Visualization of 88 Items with 6 Clusters

The binary method analysis resulted in a more diverse clustering. Cluster 1, marked in red, consists of words related to "physics learning," "module," "critical thinking skill," and so on. Cluster 2, marked in green, consists of words related to "micro-learning," "framework," "perspective," and so on. Cluster 3, marked in blue, consists of words related to "microlearning course," "e-learning," and so on. Cluster 4, marked in yellow, consists of words related to "video," "microlearning strategy," "social media," and





Figure 3 shows that items belonging to a cluster will appear on the density visualization screen. Each item will display a color based on the density of the item at that time. Based on the bright color that appears, indicates that research can still be done from 2020 and beyond to find novelty, while the dark color that appears indicates that research has been widely conducted from 2020 and below.

From the analysis of the VOS Viewer display image, the word "microlearning" often appears, indicating that there have been many studies on microlearning. However, it becomes novel when related to physics learning, both in terms of teaching and learning media.

In physics learning, microlearning is a suitable and appropriate strategy to implement. This is because microlearning presents short materials that make it easier for students to learn physics. Microlearning can be done through interactive modules that present physics information in small, easily understood pieces. For example, interactive modules can include visualization of graphs and diagrams, physics simulations, and sample calculations presented in formats that are easily accessible by students (Galarosa & Tan, 2022).

In addition to interactive modules, microlearning can also be presented in the form of physics animation videos. Short instructional videos can be used to explain complex physics concepts clearly and easily understood. Videos can be presented in a fun and engaging format that captures the attention of students, thereby helping to increase student engagement and accelerate concept understanding (Purwanto et al., 2015). The development of instructional media is driven by a desire to increase student engagement, student-centered learning, and improvement in the student learning experience (Rahmi et al., 2021; Luy, et.al, 2024).

The use of microlearning can help improve students' problem-solving abilities (Ariantini et al., 2019). This is due to the focus on more specific topics and providing short content in multimedia formats that can accommodate students' learning styles (Kohnke, et.al, 2024; Garshasbi, Yecies, & Shen, 2021). With this learning approach, students can acquire knowledge more easily and quickly, enabling them to focus more on problem-solving and finding solutions (Mercan et.al, 2023; Surahman, at. al, 2019). Additionally, microlearning can also facilitate self-directed learning and provide opportunities for students to learn according to their own needs and learning pace. However, the effectiveness of microlearning in improving students' problem-solving abilities also depends on the use of appropriate technology and the quality of content presented.

## CONCLUSION

An article on the topic of microlearning media in physics learning was obtained through the Publish or Perish software and analyzed using VOSViewer software. Based on the data obtained, articles with the keywords "microlearning" and "physics learning" have been rapidly increasing in 2020, 2021, and 2022. Additionally, there were 6 clusters of classification with 88 items using the VOSViewer software. Based on the review of the clusters, research on the application of microlearning in physics learning is still rare. According to Google Scholar's database, the highest number of publications related to microlearning in physics learning was in 2020-2021.



Therefore, the application of microlearning in physics learning can support the development of 21st-century technology. The use of microlearning can help improve students' problem-solving abilities, as it focuses on specific topics and provides short content in a multimedia format that accommodates students' learning styles. With this learning approach, students can acquire knowledge more easily and quickly, allowing them to focus more on solving problems and finding solutions. Based on the VOSViewer results shown, further research recommendations include investigating the application of microlearning using different types of media or media other than video.

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## Fen Bilimleri Eğitiminde Simülasyon Yönteminin Kullanılması

Havva AYDIN<sup>1</sup>

Haki PEŞMAN

Firat University, Türkiye

### Öz

Günümüzde görerek yaparak, yaşayarak, duyarak, hissedilerek öğrenilen bilgilerin kalıcı olduğu hemen herkes tarafından kabul edilmektedir. Fen Bilimleri dersi de öğrencilerin deneyerek, keşfederek, dokunarak gerekirse mühendislik tasarımını dahi kendisi yaparak öğrenilebilecek dersler arasında olduğu bilinmektedir. Edgar Dale'nin öğrenme konisine göre de;

Okuduklarımızın %10'unu,

Duyduklarımızın %20'sini,

Gördüklerimizin %30'unu,

Hem görüp hem duyduklarımızın %50'sini,

Hem görüp, hem işitip hem de söylediklerimizin %70'ini,

Hem görüp, hem işitip, hem söyleyip hem de yaptıklarımızın ise % 90'ını hatırladığımızı gösteriyor.

Simülasyon yönteminin Edgar Dale öğrenme konisine göre ne kadar başarılı olduğu yazılan makale ve tezlerle irdelenmeye çalışılmış ve yapılan çalışmalarda simülasyon yöntemi başarılı sonuçlar vermiştir.

Simülasyon yöntemi ile, gerçekleştirilemeyecek durumlarda ki deneyler de veya soyut kavramların somutlaştırılmasında Fen Bilimleri dersi için öğrencilerde kalıcı öğrenme sağlayacak yöntem olarak karşımıza çıktığı ve yapılan çalışmalarda simülasyonların Fen Bilimleri dersi için etkili bir yöntem olduğu görülmüştür.

**Anahtar Kelimeler:** Fen Bilimleri Eğitimi , Edgar Dale, Simülasyon

## 1.GİRİŞ

### 1.1 Problem Durumu

Fen Bilimleri eğitiminde anlamlı öğrenmeyi gerçekleştirmek amacı ile etkili eğitim-öğretim nasıl yapılır, öğrencilerin dersteki hazırbulunuşlukları nasıl artırılır, öğrencilerin ulaşamayacakları araç ve

<sup>1</sup> Corresponding Author



gereçler olduğunda eksik nasıl kapatılabilir üzerine yapılan çalışmamda araştırmamız ‘Fen Bilimleri Eğitiminde Simülasyon Yönteminin Kullanımı’ ve buna bağlı olarak problem durumumuz ‘Simülasyon Nedir ve Nasıl Kullanılır?’ üzerine araştırmalar yapmak olarak belirlenmiştir.

## 1.2 Araştırmanın Amacı

Milli Eğitim Bakanlığı bilimsel süreçlerin öğrenme ortamlarına aktarılmasıyla öğrencilerin araştırmalar yapmasını bilimsel süreçlere doğrudan katılmaları hedeflenmektedir. Mühendislik, insanların ihtiyaçlarını karşılamak için sistemi tasarlamak uygulamaları geliştirmektir. Teknoloji doğal dünyanın değiştirilmesidir. Amaç öğrencilerin mühendislik ile bilim arasında bağlantı kurmalarını sağlamaktır. Ülkemizin bilimsel araştırma kapasitesini artırmak için fen ve mühendislik uygulamalarına önem verilmiştir.

Milli Eğitim Bakanlığı Öğretim Programı kapsamında verilen bu bilgilerden yola çıkarak Fen Bilimleri eğitiminde kullanılan Simülasyon Yöntemi ile Fen Bilimleri dersi başarısı üzerine etkilerini incelemek.

## 1.3 Araştırmanın Önemi

Araştırmanın önemi ‘ Soyut Kavramların Öğretilmesinde, Okul Laboratuvarlarının Yetersiz Kaldığı Durumlarda Simülasyon Yönteminin Kullanılması Fen Bilimleri Dersinin Anlaşılmasını Kolaylaştıracaktır’ hipotezinden yola çıkarak Simülasyonların etkililiği hakkında çalışmalarda bulunmak ve literatür taraması yapılarak ortaya çıkan sonuçlar üzerinden genel bir kanıya varmak.

## 2.1 . Milli Eğitim Öğretim Programı

Bilim ve teknolojide yaşanan gelişmeler öğrenme, öğretme, teori ve yaklaşımlarda ki gelişmeler bireylerden beklenen performansları doğrudan etkilemiştir. Bilgiyi üreten, kullanabilen, problem çözebilen, kararlı empati yapabilen ve bütüne katkı sağlayan bir bireyi tanımlamaktır.

Sarmal yaklaşımla hazırlanan kazanım ve açıklamalarla, diğer taraftan bütünsel ve bir kerede kazandırılması hedeflenen öğrenme çıktıklarına yer verildiği görülmüştür.(MEB,2018)

### 2.1.1 Öğretim Programının Amaçları

Öğretim programları, 1739 sayılı Millî Eğitim Temel Kanununun 2. maddesinde ifade edilen “Türk Millî Eğitiminin Genel Amaçları” ile “Türk Millî Eğitiminin Temel İlkeleri” esas alınarak hazırlanmıştır.

1. Okul öncesinde bedensel, zihinsel ve duygusal alanlarda gelişimleri gözlemlemek.
2. İlkokulu tamamlayan öğrencilerin ahlaki bütünlük ve farkındalık çerçevesinde öz disipline sahip sözel sayısal ve bilimsel akıl yürütme ile sosyal beceriler kazanmış bunları etkin bir şekilde kullanan ve sağlıklı hayat yönelimli bireyler olmasını sağlamak.
3. Ortaokul öğrencilerinin önceki eğitim-öğretim döneminde kazandıkları kazanımları geliştirmek suretiyle, haklarını kullanabilen ve sorumluluklarını yerine getiren bireyler olmasını sağlamak.



4. Liseyi tamamlayan öğrencilerin, geçmiş eğitim-öğretim yıllarında kazandıkları yenilikleri geliştirmek suretiyle, milli manevi değerleri benimseyip hayat tarzına dönüştüren, aktif ve üretken bireyler olarak yurdumuza katkıda bulunan ilgi ve yetenekleri doğrultusunda bir mesleğe, yükseköğretime ve hayata hazır bireyler olmalarını sağlamak.(MEB,2018)

### 2.1.2 Öğretim Programı'nda Alana Özgü Beceriler

#### a. Bilimsel Süreç Becerileri

#### b. Yaşam Becerileri

- Analitik düşünme
- Karar verme
- Yaratıcı düşünme
- Girişimcilik
- İletişim
- Takım çalışması

#### c. Mühendislik ve Tasarım Becerileri

- Yenilikçi (inovatif) düşünme

### 2.1.3 Fen Bilimleri Öğretim Programı'nda Benimsenen Strateji ve Yöntemler

Öğrenciyi temele alan öğrenme ortamlarında ;

-problem

-proje

-argümentasyon

-işbirliğine dayalı öğrenme esas alınmıştır.

Bilgiyi anlamlı ve kalıcı olarak öğrenebilmeleri için okul içi ve okul dışı öğrenme ortamları tasarlanır. İnfomal öğrenme ortamları da Fen Bilimleri eğitimi için oldukça önemlidir. Örneğin;

-Okul binası

-müzeler

-bilim merkezleri

-planetaryumlar vb.



Ayrıca öğrencilerin fikirlerini rahatça ifade edebilmelerine olanak sağlanmalıdır. Öğrencilerin yaratıcı düşünme becerileri desteklenmeli ve yeterli fırsat verilmelidir. Öğretmenler, öğrencilerinin geçerli verilere dayalı oluşturdukları ve sundukları çalışmalarda yönlendirici ve rehber olmalıdırlar.

Fen Bilimleri dersi öğretim programında bilimin uygulama ve ekonomiye girdi üretme niteliği önemsenmiştir. Bu bağlamda her bir ünite, konu ve kazanım günlük hayat ihtiyaçlarını gidermeye yönelik teknolojiler üretilmesini gözeten bir yaklaşımı benimsemiştir. “ F.7.3.3.3. Hava veya su direncinin etkisini azaltmaya yönelik bir araç tasarlar.” kazanımı gerçekleştirildiğinde sürtünme kuvvetinin günlük hayata etkileri öğrenci zihninde açıklık kazanacaktır. Fen bilimleri ve bilimsel bilgi edinme süreci uygulama ve teknolojik ürün üretmeyle bu ise girişimcilik yeterliliği ile hayata değer katma ve maddi kültürün gelişimine ve ekonomik yaşama hizmet edecektir. Bu yaklaşım çerçevesinde fen, mühendislik ve girişimcilik uygulamaları başlığı altında her bir üniteye paralel şekilde ve her bir kazanıma içkin olarak bilim ve girişimcilik dersin gündemine bütünün ayrılmaz bir parçası hâlinde dâhil edilmiştir. (MEB,2018)

#### 2.1.4 Fen Eğitiminde Kullanılan Model Çeşitleri

Fen eğitiminde kullanılan model çeşitleri Çağlar, Gürdal ve Şahin (2001) tarafından aşağıdaki şekilde verilmiştir.

##### A. Soyut modeller

Gerçek cismin sadece oluş kısmını belirten, detayların atıldığı, renk ve yapı bakımından aslına benzeyen modellerdir.

##### B. Tam modeller

Aslının aynısı olan modellerdir. Ör: iskelet, diş, insan beyni

##### C. Büyütülmüş veya küçültülmüş modeller

Aslının belli bir oranda büyütüldüğü veya küçültüldüğü modellerdir. Ör: Atom modeli, güneş sistemi

##### D. Kesitli modeller

Cismin kesitini görme imkânı veren, gerçek cisimle aynı ölçüde veya orantılı olarak yapılan modellerdir. Ör: Böbrek kesiti

##### E. Sökülebilir modeller

Bir kısmı veya tamamı sökülüp takılabilen modellerdir. Ör: insan vücudu modeli

##### F. Çalışan modeller

Sınıfa getirilemeyen bir cismin nasıl çalıştığını göstermek üzere yapılan modellerdir. Ör: elektrik motoru, vinç, elektroskop, buzdolabı

##### G. Elle yapılan modeller

Bir cismin modelini, öğrenciye yaptırarak öğrenmeyi sağlayan modellerdir. Ör: Dünya modeli, elektrik devresi



## H. Maketler

Daha çok mimarlıkta kullanılan modellerdir. Ör: Baraj, fabrika, ev maketleri

## 2.2. Simülasyon Kavramı

Gelişen teknoloji ile birlikte günümüzde eğitimde görsel sunumların öneminin arttığı görülmüştür.(Eliam ve Poyas, 2008).

Teknolojinin gelişmesi ile bilgisayarın tanınması ve kullanılması çok önemli hale gelmiştir. (Micheal, 2001).En önemli gelişmelerden biri de kuşkusuz bilgisayar simülasyonlarında görülmüştür.

Günümüzde Fen Bilimler eğitiminde simülasyonların dinamik sistemlerin gerçekleştirilmesi zor veya taklidi olan uygulamaları gerçek ya da yaratılmış dünyada bilgisayar örnekleriyle taklit edilmesidir. (Akpan, Andre, 1999)

Simülasyonlar canlandırılmış, oyun benzeri ortam olarak tanımlanmıştır. (Perkins ve diğerleri, 2006).

Örnek olarak sistem simülasyonları verilebilir. Sistem simülasyonları trafik modelleri, deprem modelleri, üretim uygulama örnekleri, sağlık sistemleri, askeri sistemler gibi birçok alanda kullanılmaktadır. Örneğin pilot eğitiminde her uçuşun gerçek uçakla yapılması öncelikle kaza riskini artıracaktır. Bu da insan gücünden taviz vermenize neden olacaktır. Biliniyor ki gerçek uçuş her zaman benzetilmiş uçuştan daha maliyetli olacaktır. Simülasyonlarda ise aynı uçuşu defalarca daha az maliyetle gerçekleştirebilir, pilotlar daha az stres içerisinde eğitimlerini almış olacaklardır.

Aynı zamanda deney yapmanın maliyetli veya uygun olmadığı durumlarda oldukça işe yaramaktadır. Malzemesi bulunmayan veya sınıf ortamında yapılması tehlikeli deneylerin zararsız olarak gerçekleştirilmesine olanak sağlamış olacaktır.

### 2.2.1. Simülasyon Çeşitleri

Thomas ve Hooper (1991) simülasyonları dört gruba ayırmışlardır.

- Deneyimleyici Simülasyonlar
- Bilgilendirici Simülasyonlar
- Güçlendirici Simülasyonlar
- Tamamlayıcı-Birleştirici Simülasyonlar

Alessi ve Trolip (2001) simülasyonları dört farklı grupta toplamıştır.

- Fiziksel Simülasyonlar
- Tekrarlanan Simülasyonlar
- Yöntemsel Simülasyonlar



#### d)Durumsal Simülasyonlar

### 2.3 İyi Bir Simülasyon Nasıl Olmalıdır?

Fen eğitiminde kullanılan simülasyonlar iki ya da üç boyutlu olabileceği görülmüştür. Simülasyonlar Fen Bilimleri derslerinde diğer araç gereçlere gerek duyulmadan tek başlarına kullanılabilen öğretim araçlarıdır. Öğretmenlerin sınıfta gerçekleştiremediği soyut kavramlı etkinliklerin somutlaştırılmasında ve yapılması imkansız veya zararlı deneylerin öğrencilerin kafalarında somutlaştırmalarına olanak sağlar. (Sönmez, 2006).

İncelenen araştırma sonuçlarına göre simülasyon oldukça etkili bir yöntemdir. Öğrencilerin farklı duyularına hitap ettiği için öğrencilerin meraklarını giderebilir. (Sönmez, 2006).

Simülasyonlar ne kadar uğraşılırsa uğraşılırsın hiçbir zaman gerçek dünyanın tam bir kopyası olamazlar. Öğrenciler simülasyonları gerçek dünya ile bağlantısını ne kadar güçlü kurarlarsa öğrenme o kadar güçlü olacaktır. Simülasyonlar öğrenciler için inandırıcı olmalıdır ve öğrencilerin sorularına cevap verebilmelidir. (Perkins ve diğerleri, 2006).

Simülasyon, son derece pahalı, tehlikeli veya imkansız testlere izin verir.(Strauss, Kinzie, 1994)

Simülasyon öğrencilerin testlerdeki soruları anlamada kolaylık sağladığı ve diğer öğrencilere göre performanslarının yüksek olduğu görülmüştür. (Akpan, Andre, 2000; Barnea, Dori, 1999; Yıldız, Atkins, 1996; Geban ve diğerleri, 1992)

### 2.3.Simülasyon Kullanmanın Faydaları

Üretim maliyeti çok yüksek olan ve insan kaynaklı hatalar nedeniyle herhangi bir kaza gerçekleşmesi halinde hem insan canına mal olan hem de çok büyük bir maliyetin boşa gitmesine neden olan teknik donanımlarının uzmanlık eğitimi, bilgisayar ortamında kullanılan simülasyon programları sayesinde gerçek zamanlı ancak risksiz olarak yapılabilmektedir. Gerçek dünyadaki sistem ve süreçlerin programlama ile oluşturulan yapay ortama taşınması olarak da tanımlanan simülasyonlar, bilgisayar yazılımları sayesinde bire bir gerçeklikte herhangi bir olayı taklit edebilmektedir.

### 2.4.Simülasyon Kullanmanın Zararları

Bir sistemin bilgisayar simülasyonunu kurmak ve geçerli olduğunu ispatlamanın maliyeti çok yüksektir. Genel olarak her bir sistem için ayrı bir program yazma gereği vardır. Simülasyon dilleri bu mahsurları bir dereceye kadar ortadan kaldırmıştır. Kurulan bir simülasyon programının bilgisayarda çalıştırılması çok zaman alabilir. Araştırmacılar simülasyon tekniğini öğrendikten sonra onu analitik yöntemlerin daha uygun olduğu durumlarda da kullanma eğilimindedir.



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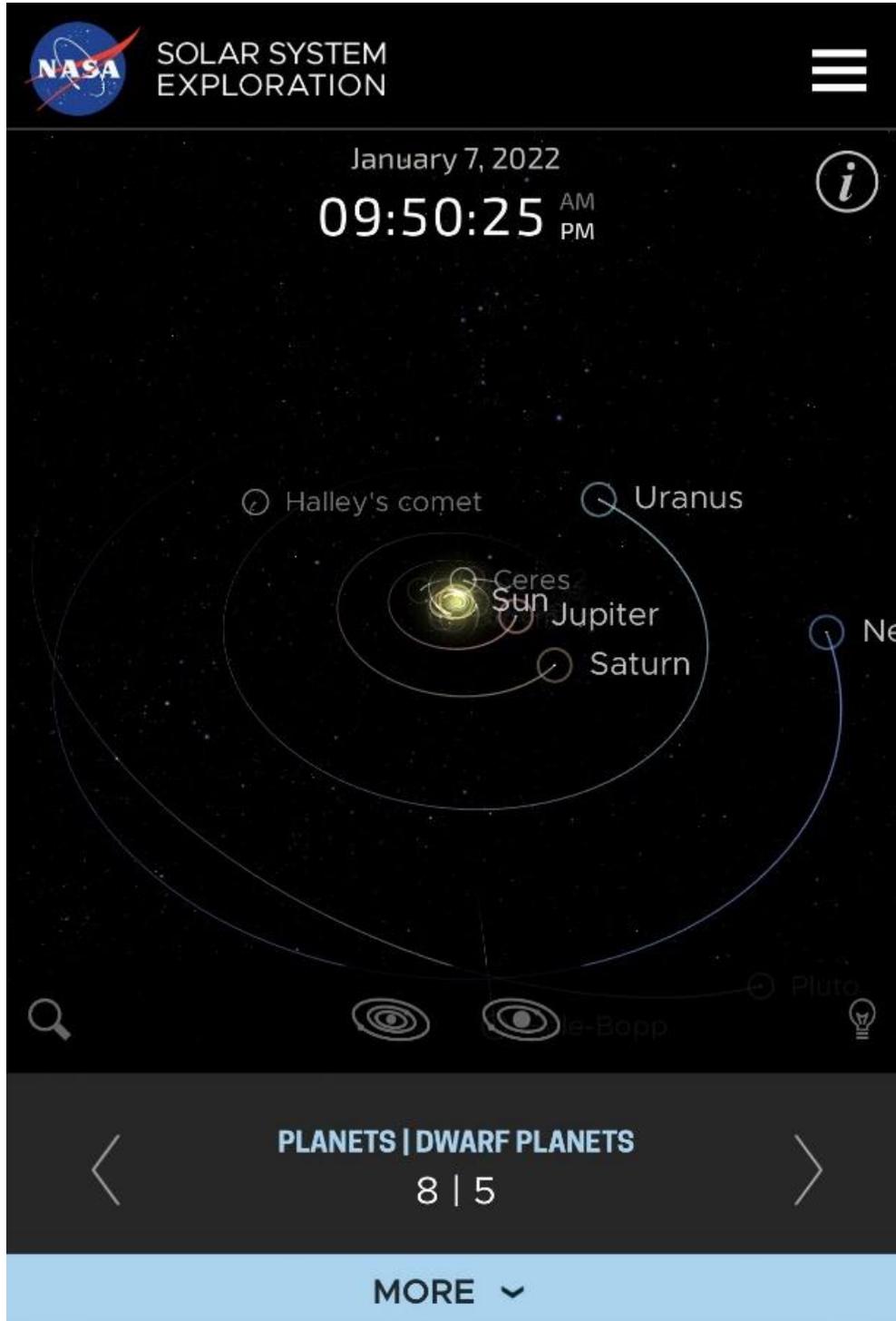
<https://www.eclss.org/ess>

11



## 2.5.Fen Bilimleri Eğitiminde Kullanılan Simülasyon Uygulamaları

### NASA 3D Gök Cisimleri ve Uzay Araçları Modelleri





PhET Simülasyonları

# Enerji - Kaykay Parkı

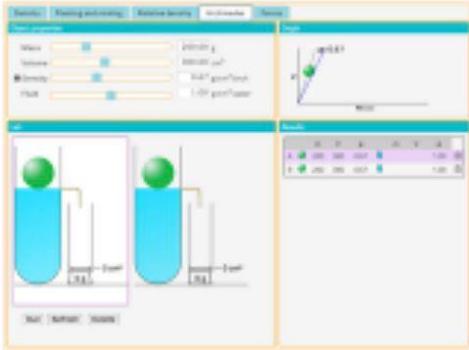


Energy	Value
Kinetic	1557.2 J
Potential	1442.3 J
Thermal	61.4 J
Total	3060.9 J

Height = 2.5 m  
Speed = 7.2 m/s



GO – LAB



### Splash: Virtual Buoyancy...

★★★★☆



### Electrical Circuit Lab

★★★★☆



### Bond

★★★★☆



## JavaLab

# JavaLab

- MENU -

## Science simulations

**JavaLab**

### What is JavaLab?

📁 Dongjoon | 🕒 2019-01-01 | 📁 미분류

Free interactive science simulation written by JavaScript Simulates various natural phenomena Includes about Physics, Chemistry, Earth, Astronomy, Biology, Measurment, Mathmatics... No need to plugin add-ons Available on mobile devices and tablets also...

[javalab.org](https://javalab.org)



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## Algodo



### 3. Fen Bilimleri Eğitiminde Simülasyon Kullanımına Yönelik Literatür Alan Taraması

- Çağırın(2008)'in yaptığı çalışmada 8. Sınıflarla çalışmıştır. Öğrencilerin öğrenmekte zorluk çektiği Mayoz ve Mitoz Bölünme konusunda bilgisayar destekli eğitim ile geleneksel öğretimi karşılaştırmıştır. Elde ettiği verilerden çıkardığı sonuca göre bilgisayar destekli öğretimin öğrencilerin öğrenmesinde daha etkili olduğu sonucuna varmıştır.  
Not: Çalışma 2008 yılında yapıldığı için Mitoz ve Mayoz Bölünme 8.sınıflarda alınmıştır. Güncellenen ders programına göre bu konu 7. Sınıflarda işlenmektedir.
- Salgut(2007) yaptığı araştırmada 5. Sınıflarla çalışmıştır. 5.sınıflarda seçtiği konu Işık ve Ses konusudur. Bilgisayar destekli öğretim ile geleneksel öğretimi karşılaştıran Salgut, bilgisayar destekli öğretim lehine anlamlı bir fark bulmuştur. Kız öğrenciler ile erkek öğrenciler arasında herhangi bir fark bulamayan Salgut çalışmasını, internet kullanılan bilgisayar destekli öğretim lehine sonuçlandırmıştır.



Not:2007 yılında yapılmış olmasından dolayı Işık ve Ses konusu üzerinde çalışılmıştır. Şuan ki ders programında 5.sınıflarda ışık konusu ele alınırken Ses konusu 6.sınıflarda işlenmektedir.

- Dilek(2006)'in yaptığı çalışmada farklı karşılaştırma yaptığı görülmektedir. Dilek, deney ve simülasyon destekli öğretim ile yalnız deney yapılarak ders işlenen öğrenme ortamını karşılaştırmıştır. Yaptığı çalışmanın sonucunda deney ve simülasyon destekli öğretimin daha başarılı olduğu sonucuna varmıştır.
- Kocakulah ve Kocakulah(2006)'ın yaptıkları çalışmada bilgisayar simülasyonları ile deney düzeneklerinin kullanıldığı öğretim sürecini karşılaştırmıştır. Çalışmalarında ön test ve son test kullanan araştırmacılar bilgisayar simülasyonları ile işlenen derslerin daha etkili ve olumlu etki yarattığı sonucuna ulaşmışlardır.
- Pektaş vd.(2006)'nın yaptıkları çalışmada geleneksel öğretim ile bilgisayar destekli öğretimi karşılaştırmıştır. Öğrencilerle yapılan çalışmada Sindirim ve Boşaltım konuları üzerinde çalışılmıştır. Sonuçlara bakıldığında ise bilgisayar destekli öğretimin daha başarılı olduğu sonucuna varılmıştır.
- Akçay vd.(2005) çalışmalarında Fen Bilimleri eğitiminde görselliğin öneminin çok daha önemli olduğunu bu yüzden bilgisayar destekli öğretimin geleneksel öğretime göre öğrencilerin başarısını artırmada etkili bir yöntem olduğunu vurgulamışlardır.
- Uzun(2004)'un yaptığı çalışmada öğrencilerin 'Yer Çekimi ve Potansiyel Enerji' konusunda bilgilerini somutlaştıramadıklarını bu yüzden de öğrenme güçlüğü çektiklerini düşünerek bilgisayar (logo) destekli materyali kullanmıştır. Kullandığı yöntemin Yer Çekimi ve Potansiyel Enerji öğretiminde etkili olduğunu öğrencilerin derste dikkatlerinin ve algılarının daha açık olduğu sonucuna varmıştır. Yiğit, diğer Fizik konularında da bu yöntemin uygulanması ile başarıya ulaşabileceğini vurgulamıştır.
- Türkmen (1998) 'Fen Bilgisi Ve Biyoloji Eğitiminde Bilgisayar Simülasyon Kullanımları' adlı çalışmasında özellikle Biyoloji konusunda yapılamayan deneyleri simülasyonla birlikte yapılabilir olduğu, soyut kavramların öğrencilerin kafalarında somutlaştırmasını kolaylaştırdığını ve öğrencilerin derse olan ilgi, tutum ve motivasyonlarını artırdığını gözlemlemiştir.
- Arıcı, Dalkılıç (2006) yaptıkları çalışmada simülasyon sayesinde deneylerin daha kolay yapılabilirdiği, kitaplarda yer alan öykülerin canlandırılmasında etkili bir yöntem olduğu sonucuna varmışlardır.
- Benli, Kayabaşı , ve Sarıkaya (2012) Ankara' da yaptıkları çalışmada 7. sınıflarda ki Işık konusunda öğrencilerin konuyu somutlaştıramadıkları, günlük hayatlarında karşılaştıkları



durumlarda öğrendikleri bilgileri kullanmadıkları anlatılan konunun soyut kaldığını belirtmişlerdir. Animasyon yöntemini kullanan araştırmacılar öğrencilerin başarılarında pozitif yönde etki ettiğini gözlemlemiştir.

- Büyükkara (2011) yılında yaptığı çalışma ile 8. sınıf öğrencilerine Ses ünitesi konusunda 5E yöntemine karşı geleneksel laboratuvar yöntemini uygulamış, deney grubunda ise animasyon ve simülasyonlarla ders işlendiğini belirtmiştir. Büyükkara, öğrencilere ön test ve son test uygulaması yapmış simülasyon yönteminin kontrol gruplarına göre başarılı olduğu sonucuna ulaşmıştır. Tutum ölçeklerinde herhangi bir fark bulunmadığını belirtmiştir.
- Ünlü (2011) 'nün yaptığı çalışmada 7. sınıflarda 'Elektrik' konusu üzerinde çalışılmıştır. Yaptığı çalışmada laboratuvar etkinlikleri ve simülasyonlar birlikte kullanılarak öğrencilerin başarıları, tutumları ve cinsiyetleri üzerinde sonuçlarını elde etmiştir. İkinin birlikte kullanılması öğrencilerin ders başarısını, tutumlarını artırdığını gözlemlemiştir. Cinsiyet farkının başarı ve tutum üzerinde etkisinin olmadığı görülmüştür.
- Güvercin (2010) 'in lise de yaptığı çalışmada deney grubunda geleneksel öğretim ile simülasyon ile ders işlenmiş, kontrol grubu ile de sadece geleneksel öğretim ile dersler yürütülmüştür. Güvercin, deney grubunun daha başarılı olduğunu fakat kontrol grubunda ise bilgilerin daha kalıcı olduğu sonucuna varmıştır. Öğrencilerin tutumları arasında nötr ilişki olduğunu vurgulamıştır.
- Arda ve Akaygün (2004) yaptıkları çalışmada soyut kavramların öğretilmesinde simülasyon yöntemi kullanılmasının başarıyı artırdığını, kavrama düzeylerinin yükseldiğini belirtmişlerdir. Atom, molekül gibi soyut kavramların öğretilmesinde simülasyon kullanan araştırmacılar öğrencilerin daha sonra sunum yaptıkları ve konu ile ilgili daha doğru sunumlar yaptıklarını belirtmişlerdir.

## SONUÇ

Milli Eğitim Öğretim Programı incelendiğinde Fen Bilimleri öğretiminin bol etkinlikli kazanımlara yer verildiği görülmektedir. Öğretim programına bakıldığında görülmektedir ki öğrencilerin bilgiyi üreten, eleştirel düşünebilen, girişimci, kararlı bireyler yetişmesine hizmet ettiği görülmektedir. Güncellenen öğretim programı ile öğrencilerin her alanda etkin olması bilgiyi alan olmaktan çıkıp bilgiyi üreten, kullanan bireyler yetiştirmek olduğu görülmektedir.

Fen Bilimleri öğretiminde deneylerin, uygulamaların yeri göz ardı edilemez olduğu bilinmektedir. Günümüz eğitim anlayışına göre Fen Bilimleri ezber ders anlayışından çıkıp günlük hayatta karşılaşılabileceğimiz her yerde karşımıza çıkmaktadır. Ancak deneylerin yapılabirliğine bakıldığında gerekse okullarda ki laboratuvar malzeme eksikliği gerekse gerçekleştirilemeyecek güçlükte ki deneylerde kurtarıcı rolünü üstlenen simülasyonlar ile karşılaşmaktayız.



Simülasyonlar gerçeğe yakın olacak şekilde tasarlanmış uygulanması ve kullanması kolay olan bu yöntemle öğrencilerin anlamlı öğrenme sağlaması amaçlanan uygulamalardır.

İncelenen makale ve tezlerde de görülmektedir ki ön test ve son test yapılarak öğrencilerin tutum ve başarıları üzerinde simülasyonların olumlu etki yarattığı görülmüştür. Bunun yanında kız öğrenciler ile erkek öğrenciler arasında anlamlı fark bulunmadığı belirtilmiştir. Araştırmacılar genellikle simülasyon yöntemi ile geleneksel öğretimi karşılaştırmış olup simülasyon yöntemi lehine olumlu sonuçlara ulaşmışlardır. Yöntemle ilgili herhangi olumsuz ifadeye rastlanılmamıştır.

Simülasyon yönteminin klasik eğitim öğretim faaliyetlerinin aksine öğrenciyi hazırcılığa alıştırebileceği, öğrencinin zorluk çekmeden her şeye kolay sahip olunabileceği algısını yerleştirebileceği de göz ardı edilmemelidir. Diğer taraftan öğrenciler arasında ki işbirliğini kısıtlayarak iletişimlerini olumsuz etkileyebileceği düşünülebilir. Yapılabilecek olan deney ve uygulamalarda dahi simülasyonların kullanılması öğrencilerin yaparak yaşayarak öğrenmelerine kısıtlama getirebilmektedir. Öğrencilerin araştırma sorgulama becerilerini bir süre sonra kaybedecekleri unutulmamalıdır. Dokunmadan, hissetmeden, kokusunu alamadan yapılan her etkinlik biraz yarım kalacaktır.

Simülasyonların eğitimde ki yeri teknolojinin kendini hissettirmesi ile her geçen gün etkisini artırmaktadır. Ancak gerçekte olmayan her şeyde gerçeği kadar inandırıcı olmadığı da kabul edilmelidir.

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## **The procedural consequences of posting information on social networking sites - on the example of the proceedings concerning the appeal against the decision of the Social Insurance Institution obliging to return the collected sickness benefit**

**M.Sc. Karolina Badurowicz**

**The Maria Curie-Skłodowska University in Lublin, Poland**

### **1. Introduction**

Technological development has resulted in computerisation influencing all spheres of human activity. As a result, a lot of people are literally “moving” their lives to the Internet – sharing every event, even the most trivial, and posting information about it on their social network accounts.

Whilst it may seem that maintaining such a “virtual diary” does not constitute anything dangerous, in certain situations it can have momentous consequences. It appears that posting a photo gallery of holiday pictures on one's Internet profile or presenting a photo-report on the effects of renovations conducted at one's home may constitute the basis for the issuance of a decision by various public administration bodies or a court ruling.

An example of such an event is certainly the treatment of information provided by users of social networking sites as evidence justifying the issuance of a decision by the Social Insurance Institution<sup>1</sup> on the return of unduly collected sickness benefit. Subsequently – after an appeal is filed – the information posted on social networking sites becomes nothing more than evidence on the basis of which the court will decide whether the decision issued is justified or not.

### **2. Content posted on social networking sites and proceedings against the Social Insurance Institution issuing a decision obliging to return the collected sickness benefit**

As regards the material basis for possible loss of the right to sickness benefit, this is explicitly stipulated in Article 17 of the Act of 25 June 1999 on cash benefits from social insurance in the event

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<sup>1</sup> The Social Insurance Institution – acting on the basis of the Act of 13 October 1998 on the social insurance system (Journal of Laws 2023, item 1320) – is a state organisational unit responsible for the implementation of social insurance regulations.



of sickness and maternity<sup>1</sup>. The regulation points to two bases<sup>2</sup>, the occurrence of which provides grounds for issuing a decision on return of the benefit collected. Such circumstances include performing paid work during the period of inability to work or using the leave in a manner inconsistent with the purpose of the leave<sup>3</sup>.

Determining whether, in the course of the adjudicated inability to work, the insured person by their conduct actually fulfilled one of the prerequisites resulting in the loss of the right to sickness benefit occurs on the basis of Article 68 of the BenefitsU<sup>4</sup>. This regulation provides that the Social Insurance Institution and (in some instances) the premium payers are entitled to inspect the correctness of the insured's use of sick leave.

The above means that the subject of control of authorised entities – as regards the issue of sickness benefit – will be verification whether the insured person uses their sick leave correctly<sup>5</sup>. It appears that one method that will enable such information to be obtained is precisely by analysing the insured's social media accounts. In fact, there is no doubt that the authorised employees of legitimate entities to conduct control activities have the authority also to view the insured persons' accounts on social networking sites<sup>6</sup>.

### **3. Content posted on social networking sites and proceedings against the decision of the Social Insurance Institution obliging to return the collected sickness benefit**

As it has already been indicated, the moment a party receives a decision issued by the Social Insurance Institution concerning repayment of unduly collected sickness benefit, they are entitled to lodge an appeal<sup>7</sup>.

In the proceedings in question, the court will verify the findings established earlier by the Social Insurance Institution. Thus, the court will *de facto* assess whether the decision issued on the basis of

<sup>1</sup> (Journal of Laws of 2023, item 2780), hereinafter, as: *BenefitsU*.

<sup>2</sup> Pursuant to Article 17(2) of the BenefitsU, sickness benefit is also not payable if the medical certificate has been falsified.

<sup>3</sup> A. Rzetecka – Gil indicates that the verification of whether either of the two prerequisites referred to in Article 17 (1) of the BenefitsU has occurred is of a substantive control nature, as: A. Rzetecka – Gil, *Commentary to Article 68 of the BenefitsU* [in:] Act on cash benefits from social insurance in the event of sickness and maternity. Commentary, ed. II, LEX/el. 2017, nb. 1. K. Stopka specifies that as regards the premise of performing gainful employment – it has an economic dimension. As for the premise of not performing work that is incompatible with the purpose – it concerns every other aspect of life. More: K. Stopka, *Commentary to Article 17 of the BenefitsU* [in:] Cash benefits from social insurance in the event of sickness and maternity. Commentary, K. Stopka, Warsaw 2022, Lex, nb. 10.

<sup>4</sup> In addition, control activities are performed on the basis of the Regulation of the Minister of Labour and Social Policy of 27 July 1999 on detailed principles and procedures of control of correct use of sick leave and formal control of medical certificates (Journal of Laws of 1999 No. 65 item 743).

<sup>5</sup> R. Tonder, *Commentary to Article 68 of the BenefitsU* [in:] Act on cash benefits from social insurance in the event of sickness and maternity. Commentary, A. Radziślaw, R. Tonder (eds.), Legalis, nb. 1.

<sup>6</sup> K. Szopa, “Is ZUS looking for ‘benefit scammers’ on social media?”, <http://surl.li/rdeja> (accessed: 02.03.2024).

<sup>7</sup> The possibility to lodge an appeal in social insurance cases is provided for in the regulations of Title VII Separate Proceedings, Section III Proceedings in Labour and Social Insurance Cases of the Act of 17 November 1964 - the Code of Civil Procedure (Journal of Laws of 2023, item 1550), hereinafter referred to as: *the CCP*.



Article 17 of the BenefitsU is correct, and if it arrives at a different conviction – it will acknowledge the appeal as legitimate.

Significantly, the basis for the court ruling on an appeal against a decision of the Social Insurance Institution is the facts established, inter alia, on the basis of evidence submitted to the case file<sup>1</sup>. Therefore, if the basis for issuing the appealed decision was the evidence posted by the insured on their account within a social networking site – this will also be assessed before the court<sup>2</sup>.

Both the jurisprudence and the doctrine unequivocally accept that information originating from the Internet, or more precisely – posted on a social networking site – has evidentiary value<sup>3</sup>. It may thus be the situation in which the court dismisses the insured's appeal because it gives credence to the evidence gathered in the control proceedings conducted by the Social Insurance Institution. This evidence, for example, could be screenshots of photo galleries from a trip abroad posted by the insured on their account on the date they were on sick leave. For in the absence of an effective challenge to this evidence – the insured will not prove the lack of legitimacy of the Social Insurance Institution's decision in the area of reimbursement of unduly collected sickness benefit.

### 3. Conclusion

The entirety of the above-mentioned discussion enables acceptance of the thesis that content published on social networking sites may constitute evidence in court proceedings. In the situation where social security proceedings are concerned, often even before the court proceedings are initiated, the Social Insurance Institution bases their findings precisely on evidence obtained directly from the insured's account on a social networking site.

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<sup>2</sup> So-called “Internet evidence” is most often multiplied and submitted to the case file in the materialised form of printouts of a screenshot or printout of a website. More extensively: A. Kościółek, *Evidence from information contained in social networking sites (on the example of Facebook)* [in:] Acta Universitatis Wratislaviensis, Review of Law and Administration, number 133, 2023, p. 100.

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## Factors driving the attraction of foreign investments in Albania: Political stability under ambiguous times

**Emiljan KARMA**

Catholic University “Our Lady of Good Counsel”

[e.karma@unizkm.al](mailto:e.karma@unizkm.al) , Tirana, ALBANIA

### Abstract

Referring to the various definitions of foreign direct investment, three common elements can be identified: the involvement of two different economies, controlling interest in the host country's company, and long-term investment.

This empirical research aims to identify the causes behind the FDI evolution in Albania considering that the Albanian economy can offer different advantages, which are also identified by economic theories about FDI attraction.

This investigation analyses the principal factors affecting net inflow FDI according to economic theory. At the same time, this study examined the reasons for the FDI evolution in Albania focusing on yearly data from 1992 - 2022 and using the ARDL approach to analyze the long-term relationship between independent factors and the FDI evolution in Albania.

The study's results indicate that the traditional economic factors affecting FDI inflow, such as exchange rate volatility, market size, and human capital quality do not significantly impact FDI fluctuations. However, the study found that trade openness and political stability have a significant and positive effect on the FDI evolution.

This study indicates that the evolution of FDI in Albania is primarily attributed to the country's political stability and trade openness. It is important to note that political stability and its preservation are significant advantages for a small country like Albania, particularly in an uncertain geopolitical situation. However, policymakers should consider the development of other competitive advantages in Albania, such as the development and motivation of human capital towards economic sectors with added value and a comparative advantage over other countries in the regional economy.

**Keywords:** Albania, FDI, political stability, ARDL approach



## INTRODUCTION

Businesses invest outside their territory to find new markets that offer comparative advantages over their home country's economy. According to various economic theories, investing abroad has comparative advantages related to factors such as input prices, host market size, monetary and fiscal policies, and social and political characteristics of the host country.

In its initial stages as an open market, the centralized and closed Albanian economy has recognized the importance of foreign investments as a potential driver of the country's development. For this purpose, Albanian governments have undertaken legal reforms to facilitate and encourage foreign investment in the country's economy. These reforms aim to interfere with macroeconomic factors and keep up with economic developments. The first Law 'On Foreign Investments' was published in 1993 and has been amended in subsequent years. This law revolutionised the regulation of Investor-State relationships and provided investors with more security and operational guarantees in the market. In Albania, special attention has been paid to strategic investments in sectors prioritised for the country's development. The Ministry of Finance is currently reviewing the legal framework for foreign and strategic investments. The aim is to create a new legal package that is comprehensive and aligned with the legal framework of the European Union (Gjediku, 2023).

However, despite efforts to create a favourable investment climate, the Albanian economy has not attracted foreign investment due to concerns over political and economic instability. Factors such as the lack of political stability, institutional reforms, and an unclear and constantly changing fiscal framework have hindered the pace of foreign investment in the country.

According to data obtained by the World Bank, foreign investments in Albania have been unstable due to both internal factors, such as an unstable political situation and economic crisis, and external factors, including the war in the former Yugoslavia, the global economic crisis, and the COVID-19 pandemic (WORLD BANK Data, 2023). These data demonstrate the sensitivity of investment flows to the political, economic, and social conditions of the host country or region. It is important to note that foreign investors may face challenges in developing their economic activities in such situations. The evolution of these investments in Albania, regardless of their dynamics, shows that definitive and clear conclusions about the advantages for the national economy cannot be drawn.

Unstable political situations, such as the war in Ukraine, can lead to economic instability and social crises. These factors can also impact smaller markets, like Albania, causing strategic investors to leave due to the risks they face.

However, considering Albania's integration into various international organizations, such as NATO, and efforts towards full integration into the European Union, the country's risk has significantly decreased. This has improved Albania's image in front of foreign investors. Despite that, investment analysis is multidimensional and Albania, being a small market, needs to improve many aspects mentioned in the previous paragraphs. This would add value to the decision-making process of foreign investors considering investing in the Albanian market.



This study considers various theories on the determinants of foreign investment, empirical studies on the factors that make foreign investment attractive, and the characteristics of the Albanian market. It aims to highlight the key factors that contribute to the attraction of foreign investment in Albania. This research aims to contribute to the existing empirical studies on the determinants of foreign investments in Albania by relying mainly on statistical analysis and regression econometrics.

The following sections of this paper involve a literature review, methods and analysis were defined, and finally results and conclusions.

## LITERATURE REVIEW

Regarding economic theories on the factors that influence the development of foreign direct investments, it can be said that there are numerous motivational factors for investing in a foreign country. Theories on the motivating factors of foreign investments are diverse, and despite many attempts to generalize a complex phenomenon, no theory has yet achieved the final goal. Foreign investment theories can be classified based on the presence or absence of market perfection (Lizondo, 1990; Moosa, 2002).

Theories that include the perfection of markets in their ratio are distinguished by a. *the differential rates of return theory* (neoclassical theory), b. *the portfolio diversification theory*, and c. *the market size theory*. According to the *neoclassical theory*, which assumes the existence of perfect markets, capital moves to markets where it costs less. Therefore, capital would have to move from developed countries (where it costs more) to developing countries (where it costs less). The *theory of portfolio diversification* differs from the neoclassical theory in that it considers the risk factor of a country. The need to reduce the risk of investing in a particular country is achieved through investment diversification. According to this theory, an investor considers not only the rates of return but also the investment risk. According to *the market size theory*, the absorption of foreign investments is positively affected by the size of the market. This means that larger markets are more attractive to foreign investments. The theoretical approach based on market or competition perfection is criticised for its hypothesis of market perfection and its inability to explain investment flow trajectories, as evidenced by numerous empirical studies (Singh et al., 2008; Artige and Nicolini, 2009; Denisia, 2010; Zeqiri and Bajrami, 2016).

Theories that explain market imperfections are categorised into four types: a) *location theory*; b) *internalisation theory*; c) *eclectic theory*; and d) *international product life cycle theory*. The *location theory* is based on the movement of diverse production factors, such as human capital or natural resources, due to lower costs in the host country. According to *the internalization theory*, businesses that invest in conditions of market imperfections tend to replace the costs of commercial transactions with the costs of internalizing activities. The theory explains that businesses will make a foreign investment only when the costs of internalization are lower than the costs of developing the activity in the country of origin. This theory distinguishes between direct investment, which is a strategic and long-term process, and financial capital investment. It also emphasizes the importance of human capital quality. The *eclectic theory*, also known as the OLI paradigm, emphasises the simultaneous importance of Ownership (O), Location (L) and Internalisation (I). According to this theory, which is



essentially a union of three separate theories, the greater the advantages of creating and developing property in a certain country, the stronger the pressure for internalising activities, considering the economic, social, and political aspects of that country. The instability of a country, both politically and economically, can hinder decision-making regarding ownership and other production and organizational processes in the host country. *The international product life cycle theory* is related to the product life cycle theory. According to this theory, during the maturation or standardization stages of a product, businesses attempt to invest in other countries due to the exhaustion of advantages in the product's original market, which were apparent during the initial stages of the product's life. As a result, businesses seek foreign markets where cost advantages are greater than in their home markets. These theories and their hypotheses have been tested through empirical studies, and the results do not always agree with the theoretical conclusions (Dennis and Liancz, 2005; Faeth, 2009; Makoni, 2015; Nayak and Choudhury, 2014). This is understandable because theoretical models, with their assumptions, do not always correspond to reality, where interacting factors are much more diverse than theoretical hypotheses. Several empirical studies have demonstrated that the eclectic theory is one of the most frequently used and empirically validated theories (Makoni, 2015; Feng, 2017; Cruz et al., 2020; Bretas et al., 2022).

In addition to these two main theoretical groups, other theories consider investment into international markets, such as the country's monetary strength, foreign investments from developing countries, etc. (Lizondo, 1990; Nayak and Choudhury, 2014; Tan et al., 2021). Lizondo (1990, p.22) suggests that *“While most explanations of foreign direct investment receive some empirical support, there is not sufficient favorable evidence on any one of them to merit rejection of all the others”*.

Regarding the theories mentioned earlier and their hypotheses, it can be noted that motivating factors are linked to macroeconomic factors such as market size, labour costs, and natural resource costs, as well as microeconomic factors such as process ownership and internalisation, and product life cycle. Additionally, social, and political factors such as the host country's culture, fiscal policies, and political stability also play a key role.

In the Albanian context, there are few studies with an econometric focus. Hoxhaj and Pulaj (2022) used a regression model to investigate the impact of foreign investments on the country's economic growth from 1993 to 2019. The study demonstrates that foreign investments have played a significant and positive role in the development of the country's economy, contributing not only to GDP but also to consumption, infrastructure, and employment. Sulanjaku and Shingjergji (2015) investigated the relationship between gross domestic product (GDP) and foreign direct investment (FDI) using a regression model (OLS) for the period 1993-2013. The study found a positive correlation between GDP and FDI, indicating that FDI tends to increase as the economy grows. Hobbs et al. (2017) investigated the relationships between FDI, trade, and economic growth in Albania from 1992 to 2016 using annual time-series data from the World Bank. The econometric model (Johansen cointegration analysis, error correction model, and Granger causality test) revealed a long-term relationship between FDI, trade, and economic growth. The Granger causality tests found unidirectional causality. Gjebrea and Zoto (2013) have examined the historical trend of inflows and outflows of foreign investments. The conclusion of the study emphasizes the importance of the privatization process in Albania and the role of the central government to create a favorable climate for foreign investments positioning



Albania quite well to other countries of the Western Balkans. Merollari and Koti (2015) conducted a descriptive study on the historical evolution of foreign investments in Albania. They highlighted the sectors with the most investment inflows in Albania. Dragusha (Spahija) and Osmani (2013) conducted a descriptive analysis that emphasized the role of governance in fiscal reform and the privatization of state enterprises. However, this study concludes that Albania's membership in NATO and the process of joining the European Union have improved and consolidated the investment climate in Albania.

## DATA AND METHODOLOGY

The study collected data from the World Bank statistics between 1992 and 2022, with annual periodicity. The research examined several variables, including Net Inflow FDI (as % GDP), Real Exchange Rate, GDP (as a proxy for market size), Trade Openness, Tertiary Enrollment (as a proxy for human capital quality), and Labor Costs. As data on the cost of labour in Albania are missing or incomplete until at least 2014, this variable was not considered in the study. Labour costs are a significant factor in capital movement, and the absence of this data is a limitation of the study. The data show fluctuations, particularly during the period 1992-2002, which coincided with Albania's challenging political, social, and economic transition. Descriptive statistics for the tested variables are presented below (Table 1).

**Table 1.** Descriptive Statistics.

Variables	Obs	Mean	Min.	Max.	St. Dev.
FDI (as % GDP)	31	5,9	1,3	11,2	2,8
Real Exchange Rate (\$ vs Lek)	31	105,1	31,3	148,4	23,6
GDP (constant 2015 \$, 000)	31	8777785	3527709	14318133	3245898
Trade Openness (as % GDP)	31	70,2	44,9	108,8	13,7
Tertiary Enrollment rate (% gross)	31	35,4	9,0	66,8	21,9
Political Stability (- 2,5 – 2,5)	31	-0,1	-0,5	0,5	0,3

**Source:** WorldBank database, 2023

To ensure linearity between variables, this study transformed them into logarithmic form before presenting the econometric model:

$$\ln FDI = \beta_0 + \beta_1 (\ln RER + \ln GDP + \ln TOP + \ln TER + \ln PS) \quad (1)$$

**FDI** = Net Foreign Direct Investment; **RER** = Real Exchange Rate; **GDP** = Gross Domestic Product; **TER** = Tertiary Enrollment Rate; **PS** = Political Stability.



Firstly, the correct regression model was determined by testing for stationarity. According to Shrestha and Bhatta (2018), if all variables are stationary at level  $I(0)$ , the OLS method will be used. Conversely, if the variables are not stationary at level  $I(0)$  or  $I(1)$ , either the Johansen test (all variables non-stationary) or the ARDL model (mixed variable) will be selected. This study employed Dickey-Fuller (Dickey and Fuller, 1979) and Philips-Perron (Philips and Perron, 1988) stationarity tests. The test results are presented below (Table 2):

**Table 2.** The stationarity test

Variable	Order 0		Order I	
	ADF	PP	ADF	PP
lnFDI	-1,695	-1,560	-5,821***	-6.007***
lnRER	-7,445***	-5,771***	-5.331***	-5.718***
lnGDP	-2,435	-3,249	-5.305***	-5.363***
lnTOP	-2,439	-2,862**	-3.869***	-3.820***
lnTER	-1,317	-1,212	-4,132***	-4,250***
lnPS	-1,517	-1,549	-4.258***	-4.143***

\*\* p value <5%; \*\*\* p value <1%

Source: Own processing

The significance of the tests is different both in the order zero and in the order I. It is important, in any case, that the stationarity can be confirmed, either in the order zero, or in the order I. Therefore, referring to the literature, the ARDL econometric model is selected. The next step concerns the cointegration of the time series using the border test (Pesaran et al., 2001). By calculating the statistical value F with its lower and upper limits, we can conclude on the cointegration of the variables. From Table 3, the cointegration of the variables can be confirmed as the statistical value F is greater than the upper limit in all levels of significance.

**Table 3.** The cointegration test

F statistic = 4.731	Critical Value Bounds for K = 5					
	10%		5%		1%	
	Limit I0	Limit I1	Limit I0	Limit I1	Limit I0	Limit I1
	2,26	3,35	2,62	3,79	3,41	4,68

Source: Own processing



After confirming the stationarity and cointegration, we can look for the existence of the long-term relationship through the ARDL model with optimal delays (2,0,0,0,0,1). According to the literature, we should stop at a maximum lag number of two when using annual data to avoid collinearity (Kripfganz et al., 2018).

## RESULTS AND CONCLUSIONS

The empirical test results indicate that trade openness and political stability have a positive impact on the flow of foreign investments in Albania. Additionally, it is noted that market size, quality of human capital, and real exchange rate fluctuations do not significantly affect the development of foreign investment flows (Table 4):

**Table 4.** ARDL Long run approach.

Variable	Coefficient	Std. Error	t - statistic	Prob.
lnRER	-0,535	0,318	-1,68	0,118
lnGDP	-0,597	0,692	-0,86	0,398
lnTOP	1,419	0,623	2,28	0,034
lnTER	0,507	0,313	1,62	0,120
lnPS	1,510	0,702	2,15	0,044
R-squared	0,8634			
Adjusted R - Squared	0,8088			
F – statistics	15,80			
Prob (F – statistic)	0,0000			

**Source:** Own processing

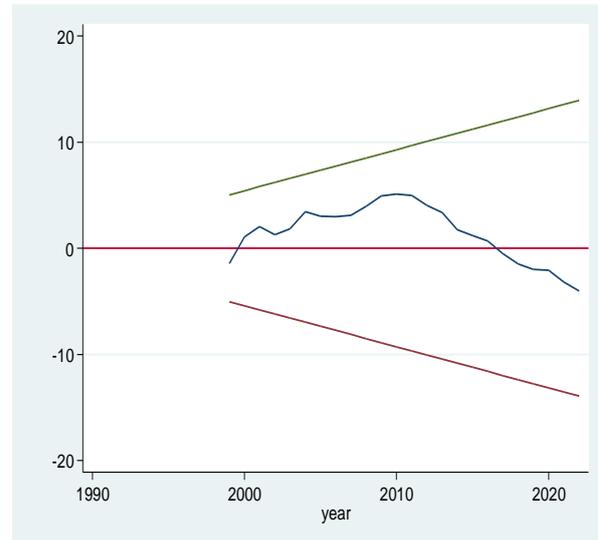
The validity of the above results is confirmed by the post-estimation tests for autocorrelation and normal distribution (Table 5). Additionally, the stability of the results can be verified through the Cusum test.



**Table 5.** Postestimation tests

Tests	Value	P-value
Breusch Godfrey	0,067	0,7952
Durbin – Watson	1,89	_____
White	29,00	0,4125
Skewness	9,86	0,2751
Kurtosis	1,25	0,2642

**Source:** Own processing



The results indicate that political stability is crucial in creating a favourable and safe environment for foreign investments. This is supported by empirical studies that show that political stability, regardless of the level of democracy or corruption, has a positive impact on investment flows (Brada et al., 2003; Haksoo, 2010). Albania is situated at the crossroads of civilizations, both east and west. The country's economic and social development is greatly influenced by its internal political stability and external alliances. The commercial opening is a crucial factor in enabling investment flow. Empirical evidence suggests that foreign trade plays a significant role in addition to political stability (Islam and Belouci, 2023). Regarding the size of the market, it is not surprising that Albania is not considered a key factor for foreign investments due to its small market. However, the quality of human capital can compensate for the small market size. Numerous empirical studies have shown that high-quality human capital can add value to foreign investments (Zeqiri and Bajrami, 2016; Abbas et al., 2022; Dankyi et al., 2022).

In conclusion, Albania, as a small regional market, should prioritize maintaining internal political stability. This can be achieved through positive relationships with international partners, particularly NATO and the European Union. While recent events in Europe, such as the war in Ukraine, may have an impact on commercial developments with European countries, internal stability within Albania can help mitigate the negative effects of regional geo-economic turmoil.

Similarly, policymakers' efforts to direct higher education towards economic sectors with added value and high international competitiveness, such as the technological sector, can aid in the development of investment flows of mutual interest.



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## Dil Eğitiminde Küresel Dil Emperyalizmi ve Dil Politikalarının Etkisi

**Prof. Dr. Fethi KAYALAR**

Erzincan Binali Yıldırım Üniversitesi, Eğitim Fakültesi, TÜRKİYE.

E-mail: [fkayalar@erzincan.edu.tr](mailto:fkayalar@erzincan.edu.tr)

**Dr. Öğretim Üyesi Filiz KAYALAR**

Erzincan Binali Yıldırım Üniversitesi, Fen-Edebiyat Fakültesi, TÜRKİYE. E-mail:

[filiz.kayalar@erzincan.edu.tr](mailto:filiz.kayalar@erzincan.edu.tr)

### Öz

Dil emperyalizmi kavramı, imparatorlukların üç bin yıl boyunca yükselip düşen sosyo-politik yapıların tarihsel gerçeğiyle ve son yüzyıllarda dünya sahnesine hakim olan imparatorluklarda dilin rolünün analitik keşfiyle örtüşmektedir. Dünya çapında dil hiyerarşilerinin düzenlenmesinde büyük bir akışkanlık ve dinamizm olduğu her alanda görülmektedir. Dil emperyalizmi, ticari kurumların önderlik ettiği küreselleşmenin yeni emperyal bir dünya düzenini dayatmaya veya teşvik etmeye çalıştığı, hızla gelişen bir dünyada iletişimsel, kültürel, eğitimsel ve bilimsel emperyalizmle örtüşmektedir. Ulusal ve uluslararası diller arasında ve ulusal egemenliği, dil çeşitliliğini ve kişisel özgürlükleri koruyarak küresel ekonomiye katılımı uzlaştırma konusunda çözülmemiş büyük gerilimler olduğu aşikardır. Bu çalışmamızda dil eğitiminde küresel dil emperyalizmi ve dil politikalarının etkisini ele almaya çalıştık. Bu bağlamda, dil politikası, ulusal dillerin konumunu korumaya yönelik yukarıdan aşağıya baskılar ile dilsel çeşitliliği ve dil haklarının uygulanmasını güvence altına almaya yönelik aşağıdan yukarıya baskılar arasında bölünmüş durumdadır. Bu eğilimlerin her ikisini de etkileyen, dünya çapında İngilizcenin giderek artan kullanımınıdır. Bu da küresel olarak dil emperyalizminin dil eğitiminde uygulanacak olan politikaları doğrudan etkilemesi sonucunda tüm ülkelerde yabancı dil olarak özellikle İngilizceyi ön plana çıkarmaktadır.

**Anahtar Kelimeler:** Dil Emperyalizmi, Dil Eğitimi, Dil Politikası, Küresel İletişim, Eğitim Yönetimi

### 1.GİRİŞ

Dil emperyalizmi teorisi insanların dikkatini dünya dil ekolojisine çekmiştir (Xiao, 2009). Emperyalizmin diğer biçimleri gibi, İngiliz dili emperyalizmi de Birleşik Krallık ve Amerika Birleşik Devletleri'nin hegemonyasına ve genişlemesine eşlik ederek, sömürgelerin yerli dillerinin hayatta kalmasını ve gelişmesini tehdit etmiştir. Azınlık dillerinin kullanımını ve değerini azaltmakla



kalmamış hatta onları tamamen yerinden de etmiştir (Shannon, 1995). Dil emperyalizminin belirli dillere tanıdığı ayrıcalıklar, günümüzde diller arasında eşitsizliğe yol açmaktadır. Baskın dilleri konuşanlar eğitim, istihdam ve sosyal statü açısından avantajlara sahipken, azınlık dillerini konuşanlar dezavantajlı konuma düşmüşlerdir. İngilizce hakim konuma geldikten sonra kolonilerdeki insanlar genellikle hakim dilin peşine düşmüşler ve ana dillerinden vazgeçmişlerdir. Küresel ortak dil olan İngilizcenin gelişmesi ve etkisi nedeniyle 21. yüzyılda 6.000 dilin yok olacağı tahmin edilmektedir (Crystal, 2002).

Phillipson'un (1992) dil emperyalizmi kavramını öne sürmesinden bu yana, hem lehte hem de aleyhte sosyolingüistik çevrelerde yoğun ilgi görmüştür. Genel olarak bakıldığında, bu teorinin önerisi ve geliştirilmesi, akademisyenlerin dil politikası, dil planlaması ve İngilizcenin uygulamalı dilbilimdeki konumu hakkındaki araştırmaları teşvik etmiştir. Dil emperyalizmi teorisi, dil statüsünün toplumu nasıl şekillendirdiğinin ve dil politikasını nasıl etkilediğinin en iyi örneğidir (Xiao, 2009). Geçmişte ve günümüzde İngilizce, Fransızca ve İspanyolca gibi emperyalist dillerin sömürge ülkelerdeki ekonomik, politik, sosyal, kültürel, eğitimsel ve diğer alanlardaki hakimiyetleri aracılığıyla nasıl teşvik edildiğini açıkça ortaya koymaktadır. Küreselleşme İngilizceyi paradoksal bir süreklilik haline getirmiştir. Bir başka deyişle, İngilizce emperyalizmin, tüketimin, pazarın, Hollywood'un, çok etnikliliğin, savaş ve baskının, fırsatların, bilimin, toplumsal hareketlerin, barış süreçlerinin, insan haklarının ve kültürler arası iletişimin dili haline gelmiştir (Guilherme, 2007). ). İngiliz dili emperyalizminin etkisi eğitimin ötesine de geçmiştir. Dünya politikasında, ekonomide, bilimde ve teknolojide, medyada, akademik iletişimde, eğlencede vb. hiçbir dil İngilizcenin yerini alamamıştır. İngilizce, birçok ülkede sosyal ve ekonomik ilerlemenin temel belirleyicisi ve çevredeki bireyler için daha yüksek sosyoekonomik statüsünün bekçisi haline gelmiştir. Dil emperyalizmi, ticari kurumların önderlik ettiği küreselleşmenin yeni emperyal bir dünya düzenini dayatmaya veya teşvik etmeye çalıştığı, hızla gelişen bir dünyada iletişimsel, kültürel, eğitimsel ve bilimsel emperyalizmle örtüşmektedir. Ulusal ve uluslararası diller arasında ve ulusal egemenliği, dil çeşitliliğini ve kişisel özgürlükleri koruyarak küresel ekonomiye katılımı uzlaştırma konusunda çözülmemiş büyük gerilimler olduğu aşıkardır.

İngilizce, Fransızca, Portekizce ve İspanyolcanın dünya çapındaki mevcut gücü, bu dillerin sömürge işgali altındaki bölgelerde kullanımını sağlamlaştıran politikaları yansıtmaktadır. Almancanın Afrika ve Asya'daki kaderi, Almanya'nın 1918'deki yenilgisiyle belirlenmiştir. Benzer şekilde, Japonya'nın 1945'teki yenilgisi, Japoncanın bir imparatorluk dili olarak Asya'nın birçok bölgesindeki etkisini tersine çevirmiştir. Endonezya'da Felemenkçe'nin ölümü ve Güney Afrika'da gerilemesi aynı zamanda Felemenkçe ve Afrika dili konuşanların siyasi gücünün de azaldığına işaret etmektedir. Sovyet komünizminin çöküşü, Rusçanın Orta Asya'da kullanımını kısıtlamış ve Doğu Avrupa'da kullanımını ciddi şekilde sınırlamıştır. Benzer değişim kalıpları, Grönland ve İzlanda'daki Danca gibi eski imparatorlukların diğer dillerini de etkilemiştir.

Dünya çapında dil hiyerarşilerinin düzenlenmesinde büyük bir dinamizm olduğu açıktır. Dil politikası, ulusal dillerin konumunu korumaya yönelik yukarıdan aşağıya baskılar ile dilsel çeşitliliği ve dil haklarının uygulanmasını güvence altına almaya yönelik aşağıdan yukarıya baskılar arasında bölünmüş durumdadır. Bu eğilimlerin her ikisini de etkileyen, dünya çapında İngilizcenin giderek artan kullanımınıdır.



İngilizcenin sahip olduğu güç, başta Fransızca olmak üzere uluslararası ilişkilerde yaygın olarak kullanılan diğer dillerin de kaderini etkilemektedir. Avrupa Birliği resmi olarak çok dilliliğe ve dilsel çeşitliliğe kendini adanmıştır, aynı zamanda İngilizce ile simbiyotik olarak bağlantılı küreselleşme süreçlerine entegre bir şekilde dahil olmuştur. AB işlerini yürütmede ve üye ülkelerde kullanılan birçok dil ile İngilizceyi ileriye taşıyan ivme arasında çözülmemiş bir gerilim bulunmaktadır. Bununla bağlantılı olarak, Amerika Birleşik Devletleri'nin daha önceki imparatorluklardan farklı bir küresel imparatorluk kurup kurmadığı ve eğer öyleyse, bunun dil politikası açısından ne gibi sonuçları olacağı sorusudur.

İngilizcenin çeşitli rollerini ve yerel dil ekolojileri üzerindeki etkisini ele almak için teorik araştırmamızın yeterliliğini değerlendirmek, dünya çapında dillerin giderek daha zengin bir şekilde belgelenmesi nedeniyle gereklidir.

Bu çalışmamızda dil eğitiminde küresel dil emperyalizmi ve dil politikalarının etkisini ele almaya çalıştık. Bu bağlamda, dil politikası, ulusal dillerin konumunu korumaya yönelik yukarıdan aşağıya baskılar ile dilsel çeşitliliği ve dil haklarının uygulanmasını güvence altına almaya yönelik aşağıdan yukarıya baskılar arasında bölünmüş durumdadır. Bu eğilimlerin her ikisini de etkileyen, dünya çapında İngilizcenin giderek artan kullanımınıdır. Bu da küresel olarak dil emperyalizminin dil eğitiminde uygulanacak olan politikaları doğrudan etkilemesi sonucunda tüm ülkelerde yabancı dil olarak özellikle İngilizceyi ön plana çıkarmaktadır.

## 2. POST-EMPERYALİZMDEN NEO-EMPERYALİZME

Phillipson (1992), dil emperyalizmi üzerine yazdığı bir kitabında, İngilizcenin eski sömürgelerdeki baskın rolünü ve Kuzey-Güney ilişkilerindeki merkezi rolünü nasıl koruduğunu ve dil pedagojisinin, her zaman İngilizcenin en üstte olacağı bir diller hiyerarşisini nasıl pekiştirdiğini araştırmıştır.

Dünya Bankası, IMF, Dünya Ticaret Örgütü, Birleşmiş Milletler, NATO ve bölgesel ekonomik bloklarla birlikte küresel olan kurumsal faaliyetler, güç odağını önceki ulus devlet emperyalizmi ve neo-devlet emperyalizmi ile karşılaştırıldığında ekonomik sömürgeciliği daha yaygın hale getirmektedir. Mevcut dünya “düzenini” oluşturmada ve kontrol etmede İngilizce merkezi bir rol oynamaktadır, ancak bu tek bir devletin çıkarlarıyla eşbiçimli bir rol değildir.

Görlach'ın istatistiklerle ilgili yorumuna göre:

- Eleştirel toplumdilbilim, küreselleşmenin Amerikalaşma ve İngilizleşmeyle nasıl örtüştüğünü ortaya koyma ve teorileştirme konusunda büyük bir zorlukla karşı karşıyadır.
- Dil emperyalizmi, bu tür bir sömürüyü meşrulaştıran ve doğallaştıran bir sistemde, belirli dillerdeki yeterliliklerine göre tanımlanan kişiler veya gruplar arasında eşit olmayan alışverişi ve eşit olmayan iletişim haklarını, bunun sonucunda da eşit olmayan çıkar ve faydaları gerektirir.
- Dil emperyalizmi açıkça ulus-devletlerin bir dili ayrıcalıklı kılma ve sıklıkla aktif olarak diğerlerini ortadan kaldırmaya çalışarak, onları konuşanları baskın dile geçmeye zorlama biçiminin bir özelliğiydi.



Bu aynı zamanda sömürge imparatorluklarının da bir özelliğiydi; Kanada gibi yerleşimci ülkelerde, Hindistan ve Nijerya gibi sömürü kolonilerinden daha derin bir dil nüfuzu vardı. İngilizceye ve yerel dillere yönelik sömürgeci politikaların bir takım karmaşık ilişkileride ortaya çıkarılmıştır. (Brutt-Griffler, 2002; Pennycook, 1998), ancak bu tür çalışmalar, yazarları meseleleri farklı yorumlasa bile, hiçbir şekilde İngiliz dil emperyalizminin hiyerarşik dünyasıyla çelişmemektedir.

İngilizceye hem arz hem de talep açısından bakmak, İngilizceyi bağımlılık yaratan, zayıflatan, afyona benzer bir dayatma olarak görmenin ötesine geçmeyi amaçlayan ve İngilizcenin ginseng, pahalı olduğu imajını tercih eden Hong Kong'un geçmişi ve bugünü üzerine yapılan bir çalışmada incelenmiştir. Dil politikaları sömürgecilik sonrası çağa kadar büyük ölçüde değişmeden devam etmiş; bunun sonucunda bu tür devletlerde eski sömürge dillerini konuşanlar baskın grup haline gelmiştir. Sömürgecilik sonrası eğitim sistemleri, özellikle son yıllarda Dünya Bankası'nın etkisiyle, eski sömürge diline öncelik verme ve yerel dillere marjinal bir statü verme eğiliminde olmuştur. Ancak dil grupları ile içinde buldukları devletler arasında hiçbir zaman yakın bir uyum olmadığı gibi, küreselleşen dünyada diller de devlet sınırlarına saygı duymamaktadır. Teknoloji, giderek daha karmaşık hale gelen ağlarda finansal, ticari ve kültürel bilgilerin anında alışverişine olanak tanımaktadır. Küresel ekonomi, "sermayenin, üretimin, hizmetlerin ve kültürün uluslararasılaşmasını" yöneten "küresel şehirler" tarafından yönetilmektedir (Yeung, 2000, s. 24). Dolayısıyla Hong Kong, Seul, Singapur ve Tokyo, Frankfurt, Londra ve New York gibi şehirler küreseldir; oysa Delhi ve Şanghay, işlevleri esas itibarıyla yerel olduğundan küresel değildir.

Askeri, siyasi, ekonomik ve kültürel dünyadaki hakim gruplar, Dünya Bankası'ndan bir kişinin açıkça belgelediği gibi, sahip olanlar ile olmayanlar arasındaki uçurumu genişletmeye devam eden küresel bir ekonomiyi yönetmek için başka yerlerdeki benzer gruplarla bir ağ oluşturmaktadırlar (Stiglitz, 2002). Sürekli tekrarlanan askeri, ekonomik ve siyasi krizler, sistemin kronik olarak tüm dünya nüfusuna barış, istikrar ve insan hakları normlarına uygun bir yaşam kalitesi sunma konusunda yetersiz kaldığını ortaya koymaktadır.

Serbest ticaret liberalizmi her zaman güçlüyü desteklemektedir. Ulusal ve uluslararası dil ekolojilerimizde de eşitlikçi koşullara ihtiyaç vardır. Hem demokrasilerde hem de daha baskıcı sistemlerde, belirli dillere diğerlerinden daha fazla destek verilmektedir. Çoğu uluslararası forumda İngilizce ayrıcalıklıdır ve farklı dil kökenden gelen konuşmacıların eşitliğinin sağlanmasına nadiren dikkat edilir. Burada ortaya çıkan iki soru şudur: (1) Bazılarının ana dillerinde iletişim kurabilmesi, müzakere edebilmesi, ticaret yapabilmesi ve kültürel açıdan üretken olabilmesi gerekirken diğerlerinin ikinci veya yabancı bir dil kullanması adil midir? (2) Küresel ekonomiye ve kültür endüstrilerine erişim sağlamak için hemen hemen tüm diğer eğitim sistemleri bunu yapmak zorundayken, Amerika Birleşik Devletleri ve Birleşik Krallık'ın yabancı dil eğitimine önemli ölçüde yatırım yapmaktan kaçınması adil midir?

Küresel dil hegemonyasının yapısal ve ideolojik dayanağı, İngilizce konuşulan dünyaya sağladığı devasa ekonomik ve kültürel avantajlara rağmen meşru kabul edilme eğiliminde olduğundan, bu tür bir eşitsizlik büyük ölçüdedir ve boyutu ölçülemez.

Örneğin, bilimsel burs, uluslararası iletişimde (dergiler, referans çalışmaları, ders kitapları, konferanslar, ağ oluşturma) giderek yalnızca İngilizce'ye özgü bir alan haline gelmektedir ve bu da



ulusal düzeyde zincirleme bir etkiye sahiptir (özellikle hemen hemen tüm ülkelerde lisansüstü düzeyde dilin İngilizceye kayması). Uluslararası bilimsel konferansların İngilizce dilinde yapılması bunun en basit göstergesidir. Elbetteki tüm bunlar, ironik bir şekilde, uluslararası iletişimdeki eşitsizlik sorununun varlığını ve doğasını doğrulamaktadır.

İngilizcenin mevcut hakimiyetine pek çok faktörün katkıda bulunduğunu söylemeye gerek yoktur. Bunlar genel olarak yapısal (İngilizcenin küresel ekonomi, finans ve askeri-endüstriyel kompleksle iç içe geçmesi; İngiliz ve Amerika'nın İngilizceyi teşvik etmesi; eğitim sistemlerinde İngilizce öğretimine yatırım) ve ideolojik (yaratılan İngilizce imgesi) olarak gruplandırılabilir. Siyasi olarak yakın geçmiş tarihimize baktığımızda özellikle Amerika Birleşik devletlerinde Bush yönetiminin politika yapımcıları, Amerikan değerlerini dünyaya dayatmayı hakları ve görevleri olarak görmüşlerdir.

Eğer dünya ortak bir dile doğru ilerliyorsa bunun İngilizce olmasını sağlamak ABD'nin ekonomik ve politik çıkarıdır; eğer dünya ortak telekomünikasyona, güvenliğe ve kalite standartlarına doğru ilerliyorsa, bunlar Amerikan malı olmalı; ve eğer ortak değerler geliştiriliyorsa, bunlar Amerikalıların rahat edeceği değerler olmalıdır. İngilizce dünyayı birbirine bağlayan bir dil olarak kabul gördüğü için bunlar boş istekler değildir.

Kademeli Amerikanlaşma süreçleri yirminci yüzyıl boyunca hız kazanmış ve son yıllarda küreselleşme olarak pazarlanmaktadır. "Küreselleşme" bir parola, bir slogan işlevi görürken aslında belirli çıkarları evrenselleştirmeyi amaçlayan bir politikanın meşrulaştırıcı maskesidir. Başta Amerika Birleşik Devletleri olmak üzere, ekonomik ve politik açıdan egemen güçlerin özel geleneğini geliştirmek ve bu Güçleri en çok destekleyen ekonomik ve kültürel modeli tüm dünyaya yaymak, aynı zamanda bunu bir norm, bir gereklilik ve bir kader olarak sunmak; evrensel kader, bağlılığı veya en azından evrensel teslimiyeti sağlayacak şekilde olması kültür ve dil politikalarının bir parçasıdır, ve dil eğitimine de bu yönde şekil vermektedir.

### 3. EĞİTİMDE DİL EMPERYALİZMİ

Sömürge döneminden sonra, sömürgecilik sonrası ülkelerdeki pek çok insan İngilizceyi başarıya giden bir basamak, yüksek öğrenim ve sosyal statünün bekçisi olarak görmüştür (Sibayan ve Gonzalez, 1996; Lai, 2019). Çevre ülkelerdeki eğitim politikaları ve yönelimleri açısından, İngilizce bazı yönlerden baskın bir pozisyon almıştır ve bu durum temel olarak şu şekilde yansımaktadır. İlk olarak, İngilizce daha yüksek yeteneklerin seçilmesinde zorunlu bir koşul olarak belirlenmiş ve İngilizce yeterlilik düzeyi önemli bir eleme kriteri haline gelmiştir. Eğitim dili İngilizce olan çoğu üniversite, standart testlerde yüksek puanları şart koşmuştur. Örneğin, bu üniversitelerin çoğunluğu yabancı ve bazen de yerli öğrencilerin ve öğretmenlerin üniversiteye kabul için İngilizce dil yeterliliğini kanıtlamak için TOEFL veya IELTS sertifikasını şart koşmaktadır. Ülkemizde akademik ilerlemelerde YDS, YÖKDİL, ÜDS gibi sınavlarda belirli bir puan alma şartı getirilmiştir.

İkincisi, birçok okul konu içeriğine bakılmaksızın İngilizce öğretimi savunmaktadır. Örneğin Filipinler, Malezya ve Singapur'da İngilizce eğitime ilkokuldan lisansüstü düzeye kadar İngilizce ders içerikleri temel müfredata eşlik etmektedir. Bu Asya ülkelerinin çok dilli topluluklarına veya İngilizce dışındaki dil ekolojilerine rağmen, bu ülkelerin eğitim sistemleri, eğitim dili olarak



İngilizce'nin kullanılmasını ön planda tutmuştur ve İngilizce, seviyeler arasında öğretilen içeriklerden biridir.

Anglo-Amerikan sömürgeci güçlerinin geri çekilmesine rağmen, İngiliz ve Amerika'dan ilham alan yüksek öğretim sistemleri sömürgecilik sonrası ülkelerin çoğunda ayakta kalmış ve İngilizce bu sistemlerde baskın eğitim dili olarak yerini almıştır. İngilizce konuşulmayan çevre ülkelerde bile pek çok kişi, artan sayıda dersin denizaşırı eğitim geçmişine sahip öğretmenler tarafından İngilizce olarak verildiği birinci sınıf üniversiteler oluşturma hedefini öne sürmüş ve günümüzde bu eğilim gittikçe artmaktadır.

İngilizcenin eğitimdeki statüsüne ilişkin bu düzenlemeler, sömürge yönetiminin geri çekilmesine ve çok dilli eğitimin savunulmasına rağmen özellikle paydaşlardan İngilizcenin kullanımına yönelik çeşitli destek ve olumlu tutumlar almıştır (Lai, 2001; Choy ve Troudi, 2006; Bokhorst- Heng ve Caleon, 2009; Mahboob ve Cruz, 2013). Eğitim sistemleri İngilizcenin gücünü güçlendirmiş, bu da İngilizcenin pratik kullanımının yabancılarla konuşmak için kullanılan dil (Ponce ve Lucas, 2021) ve bir zeka endeksi (Bacon ve Kim, 2018) olarak algılanmasıyla sonuçlanmıştır; dolayısıyla insanlar genel olarak bu kavramlar nedeniyle İngilizcenin eğitim dili statüsünü büyük ölçüde korumuşlardır.

#### 4. SONUÇ

İngilizce dil eğitimi, ister bireysel gelişim ihtiyaçları, ister kurumsal ve ulusal kalkınma stratejisi açısından olsun, sosyal ve ekonomik kalkınmada çok önemli bir rol oynamaktadır. Bir dil, özellikle de İngilizce öğrenmek, gerçek değeri olan bir insan sermayesi yatırımdır. İnsanların daha fazla bilgi ve bilgiye sahip olmasına, daha fazla insan sermayesi edinmesine ve daha fazla ekonomik fayda sağlamasına yardımcı olur. Yeni sömürge döneminde, dil eğitimi yavaş yavaş eski sömürü yöntemlerinin yerini almıştır ve İngilizce ile diğer diller arasındaki yapısal ve kültürel eşitsizlikleri kurmak ve pekiştirmek için ana akım söylem sistemleri yaratarak merkez ülkelerin çıkarlarına hizmet etmektedir. Eğitimciler, İngilizce eğitimini teşvik ederken çevre ülkelerdeki dilsel neo-emperyalizme karşı dikkatli olmaları gerekmektedir.

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## The Application of Health Insurance is Necessary for Safety at Work a Dignified Life

**Phd cand: Xhenete ISUFI**

“St.Clement of Ohrid” University, Bitola 7000, North Macedonia

Email: [xheneta.isufi1@rks-gov.net](mailto:xheneta.isufi1@rks-gov.net)

**Prof.Ass. Dr.Sherif SEJDIU**

Faculty of Social Science, “Fehmi Agani” University, Gjakova , Kosovo

Email: [sherif.sejdiu@uni-gjk.org](mailto:sherif.sejdiu@uni-gjk.org)

**Prof.Ass.Dr. Burim MORINA**

Faculty of Economics College "BIZNESI" Prishtina/Kosovo

Email: [burim.morina@kolegjbiznesi.com](mailto:burim.morina@kolegjbiznesi.com)

### Abstract

**Background-**The very word "Insurance" in different languages, in addition to the economic, legal or technical importance, has an even wider meaning, a general meaning that, according to the etymological meaning, marks the concept of ensuring trust in something, protection, security. **Methods-** The study is a cross-sectional correlational study. There were 56 participants in this study, 38 (67.9%) men and 18 (32.1%) women. The youngest age of the participants in this study is 21 years old, while the oldest age is 59 years old. Workplace health and safety survey and sociodemographic question was used for this study. Findings - The findings from this study show that people who do not have health insurance are more dangerous in the workplace, ( $M=4.64$ ,  $SD=1.9$ ), compared to people who have insurance, so why do they have a more dangerous workplace high they do not have health insurance. **Conclusions-**Due to the need for economic protection from the material consequences of damages and accidents, society went through the insurance process. Through this premise, the general rationale of insurance is perceived, i.e. the need for insurance. Because people often faced the force of the elements and accidents and were powerless to resist as individuals, and to reduce the consequences and material damage they began to organize economic defense with joint forces and mutual relations.

**Keywords:** health insurance, worker, danger at work



## INTRODUCTION

In Kosovo, there is a Law on Health Insurance, where the purpose of this law is to ensure universal access of citizens and residents of the Republic of Kosovo to qualitative basic health care services, with the aim of improving health indicators and ensuring financial protection from impoverishment due to large expenses for health care, through the establishment and regulation of the public health insurance system.

It is very important to take into account the health system when dealing with the importance of health insurance. The importance of the health system in relation to the health insurance system consists in the fact that the very operation of these insurances is focused on the provision of services, which are performed by health institutions. In this direction, we will briefly present the state of the health system, making a retrospective analysis through different stages. Based on the fact that Kosovo has passed several important historical stages, there is no doubt that all social segments have undergone changes, including the health system. So, since 1945 until 1989, Kosovo has been included in the health system built within the Yugoslav Federation, where within this period in terms of status, Kosovo within the federal arrangement has had a dynamic of legal status in terms of its position within the RSFJ. In this period, Kosovo had a health system installed according to the model of Shemasko (the first commissioner for health issues in the former Soviet Union), where this model was applied in the countries of the eastern bloc, including the countries of Southeast Europe that had state regulation of the socialist system. This system was characterized by the centralized method of managing health services. This system included the model according to which hospitals or polyclinics were established in the largest cities, where specialized services were offered”.

The right to health insurance is one of the basic human rights and, therefore, a prerequisite for a person to be able to enjoy many other rights. However, since the drafting of the Universal Declaration of Human Rights (hereinafter UDHR), including other international documents that have followed it, efforts have been made by many countries to prevent this right from being included in the corpus of these documents and, moreover, it should be left to the states themselves to regulate it with internal norms. However, after many, many efforts, it was achieved that Article 22, which proclaims the right to social security, was incorporated into the final document of the UDHR. Health insurance is a category of social or social insurance, which includes the coverage of expenses related to health care in case of illness. This type of insurance consists in covering the expenses that are created in the case of providing health care due to illness”.

Life insurance contracts offer the insured that, in exchange for the payment of one or more premiums, the insurer is obliged to pay benefits that depend on the life of the insured - so these benefits can be paid upon death or in the case of survival. The concept of insurance goes back to the days of the Romans, but it was not formalized until the 18th century. Basically, this is a means of spreading financial risk among a large number of people who pay into a fund. In this way, the cost is minimized for those who suffer an unexpected disaster”.



**Insurance is an economic activity that protects us from certain risks that can damage (destroy) property and people. The duty of insurance is to cover a number of risks to which the insured (policy holders) are exposed, to compensate for the damage suffered by the insured, in accordance with the insurance contract.** The insurance cover in insurance is achieved in that way, after an agreement and/or insurance contract has been reached, which is otherwise known as an insurance policy. The payment made by the insured, for the insurance cover according to the insurance policy, is known as insurance premium. Insurance performs an important social function. The greater the percentage of the insured (policy holders), the less the state budget will be spent to compensate economic damages for various enterprises/businesses and for natural persons, e.g. compensations from any natural disaster. Insurance companies contribute to the economic and financial development of a country, enabling citizens, enterprises and the state itself, to do business more safely as well as an investment in savings for financial stability. Insurance companies are important investors through the financial market, such as through investment in securities and other economic-financial activities”.

Life and property insurance, as well as other insurances, are the transfer of risk from the insured to the insurer. Various forms of associations and companies around the world have been organized for this. Since we have two parties: one offers, while the other demands, a mechanism must work to regulate their operation, so it comes to the formation of the insurance market, as one of the strongest markets in the financial system of a country as well as the international financial system”.

**Research question:** Is health insurance necessary for a secure job and a dignified life?

**Hypotheses:**

**Hypothesis 1:** People without health insurance are at risk in the workplace.

**Hypothesis 2:** People with health insurance are more aware of health and safety in the workplace.

### Methodology

The methodology used for this study is as follows: starting from the method used for this study, the sample will then describe the instruments used, giving the explanation for these instruments.

This study was designed to be descriptive in the correlational direction, which includes self-report instruments. Correlational studies are studies that involve looking at the relationship between two or more variables, where the students see if there is a relationship between these variables, and what kind of relationship or relationship it is. To test the hypotheses and demographic data, descriptive, correlational, Anova analyzes were used through the SPSS package.

### Participants

56 participants took part in this study, 38 (67.9%) men and 18 (32.1%) women, all of whom were employed within the territory of Kosovo. The selection of the participants was made by the random selection method of the captain. The youngest age of the participants in this study is 21 years old, while the oldest age is 59 years old.



Of the participants, 30 (53.3) had only completed bachelor's studies, 14 (25%) had only completed secondary education, while 12 (21.4%) had also completed post-graduate studies.

Given the scientific knowledge, according to which cognitive learning leaves deep traces in consciousness in the form of long-term memory, and the possibility of leaving such a trace is in a causal relationship, among other factors, also with motivation, the research presented it starts from the opinion of the employees about the motivating factors that contribute to their decision to have private health insurance, to the regulation and application of the state health insurance in Kosovo.

Table 1. Socio-demographic data of nurses included in the study.

	Frequency	Percentage
<b>sex</b>		
man	38	67.9
female	18	32.1
<b>residence</b>		
Prishtine	12	21.5
Lipjan	15	26.8
FusheKosove	3	5.4
Gjakove	2	3.6
Prizren	14	25
Ferizaj	8	14.3
<b>Education level</b>		
secondary	4	25
University	30	53.6
Postgraduate studies	12	21.4
<b>Social Statusi</b>		
Single	15	26.8
engaged	9	16.1
married	32	27.1



### Instrumentat:

The instrument used in this study is the workplace health and safety survey, which has been translated and adapted into the Albanian language. This instrument has a total of 27 questions, and is divided into 4 parts. Questions 1-9 assess workplace hazards, questions 10-16 assess workplace policies and procedures, questions 17-22 look at workplace health and safety awareness, and questions 23 to 27 assess participation in health and safety in the workplace. The statements require closed answers through the Likert scale (the first part has these answer types: 1=never, 2=Once in years, 3=Every 6 months, 4=Every 3 months, 5=Every month, 6=Every week, 7 =Every day; while the other three parts have these types of answers; 1= Completely agree, 2=Agree, 3= Disagree, 4= Not at all agree) (Institute for Work & Health, 2016) For all subscales, Cronbach Alpha analysis was done to evaluate the reliability of the instrument in our sample, and each of the subscales shows high reliability values.

Table 2: Credibility for the section Risk in the workplace

Reliability Statistics	
Cronbach's Alpha	N of Items
.78	9

Table 3: Credibility for the part policies and procedures in the workplace

Reliability Statistics	
Cronbach's Alpha	N of Items
.903	7

Table 4: Reliability for the health and safety awareness part in the workplace

Reliability Statistics	
Cronbach's Alpha	N of Items
.81	6

Table 5: Reliability for the part participation in health and safety in the workplace

Reliability Statistics	
Cronbach's Alpha	N of Items
.74	5



### Procedure:

Since all the participants were over 18 years of age, there was no need to get permission from other people besides the participants themselves, who had the right to withdraw from the application whenever they did not feel comfortable. The procedure was such that after the instrument was prepared, it was given to the persons who are in the employment relationship for completion. Questionnaires are completed in pencil and paper form.

Finding the respondents was random, that's why we have the difference in numbers, as for example the difference between those who have health insurance and those who don't.

### Results

Table 6. Correlation (correlation) between variables on workplace safety

		Pjesem_mean	Rreziq_mean	Politi_mean	Ndergj_mean
	Pearson Correlation	1	.669**	.674**	.508**
Pjesem_mean	Sig. (2-tailed)		.000	.000	.000
	N	56	56	56	56
	Pearson Correlation	.669**	1	.551**	.477**
Rreziq_mean	Sig. (2-tailed)	.000		.000	.000
	N	56	56	56	56
	Pearson Correlation	.674**	.551**	1	.447**
Politi_mean	Sig. (2-tailed)	.000	.000		.001
	N	56	56	56	56
	Pearson Correlation	.508**	.477**	.447**	1
Ndergj_mean	Sig. (2-tailed)	.000	.000	.001	
	N	56	56	56	56

\*\* . Correlation is significant at the 0.01 level (2-tailed).



Based on the data above, we see that all the subscales between the years have a positive correlation relationship with statistical significance, which means that with the increase of one variable, the other variable also increases ( $p < 0.01$ ).

**Table 7: ANOVA analysis**

		Between-Subjects Factors	
		Value Label	N
you have health insurance	1	YES	22
	2	NO	34

**Tabela 8. Descriptive Statistics**

	You have health insurance	Mean	Std. Deviation	N
Pjesem_mean	YES	1.56	.412	22
	NO	2.46	.439	34
Rreziq_mean	YES	2.59	.820	22
	NO	4.64	1.923	34
Politi_mean	YES	1.55	.403	22
	NO	3.37	1.220	34
Ndergj_mean	YES	1.28	.409	22
	NO	2.29	.853	34

Above are presented the Anova analysis to see the differences between the variables for the group who have health insurance and those who do not. From this analysis we see that the average of participation in health insurance is higher among people who do not have health insurance ( $M=2.46$ ,  $SD=.439$ ), according to the results we also have a higher average of risk in the workplace among people those who do not have health insurance ( $M=4.64$ ,  $SD=1.9$ ), as well as for awareness of workplace safety and health insurance as well as policies, the result shows a higher average of involvement than people who do not have insurance health ( $M=3.37$ ,  $SD=1.220$ ;  $M=2.29$ ,  $SD=.853$ ) from the result we understand that people who do not have insurance are more worried and at risk in the workplace, but also require a higher involvement in policies and awareness of safety in the workplace.



## **Discussion**

Results in this work, based on the questionnaire applied in the SPSS statistical program, it appears that we have a small number of employees who, during the time they are in a working relationship, apply for health insurance, which is paid for by self-financing from their salary.

While the majority of the respondents, who are in a working relationship, do not pay for health insurance because they do not have the financial means to pay for it.

It is worrying that this category of workers is one of those who work hard and with high risk for their health.

Also with full responsibility we find that even the employees in the state administrations are without health insurance (only self-financing) because the Law on health insurance is not yet applicable in Kosovo.

The analysis of this work was done by comparing the most dangerous types of work performed by the respondents and then the number of insured persons in their workplace.

## **Conclusion**

In this scientific paper, we conclude that in Kosovo it is urgent to implement the Law on health insurance, which would also regulate the position of the employee at work and would strengthen their interest and well-being at work.

From the very beginning, I have seen that the insured always requires acceptable protection for himself, where I have noticed that often the market of insurance companies operating in Kosovo do not offer what is in the mind of the insured, so I recommend, that at the stage where one party makes the offer, which the other party accepts, it would be more appropriate for the insured to be the proposer because the insured may have in mind a special form of insurance coverage or want to include or exclude special clauses, something that is missing in companies operating in the Kosovo market.

The meaning and purpose of insurance is to transfer the risk that is in our environment from the individual to the insurer (insurance company) by concluding an insurance contract. In this way, the individual tries to protect himself from a risk that could endanger his life, while the common characteristic of all risks is that they are future, uncertain and independent of our will.

From the research done for this paper, we learned that the insurance market in Kosovo works relatively well, according to the known principles of operation, according to the laws and powers of the country's regulatory bodies

We emphasize once again that all respondents require that they have state insurance.



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## ANNEX

### Sociodemographic Question

1. Age: \_\_\_\_\_

2. Gender                      Male                      Female

3. Residence (check) \_\_\_\_\_

4. Ethnicity

Albania

Bosnian

Other, please note: \_\_\_\_\_

5. What is the highest level of education you have achieved?

- a) No educational achievements
- b) Primary education
- c) Secondary education
- d) Faculty
- e) Postgraduate studies (master's)
- f) Doctorate

6. Occupation \_\_\_\_\_

7. How much is the income in a month in your family (all income, äages, remittances, other rent)?

a. 0-100 euro

ç. 301-500 euro

e. 801- 1000 euro

b. 101-200 euro

d. 501-700 euro

f. over 1000 euro

c. 201-300 euro

dh. 701-800 euro

g. Other note: \_\_\_\_\_

8. What is your marital status?

a. Single

b. Engaged

c. Married

what I/e widoë

d. divorced

9. The work you do? \_\_\_\_\_

10. You have health insurance

- Yes
- No

11. From what year do you have the insurance? \_\_\_\_\_



## Workplace health and safety survey

### Part 1: Workplace hazards

In your job, how often do you ?	Never	Once a year	Every 6 months	Every 3 months	Every month	Every week	Every day	DK/NA
1. Manually lift, carry or push items heavier than 20 kg at least 10 times during the day								
2. Do repetitive movements with your hands or wrists (packing, sorting, assembling, cleaning, pulling, pushing, typing) for at least 3 hours during the day								
3. Perform work tasks, or use work methods, that you are not familiar with								
4. Interact with hazardous substances such as chemicals, flammable liquids and gases								
5. Work in a bent, twisted or awkward work posture								
6. Work at a height that is 2 metres or more above the ground or floor								
7. Work in noise levels that are so high that you have to raise your voice when talking to people less than one metre away								
8. Experience being bullied or harassed at work								
9. Stand for more than 2 hours in a row								

### Part 2: Workplace policies and procedures

At my workplace ?	Strongly agree	Agree	Disagree	Strongly disagree	DK/NA
10. Everyone receives the necessary workplace health and safety training when starting a job, changing jobs or using new techniques					
11. There is regular communication between employees and management about safety issues					
12. Systems are in place to identify, prevent and deal with hazards at work					



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13. Workplace health and safety is considered to be at least as important as production and quality					
14. There is an active and effective health and safety committee and/or worker health and safety rep					
15. Incidents and accidents are investigated quickly in order to improve workplace health and safety					
16. Communication about workplace health and safety procedures is done in a way that I can understand					



## Content, stylistic and linguistic structure of Kazakh films and documentary programs during the pandemic

Пандемия кезіндегі қазақ кинофильмдері мен деректі бағдарламаларының  
мазмұндық, стильдік және лингвистикалық құрылымы

YESSENOVA K.

Professor of Abai KazNPU, Doctor of Philology

ISMAILOVA F.

Postdoctoral fellow of Abai KazNPU, PhD

### Abstract

This article aims to identify changes in the content, style, and linguistic structure of films and documentary programs related to the history of the coronavirus pandemic by analyzing **IRN AR14870178 (State Registration number 0122RK00597) titled "Language Content of Kazakh Society: Changes and Updates (Pandemic Times; 2020-2022)."** The article is based on a scientific project addressing the study of distinctive stylistic and linguistic structures in Kazakh film and documentary programs depicting life during quarantine in the pandemic. It explores the psychological state of Kazakh society and its linguistic reflection in film programs and various shows. Additionally, the article aims to identify the main topics of these years, clarify their causes, and highlight the features of film text during the pandemic, considering addressant and addressee factors.

**Keywords:** *kinodiscourse, anthropocentric direction, addressee, addressant, pragmatics, pragmatic presupposition, crossword, linguistic elements, logoevistema, communication.*

### Аңдатпа

Мақала коронавирустық пандемия тарихына қатысты кинофильмдер мен деректі бағдарламалардың мазмұндық, стильдік, лингвистикалық құрылымына талдау жасау арқылы ондағы өзгерістерді анықтауға арналған **ИРН АР14870178 (Мемлекеттік тіркелу номері 0122РК00597) «Қазақ қоғамының тілдік контенті: өзгерістер мен жаңарулар (пандемия кезі; 2020-2022 жж.)»** тақырыбындағы ғылыми жоба негізінде жазылды. Пандемия уақытындағы карантин өмірінен хабар беретін қазақ кинофильмері мен деректі бағдарламалардағы ерекшеленген стильдік, лингвистикалық құрылымдарын зерттеуге,



кинодискурстан, әртүрлі бағдарламалардан алынған қазақ қоғамының психологиялық ахуалын, оның тілдік көрінісін зерттеуге, осы жылдардағы басты тақырыптарды анықтауға және оның себептерін нақтылауға, пандемия кезіндегі киномәтін ерекшеліктеріне, адресант, адресат факторларына негізделеді.

Кинодискурс дискурстың басқа түрлерінен адресат пен адресант арасындағы қарым-қатынас процесі тұрғысынан ерекшеленеді. Бұл айырмашылық, ең алдымен, кинодағы ақпаратты қабылдаушы мен жіберушінің өзара әрекеттесу сипатына байланысты туындайды.

Жалпы дискурс ұғымы тіл біліміндегі антропоцентристік бағытты ұстанған көптеген арнаулы салалардың (психоллингвистика, әлеуметтік лингвистика, паралингвистика, нейролингвистика, когнитивті лингвистика, прагмалингвистика т.б.) дербестелуіне байланысты айрықша маңызға ие болды. Аталмыш салалардың іштей жіктелуімен бірге интеграциясы осы дискурс ұғымының төңірегінде шоғырланды деуге болады. Осымен байланысты әлі күнге дискурсқа берілген анықтамаларды аяқталған, толыққанды, дәл деп санауға болмайды.

Біздің зерттеу нысанамыз – кино мәтініне қатысты алғанда дискурсты режиссер – мәтін – көрермен ұштағаны төңірегінде қарастырған жөн. Осы үштіктің қайсыбірі іске қосылмаған жағдайда толық дискурс жүзеге асады деп айта алмаймыз. Бірінші және екінші компоненттердің дискурсқа қатысуы міндетті, сөзсіз болатын нәрсе. Ал үшінші компонент әрбір нақты дискурсқа түрліше деңгейде қатысады деуге болады. Себебі кинофильм неғұрлым әсерлі де шынай образды түрде жеткізілсе, соғұрлым көрерменнің де жүрегінен орын алмақ. Әр кинофильмнің өз көрермені болады: жас және әлеуметтік ерекшелігіне, қызметіне, қызығушылығына, дүниетанымына т.б. байланысты адресанттар да шартты түрде бірнеше топқа бөлінеді.

Кинодискурстағы хабарламаның адресаты қашықта болады және бұқаралық сипатқа ие. Әдетте, ол әлеуметтік-мәдени тұрғыдан көптүрлілігімен сипатталады. Кинодискурс адресатын жынысы, жасы, тұратын елі, ұлты, мәдени және зияткерлік деңгейі сияқты ортақ белгілері бойынша бірігетін адамдар тобы құрайды. Осындай ортақ белгілеріне сәйкес, кез келген фильмнің мақсатты аудиториясын анықтауға мүмкіндік бар. Алайда пандемия кезінде халықты қандай да бір әлеуметтік белгілеріне қарай әлеуметтік топтарға бөлу қажеттігі маңызды болмай қалды. Себебі, індет адамдарды кәрі немесе жас, ауқаты немесе тұрмысы төмен, қала немесе дала тұрғыны, оқыған не оқымаған деп ажыратып жатпады. Бұл жалпы адам өмірінің баға жетпес құндылық екенін тағы бір айғақтаған кезең болды.

Пандемия кезінде түсірілген қазақ фильмдері негізінен комедия жанрында болғаны байқалады, бұл індеттен үрейленген халықтың уайымын сейілтіп, көпшілікке позитивті көңіл күй сыйлау мақсатымен орайлас ерекшелік болса керек. Прагматикалық тұрғыдан бұл қиындықтың барлығы уақытша екендігін еске сала отырып, қазақы танымға жат жайтты қалжыңға сүйеу арқылы, оны көпшіліктің оптимистік деңгейде қабылдауына ықпал етуге бағытталған-ды.

Қазақ тілінде түсірілген «Карантин» телехикаясында орындалған С.Әуезханның сөзіне жазылған Ұ.Жамалбектің «Үміт» атты әніне құлақ түрсек, қазақы танымға сай, басқа түскен қиындықты Алланың сынағы ретінде сабырмен қабылдаудың, ауызбіршілік танытудың және қандай ауыртпалық келсе де, құдайдан үміт үзбеудің маңыздылығы өте әсерлі жеткізілген:



*Келсе де сынақ, сөнсе де шырақ, үмітін үзбеген,  
Жаны сыр бермес, намысын бермес, Қазақыз біз деген...  
Кең далам – мұрам, самғаған қыран қанаты талғанша,  
Келе алмас достан, жеңе алмас дұшпан, бірлігің бар болса.  
Оооу, күлімде, сынаққа сүрінбе,  
Жақсы үміт гүлі, жақсылық нұры...*

Бұл өлең поэзиялық шығарма ретінде көркем әдеби стильге тән белгілерді қамтыса, қалың бұқараға арналған кино өнері туындысы ретінде оның прагматикалық ерекшеліктеріне назар аудару қажет.

Ежелден еркіндікті ту еткен қазақты бейбіт заманда үйге отырғызып қою, барыс-келіске, қазақ өмірінің ажырамас бір бөлігі болып келген той-томалаққа тыйым салу біздің халыққа ерекше ауыр тигені де рас.

Ал аталмыш фильмнің лексикасына зер салсақ, онда «Қала режимін күшейту керек», «Респираторлық науқастар бөлімі», «Қала бойынша бесінші адам, әлі қанша адам кететіні белгісіз...» (медбикелердің сөзі), «Мұқтаж адамдарға маска мен антисептик таратамыз», «Карантинге жауып тастады», «Бұл күндер де өтер», «Вирус таратып жүр» т.б.с.с. қолданыстардың жиі кездесетінін көреміз. Бұл – жалпыхалықтық сөздік қордың актив жұмсалған қабатын карантин кезінде түсірілген барлық қойылымдардағы контент мазмұнынан тұрақты көреміз.

Карантин кезінде түсірілген фильмдер мен деректі бағдарламалардың барлығына тән визуалды ерекшелік – бос көшелердің, блок посттардың көрсетілуі, жолда жүрген бірен-саран адамның міндетті түрде медициналық бетперде киетіні. Ал теледидар мен радио арқылы таралған көптеген хабарлардағы негізгі сюжет осы індет құрбандарының саны, қауіпсіздік шараларын сақтауға қатысты тың деректерді жеткізуге қатысты болғанын түрлі бейнежазбалардан көреміз. Сол сияқты, карантин тақырыбында түсірілген фильмдерде де көгілдір экраннан ең жиі көрсетілген кейіпкерлер – медицина және полиция қызметкерлері, жедел жәрдем бригадаларының қауырт жұмысы, сирена даусы, халі ауыр науқастарды зембілмен (носилка) тасып бара жатқан дәрігерлердің жанқиярлық еңбегі бейнеленгені ол туындылардың прагматикасын барынша нақтылай түседі.

Адамзат қоғамында болып жатқан алуан түрлі өзгерістер мен жанарулардан тіл де тыс қалмақ емес. Осымен байланысты қазіргі ғылымда орнығып келе жатқан антропоцентристік бағыт дәстүрлі құрылымдық лингвистикалық бөлек Адам факторын түпқазық етіп алған білімнің жаңаша сипаттағы бірнеше саласы қатар дамып келеді. Олар: когнитивтік лингвистика, әлеуметтік лингвистика, психолінгвистика, лингвостилистика, т.б. Бір кездері ғалымдар шеңбері анықталмаған, проблемалары нақты көрініс таппаған деп таныған аталмыш бағыт бүгінде біршама қалыптасып, тіл білімінің өзге салалардан іргесін ажыратып, дербестене бастады. Мысалы, адам факторының өзі мұнда адресан-адресат сияқты нақты категорияларға бөлініп, олардың арақатынасы, атап айтқанда, біздің жағдайымызда, кино қоюшы-көрермен рөл



алмасуы жеке проблема ретінде қарастырылуда. Ал кез келген кино туындысының белгілі мақсатта жазылытыны белгілі. Қарапайым тілмен айтқанда, режиссер ниеті деп түсінілетін бұл мәселе прагматикада кеңінен қарастырылып, адресанттың прагматикалық ұстанымы проблемасын құрайды.

Түптеп келгенде, дәстүрлі интерлингвистикада тәл деңгейлік тұрғыдан (фонетика, лексика, грамматика) ішкі табиғи қасиеттері бойынша қарастырылса, экстралингвистикада оның функционалдық мәні, яғни қолданыстағы сыр-сипаты, яки оның «өмір сүруіне» тікелей ықпал етуші – Адаммен байланысты зерттеледі. Аталмыш экстралингвистиканың өзегі ретінде – прагматикалық танығаны тануға негіз бар. Өйткені кез келген мәтіннің прагматикалық аспектісі айрықша маңызға ие. Сөйлеу актісінде бұл тіл ұстанушының тілдік бірліктерді өз түпкі ниетіне сай етіп іріктей білуі, қай сөзге баса мән беретіндігі, өз сөзінің тыңдаушыға қандай дәрежеде әсер етуін көздейтіндігі, соның нәтижесінде адресанттың қандай да бір әрекеттерге баруына түрткі болатындығы, сондай-ақ айналадағы адамдарға өз сөздері арқылы өзінің белгілі бір қырынан таныстыруға, көрсетуге тырысатындығы т.б. барлығы жинала келе оның түпкіойының аудиторияға дұрыс, дәл, нақты күйінде жеткізілуін қамтамасыз етеді. Ғылыми тілмен айтқанда, мұны мәтінде алуан түрлі тәсілдермен кодталған ақпараттың адресант тарапынан дұрыс ашылып, адекватты түрде қабылдануы деуге болады. Сол себепті кинодискурс мәселесін арнайы прагматикалық тұрғысынан қарастырудың, оның ішінде прагматикалық пресуппозиция шеңберінде зерттеудің берері мол болмақ. Кино коммуникация барысында актерге де, көрерменге де бұрыннан белгілі дерек, мәліметтердің арнайы сөзжұмсам түрінде айтылмай, жалпы меңзелуі, яғни бір оқиға не құбылыс туралы бұрыннан белгілі ақпаратқа сүйене отырып, коммуникант жаңаша ойын баяндай береді. Ал ақпарат алушы өз кезегінде сол оқиғаға қатысты әрбір жаңа қолданысты саралап жатпайды, адресанттың ойын аңғарып түсінеді. Мысалы, «Келін» кинофильмінде Ғабит есімді актер асабаның сөзжұмсамындағы *42500, парацетомол, дистанция, маска, антисептик* т.б. сияқты қалжың мәнде жұмсалған тіл бірліктерін көріп отырған көрермен ой астарындағы меңзелімді әзіл ретінде бірден түсіне алады.

Жалпы ғылыми әдебиетте презумпция және **пресуппозиция** ұғымдары тең дәрежеде ұғынылады. Оның екі түрі белгілі: семантикалық және прагматикалық. Бір сөйлемнің семантикалық презумпциясы ретінде оның дұрыс түсінілуі үшін тыңдаушы ақиқат деп санауы тиіс пайымдау танылса, прагматикалық презумпция ретінде сол сөйлемнің нормаға сай қабылдануы үшін тыңдаушыға белгілі, аян пайымдау танылады. Біздің жағдайымызда кинодискурстың мазмұнына, стиліне лингвистикалық талдау жүргізуде пресуппозицияның осы екінші түрін басшылыққа аламыз. Бір сөзбен айтқанда, пресуппозиция дегеніміздің өзі адресант пен адресанттың ортақ білімдер жүйесі болып табылады. Презуппозиция – бір сөзбен білдіре алмайтын, мәліметті қабылдаушының санасында болатын барлық мәліметтерді және одан тыс жатқан, алайда оларды дұрыс және жеткілікті түрде түсінуге кепілдік беретін мәтіннің мағыналық компоненті [1, 44 б.]

Кино мәтіндеріндегі материалдар негізінде пресуппозицияға қатысты мынадай тұжырымдар жасауға болатынына көз жеткізілді:



1. Пандемия кезінде пайда болған кино тақырыпаты онда сөз болатын мәселені дөп басатындай формада тұжырымдалады. Мәселен, жоғарыда айтқан «Келін» кинофильмінің тақырып атының өзі карантин кезінде келін түсірумен байланысты болған той өткізудегі, құдалық жасаудағы шектеу мәселелерінен хабар береді.

2. Кез келген кино тақырыпатына қатысты кемінде үш немесе одан да көп меңзелімнен тұратын логикалық тізбек пайда болады. Аталмыш фильмдегі тізбекті былайша көрсетуге болатын сияқты: келін-құдалық-той

3. Меңзелімдер тізбегінің неғұрлым ұзақ немесе салыстырмалы түрде қысқа болуы көрерменнің аялық білім қорына тәуелді болады. Мысалы, пандемия кезіндегі фильмдерді ұзақ жылдардан кейін тамашалаған көрермендердің интерпретация жасау деңгейі әртүрлі болуы заңдылық, пандемия оқиғасынан хабары бар көрермендер мен мүлдем ол кезенді басынан өткізбеген адресаттың қабылдауы екі түрлі түрде жүзеге асады.

4. Презуппозиция тізбегін сөзжұмсамға негіз болатын пропозиция (объективті семантикалық константа) құрамына қандай да бір тілдік элемент енгізу арқылы түрлендіріп өзгертуге болады. Ол тілдік элемент толық мағыналы сөздер де, қыстырма сөздер түрінде болуы мүмкін. Яғни кинофильмдер мен деректі бағдарламалардың тақырыпат құрамына енгізілген кез келген элемент пресуппозициялар қатарына өзінше әсер етеді.

Ақпаратты қабылдау және түсіну адам санасында белгілі бір білім қорының пайда болуына әкеледі. Қандай да бір ұғым-түсініктен бұрыннан хабардар бар адам оған қатысты жаңа мәліметтерді тереңірек қабылдауы заңды. Ал реципиент үшін тың, бейтаныс оқиға-құбылыстар жөніндегі ақпаратты қабылдау белгілі бір дәрежеде қиындық туғызады. Бірақ кинодискурста қандай ақпарат қамтылғанына қарамастан кез келген мәтінді адам бұрыннан бар білім қорына сүйене отырып, интерпретациялауға ұмтылады. Бұл айтылғандар психолингвистика шеңберінде «аялық білім», «пресуппозиция», «мәтінді интерпретациялау» т.б. ұғымдар түрінде қарастырылады. Кино мәтінін прагматикалық талдаудағы негізгі мәселе адресанттың прагматикалық ұстанымы десек, психолингвистика тұрғысынан алғанда мұны ақпараттардың жазбаша мәтінде кодталуы деуге болады, ал адресаттың мәтінді интерпретациялауы, кодты ашу, яғни мәтіндегі ашық және жасырын түрде берілген ақпаратты дұрыс түсініп қабылдау болып шығады. Сондай-ақ адресанттың білім қоры да маңызды рөл атқарады, өйткені кез келген режиссердің өзнен етене таныс, негізгі саласы болатыны даусыз.

Кез келген мәтіндегі автордың мақсаты, оның білімі, интенциясы, адресаттың қабылдау уақыты мен кеңістігі, адресант пен адресаттың бір-бірін түсіну мүмкіндіктері – бәрі прагматикалық көрсеткіштер арқылы жүзеге асады.

Кинокурс мәтіні прагматикасының негізгі мәселелерінің бірі – адресант пен адресаттың интенциясы болып табылады. Адресанттың интенциясы оның мәтінді ұйымдастырудағы тіл бірліктерін таңдауынан, сәтті қолданыстарынан көрініп тұрады. Ол үшін адресант мәтіннің тақырып атауына, киноның басталуына (басы мен соңына) және аяқталуына аса сақ болуы керек. Себебі фильм басталысымен көрерменді бірден қызықтырып, аяғына дейін көріп шығуға түрткі болуына ықпал етуі қажет. Логикалық байланыстың үзілмеуі, арасында шынайылықтың көрсетілуі, бейнелі образды түрде жеткізілуі сияқты мәселелер режиссер назарында болады. Себебі фильм көре бастаған аудитория тақырып атынан-ақ оның мазмұнын



ойша елестетіп, қызыға түседі. Сондықтан да адресант кино қабылдаушының осындай интенцияларын ескеріп, өз мақсатына жету жолдарын қарастырады. Адресант кино мәтінін жазар алдында әлеуметтік-прагматикалық қырын, сипатын ескеру керек. Себебі сыртқа шыққан фильм мәтіні реципиентке бағытталып құрылады. Сөйтіп сөйлеуші ғана емес, сонымен қатар жазба мәтіннің иесі де адресанттың білім деңгейін ескереді.

Кинодискурстағы адресат пен адресанттың арасындағы коммуникация, әдетте, ақпаратты жеткізудің классикалық схемасы негізінде қарастырылады. Кейбір зерттеушілер, атап айтқанда И.П.Муха [2, 9 б.], кинода адресант саны классикалық схемаға қарағанда біреуден көп болатынын айтады, яғни кинодискурс прагматикасын қарастырғанда нақты екі адамды, сценарист пен режиссерді ескеруге тиіспіз. Демек, кинодискурсты жасаушы ретінде авторлар ұжымы жұмыс істейтінін айту орындырақ, өйткені кинодискурс өте күрделі процестің нәтижесінде пайда болады.

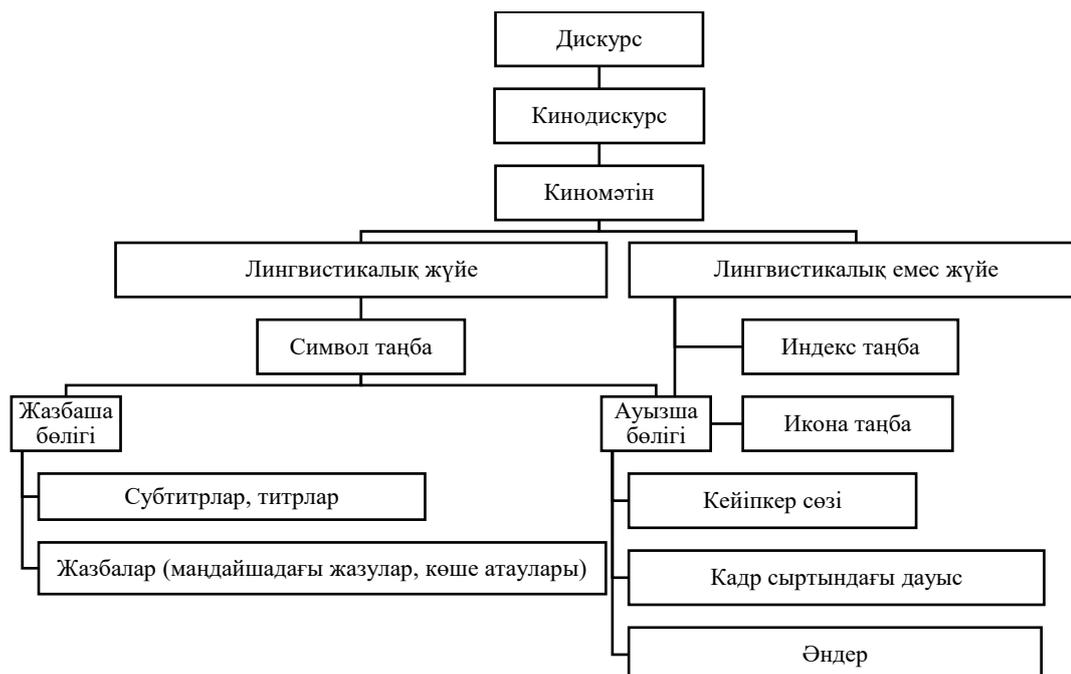
Авторлар ұжымына (продюсер, сценарист, режиссер, оператор, редактор, монтаждаушы) ортақ ғалам бейнесіне, қоршаған орта туралы білімге негізделген фильм мен көрермендер арасында кинодиалог құрылады. Бұл кинодиалогты белгілі бір кейіпкерлерді сомдайтын актерлер бір-бірімен қоян-қолтық араласа отырып «ойнап шығады». Қоршаған орта туралы білім қоры тура фильмді жасаушылар ұжымының білімімен сәйкес келетін көрермен де сол диалогты «естиді», оның мазмұны мен кейіпкерлердің мотиві туралы өзіндік болжамдар жасайды. Сонымен қатар көрермен де сол диалог арқылы жеткізілуі тиіс болған ақпаратты аңғарып, есту үшін киноның арнайы жасалғанын біледі [3, 153-б.].

Кинодискурс арқылы жасалатын коммуникацияның тағы бір ерекшелігі көрерменге фильм арқылы ұсынылатын хабарламаның аудио-визуалды сипатынан көрінеді. Яғни хабарламаны жеткізу процесінде әртүрлі – көру және есту арналары қатар іске қосылатындықтан, байланыс ақпаратқа толы, бояуы қанық болып шығады. Ақпарат реципиентке вербалды және бейвербалды түрде келіп түседі, ол ақиқат болмыстағы қарым-қатынас процесіне ұқсас, бірақ нақты қарым-қатынастан айырмашылығы ол жоспарланған, алдын ала ойластырылған болады. Кинодискурста хабардың басы мен соңын (бастапқы және финалдық титрлар) және әдетте алдын ала бекітілген ұзақтығын (қысқа метражды немесе толық метражды фильм) білдіретін белгілері болады. Жеткізілетін ақпараттың үлкен бөлігі, бір жағынан, шектеулі уақыт кезеңінде көп нәрсені айтып жеткізуге мүмкіндік берсе, екінші жағынан, әдеби шығарманы оқумен салыстырғанда, көрерменнің фильмді интерпретациялау мүмкіндіктерін белгілі бір дәрежеде шектейді. Түс, музыка, аудиовизуалды эффектілер кинодискурста белгілі бір ақпараттық жүктемені көтеретінін ерекше атауымыз керек.

Сонымен кинодискурстың негізгі үш макрокомпоненті болады: фильм авторлары (режиссер, сценарист, актерлар), фильм және көрермендер қауымы. Пандемия кезінде фильм авторларына бір ғана міндет жүктелген сияқты: үрейленген көпшіліктің көңіл күйіне оң әсер етіп, халықтың рухын көтеру, жігерлендіру. Ал індетке сену дәрежесі тұрғысынан алғанда іштей бірнеше топқа (вирусқа қалтқысыз сенушілер, бейтарап қабылдаушылар, мүлдем жоққа шығарушы оппоненттер) бөлінген көрермендер қауымының карантин фильмінен алған әсері біршама ұқсас, жалпы жағымды сипатта болғаны анық.



Зерттеушілер Г.Г.Слышкин мен М.А.Ефремованың пікірінше, фильм мәтінде «екі семиотикалық жүйе: лингвистикалық және лингвистикалық емес» жүйелер «әр түрлі белгілермен әрекеттеседі». Лингвистикалық жүйе табиғи тілдегі сөздермен өрнектелетін жазбаша және ауызша компоненттермен, ал тілдік емес жүйе көрсеткіштік белгілермен және иконалық белгілермен бейнеленеді [4, 515]. Сонымен пандемия кезіндегі кинодискурстағы лингвистикалық құрылымды төмендегі сызба түрінде жинақтап беруге болады.



Сурет 1. Кинодискурс компоненттері арақатынасының сатылы байланысы

Г.Г.Слышкин мен М.А.Ефремованың анықтамаларына сүйене отырып жасалған фильм дискурсының құрамдас бөліктері арасындағы қарым-қатынастар иерархиясының схемасы жоғарыдағы 1 суретте жинақталып берілген. Бұл суретте ұсынылған ақпаратты пандемия кезіндегі сюжетке құрылған «Келін» фильмінен алынған үзінді мәтін материалында талдап көрейік. Атап айтқанда, лингвистикалық жүйедегі кейіпкер асабаның сөзіне тоқталамыз. Той басқаратын Ғабит есімді жігіт жиналатын халықтың сол кездегі көңіл күйін дөп басу үшін қазақтың дәстүрлі өлең-жырларына карантин кезінде өзекті болған заттар мен құбылыстардың атауларын көптеп енгізу арқылы түрлендіреді:

*Құда-құда дегізген, антисептик сепкізген, құйрық-бауыр жегізген...*

*Ақ мол, стаканымызда парацетомол...*

*Ет етке, маска бетке...*

*Еттің табағына 42 500 теңгеден көбірек салыңыздар, ағайын...*



Асаба ұжымдық санамыздағы *құйрық-бауыр жегізу, табақ тарту салттары мен Ақ мол болсын* деп басталатын тілекті, *Ет етке, сорпа бетке* сияқты тұрақты қолданыстарды сөз ойнатым тәсілі арқылы ойнақыландырып жеткізуді мақсат еткен.

Сөз ойнату (каламбур) мәтіндерде қолданылатын аса маңызды стильдік тәсіл болып саналады. Сөз ойнату фразеологизм немесе бір сөзоралым құрамындағы бір лексеманы басқа сөзбен алмастыру немесе оған жаңадан сөз қосу жолымен жүзеге асырылуы мүмкін.

Е.В. Покровская кез келген мәтінде кездесетін комикалық мазмұнды жеткізу үшін қолданылатын дәйеккөздер, мақал-мәтелдер мен фразеологизмдерді логопистемалар деген атауға біріктіреді. Зерттеуші логопистемаларды адамның ойына қандай да бір аялық білімді, ақпаратты немесе мәтінді еске түсіретін сигналдар деп таниды. Сонымен қатар логопистемалар тұтас бір дәуірдегі тілдік талғамды көрсететін өлшем бірлігі және лингвоелтанымдық ақпаратты жеткізетін бірлік болып табылады [5, 44]. Бұл тұста логопистема астарынан аңғарылатын ақпарат пен білім мазмұны жағынан оның өзін салыстырғанда анағұрлым кең, бай болатыны белгілі. Осыған байланысты аталмыш қолданыстарға автор өз ыңғайына, прагматикалық мақсатқа сай қажет деп тапқан мәтіндерін үстей алады. Сонымен логопистемалар қазіргі кинодискурс мәтінінің тұрақты да маңызды бір бөлігі бола отырып, көрерменді қызықтыратын тиімді тәсіл болып табылады. Біздің мәдениетімізге дендеп енген бұл құбылыс жаңалық, тосындық әсерін тудыратындықтан, көрермен қауымның қабылдауына да жеңіл тиеді. Әсіресе пандемия кезіндегі кинодискурста қолданылған логопистемалардың прагматикалық қуаты ерекше болғаны рас. Себебі карантинде отырған көрермен үшін бір сәт көңілін көтеруге бағытталған бұл тәсіл көпшіліктің көңілінен шықты деуге толық негіз бар. Кейде логопистемалар жай ғана ойнақылық, қалжың ретінде қамтылса, кей жағдайда оған арнайы прагматикалық міндет жүктеледі. Логопистемаларға құрылған кино мәтіндерінде контраст принципі де басшылыққа алынады. Сөйтіп олар байланыс орнату қызметін ғана атқарып қоймай, кинода көрсетілетін оқиғаға қандай да бір баға беруге бағытталады. Сонымен пандемия кезіндегі кинофильмдер мен деректі бағдарламалардың мазмұндық, стильдік, лингвистикалық құрылымына талдау жасау барысында кеңінен қолданылған логопистемаларға қатысты мынадай тұжырымдар жасауға болады:

біріншіден, олар кинодискурс адресантының позициясын көрсетеді, яғни өз мәтіні ретінде көтеріп отырған проблемаға актердің қандай баға беретіні көпшілікке бұрыннан таныс мәтіндер мазмұны арқылы меңзеледі;

екіншіден, логопистемалар адресант пен адресаттың арасын жалғайтын көпір рөлін атқарады, яғни бір тілдік ұжымда, мәдениетте қалыптасып орныққан коннотациялық мәтіндерге ие логопистемалар кино мәтінін өзге материалдардан айрықшаланып тұратын прагматикалық қарқынданушылар қызметін де атқарады;

үшіншіден, әрбір логопистема өзін қолданған адресанттың даралығын танытып, режиссердің жаңашылдыққа ұмтылысын көрсетеді.



Сурет 2. Кинодискурс құрылымы

Бұл сызбадағы бөліктердің мазмұнын аша түсу үшін «Келін» фильмінің сюжетіне назар аударамыз. Пандемия кезіндегі қауіпсіздік шараларының бірі ретінде енгізілген той жасауға тыйым салудың себебі мен салдарын барынша табиғи сипатта көрсету үшін режиссер фильмге керекті элементтерді енгізу арқылы тұтас кинообраз жасаған. Кейіпкерлер арасындағы барлық әңгімелерді тыңдай отырып, көрермен сол пандемия кезіне ойша кіріп кеткендей әсерде болады. Бұлған киномәтінді құрайтын сөздер арқылы қол жеткізілген. Киносценарийдің тұтастығы асаба жігіттің аузынан шыққан антисептик сепкізген, стаканымыздағы парацетомол, дистанция сақтау, бетке маска, қырық екі мың бес жүз теңге сияқты жұмсалымдар арқылы сол карантин кезінде қалыптасып үлгерген стереотиптерді көрсетіп тұр.

Пандемия кезін бейнелейтін тағы бір фильм «Карантиндегі күндер» деп аталады. Мұнда білім беру жүйесіндегі қиындықтарды көрсету үшін режиссер мектеп оқушыларының онлайн форматта өткізілген сабақтарына назар аударған. Ол індеттің ересектер өміріне ғана емес, балалардың да санасына белгілі бір дәрежеде шектеу қойғандай әсер қалдырғанын шебер көрсете білген. Фильмнің соңындағы Заңғар есімді кейіпкердің «достарымды экранның арғы жағынан емес, қасымнан көрсем ғой», «карантин емес, уақыттың қадірін білдім» деген сөздері ешкімді бей-жай қалдырмайды.

Зерттеуші А.Н. Зарецкая кинодискурсты фильмнің вербалды және бейвербалды компоненттерімен бірлестікте алынған тұтас мәтін ретіндеанықтайды. Оған фильмде қолданылған аудиовизуалды құралдардан бөлек, басқа да маңызды экстралингвистикалық факторлар жатады. Сонымен кинодискурсты тұтастық, үйлесімділік, ақпараттық мазмұн, коммуникативті-прагматикалық бағыт, медиаконтент сияқты қасиеттері бар және хабарламаны қабылдаушының көруі үшін ұжымдық сана тұрғысынан сараланған авторлықкреолды жасалым деуге болады [6.18].



Әртүрлі дереккөздерге сілтемелер жасау арқылы мәтін авторы бірнеше мақсатқа қол жеткізеді: біріншіден, өзі таратып отырған ақпараттың сенімділігін көрсетеді, екіншіден, аудиториямен жасалатын қарым-қатынасқа айрықша объективтілік сипат береді.

Аса маңызды мәтінтүзуші компоненттер қатарына – мәтінге әртүрлі дәйексөздердің енгізілу тәсілдерін жатқызамыз. Әсіресе идеомалық тіркестердің қолданылуы кинофильмнің мәтіні құрылуында айрықша рөл атқарады.

Мәтін лингвистикасында мәтінтүзілім заңдылықтарына сәйкес паралингвистикалық құралдар кеңінен жұмсалады. Ондағы мақсат – мәтіннен ақпараттың көп мөлшерде алынуы. К. Гаузенбляз құрылымның сипатына қарай мәтіндерді екіге бөледі:

1. Паралингвистикалық құралдар арқылы (ым, ишара т.б.) жасалған хабарламалар
2. Ситуацияға тәуелді болмайтын, бейлингвистикалық құралдардың қатысуынсыз жасалатын мәтіндер [7,18].

Белгілі бір ақпаратты жеткізе отырып, мұндағы бейвербалды құралдар көрерменнің назарын аударады. Ал кино мәтініндегі ақпарат толығымен танылу үшін оларда берілген код ашылып, интерпретациялануы тиіс.

Паралингвистикалық тұрғыдан белсенді мәтіндердің айрықша бір тобына – креолды, яғни құрылымында әртүрлі таңбалық жүйелердің кодтары қамтылатын мәтіндер құрайды. «Креолды мәтіндер дегеніміз – әртекті екі бөліктен : вербалды және бейвербалды құралдардан тұратын мәтіндер» [8,18].

Креолды мәтіндерде адресанттың жіберетін ақпаратын барынша жеңіл қабылдауға негіз болатын көптеген бейвербалды қосымша құралдар қолданылады. Мысалы: бетперде тағу, үйде қалу сияқты түрлі сақтық шараларын насихаттаған плакаттар, түрлі символдық таңбалар, тыйым салу белгілері, ысқырықтар, мемлекеттік қызметкерлер киген арнайы форма, екпе салынғанын адамның көз жанары арқылы анықтайтын аппараттар т.б. пандемия кезінде түсірілген фильмдерде молынан ұшырасады. Бұлардың барлығы халық тарихындағы екі жылдық қиындықты еске түсіретін семиотикалық таңбалар болып табылады.

Жалпы кез келген мәтіндегі ақпарат үш түрлі сипатта болады:

1. Мағыналық-фактуалды ақпаратта қоғамдағы болып жатқан және енді болатын оқиғалар, фактілер жайында хабарланады.
2. Мағыналық-концептуалды ақпарат танымдық-эстетикалық қызмет атқарады.
3. Мағыналық-астарлы ойды жеткізуші (подтекстік) ақпарат (И.Р.Гальперин).

Ал кино, деректі фильм мәтінінің ақпараттық түрі танымдық-эстетикалық және мағыналы астарлы ойды жеткізуші қызмет атқарады. Әсіресе пандемия тұсындағы кинофильмдер мен деректі бағдарламалар мағыналық – астарлы ойды барынша жеткізуге тырысқанын байқаймыз.



Кинотанушылар кинодискурстың екі түрін бөліп көрсетеді: көркем және деректі. Деректі киноға шынайы оқиғаларды түсірген немесе ғылыми кино жатады. Ол өз ішінен ғылыми-көпшілік, оқу, ғылыми-зерттеу, ғылыми-өндірістік фильмдер болып бөлінеді. Көркем кинодискурста иконалық таңбалар, ауызекі сөйлеу тілінің элементтері басым болады. Олар фильмде қандай да бір эстетикалық қызмет атқару үшін қосылады. Көркем кинодискурста ауызекі сөйлеу мәнерін білдіретін сөз тіркестері, жаргондар, диалектілер пайдаланылады. Сценарий бойынша жүргізілетін жұмыс барысында фильмдегі кейіпкерлердің ауызша сөйлеуі іріктеліп, өңделеді. Кинодискурста тән ақпарат алмасудың диалогтық формасы талқылаусыз және таңдаусыз автоматты түрде болатын сөйлеу әрекетінің әсерін көрсетуге мүмкіндік береді. Алайда кинодағы диалогты табиғи тілдегі диалогпен теңестіруге болмайды. Бұл құбылыстардың негізгі айырмашылығы, кинодағы диалог ақпаратты көрерменге қайта бағыттауға арналған, ал табиғи қарым-қатынаста әңгімелесушілер серіктесіне бұрыннан белгілі ақпаратқа назар аудармайды, сәйкесінше кинода сөздер қос бағытта әсер етеді. Басқаша айтқанда, кинодиалог екі жақты сипатта болады, ол бір мезгілде экрандағы сұхбаттасушыға да, сонымен қатар көрерменге де тікелей бағытталады.

#### ***Жоғарыда баяндалған мәселелер негізінде мынадай тұжырымдар жасауға болады***

Біріншіден, кинодискурс семиотикалық жүйе ретінде бірнеше қызмет атқарады: өзекті ақпаратты жеткізу, бұрын болып өткен тәжірибені жеткізу, жаңа білімді жасауға қатысу, реттеуші қызметі, эмотивтік қызмет, эстетикалық қызметі және метатілдік, фатикалық қызметтер. Жасалған талдау нәтижесінде пандемия кезіндегі кинодискурстың, әсіресе, метатілдік қызметі ерекше сипат алғанына көз жеткізілді. Бұл фильмдерді араға неше жыл салып көрсек те, карантин кезеңіндегі туындылар екенін есімізге бірден түсіретін белгілер арнайы лексикадан, атап айтқанда медициналық терминдер қолданысынан көрінеді.

Екіншіден, кинодискурс дербес категория болып саналады, оның вербалды компонентін кинодиалог құрайды. Кинодискурс табиғаты екі жақты сипатқа ие, онда ауызекі сөйлеуге (спонтандылық, қатысымдық ниеттің болуы) және сахналық диалогқа (тұрақтылық, алдын ала дайындалғандық, сөйлеушінің қатысымдық ниетінің болмауы) тән белгілер үйлесім табады.

Үшіншіден, пандемия кезіндегі кинодискурстың тағы бір ерекшелігі уақыт тығыздығына байланысты туындады. Бұрынғы жылдар бойы дайындалып, көпшілік талқысына түсірілген фильмдермен салыстырғанда, карантин кезінде жарық көрген бірқатар фильмдер спонтанды сипатта болғаны белгілі. Мұның өзі фильмнің көркем-эстетикалық қызметінен гөрі, ақпараттық, реттеушілік және эмотивтік қызметтеріне басымдық берілгенін көрсетеді.

Төртіншіден, пандемия кезін бейнелейтін қазақ кинофильмдері мен деректі бағдарламаларының мазмұндық, стильдік және лингвистикалық құрылымына тән өзіндік ерекшеліктері болғаны анық. Оларға кейіпкерлер сөзінде жиі байқалған сөзойнатым тәсілдері, мәтінаралық референциялар, креолды мәтіндердің көп қолданылуы, кірме сөздердің белсенді жұмсалуды, деректік сипаттағы цифрлардың тұрақты және жиі жұмсалуды, комикалық әсер тудыру мақсатымен ұлттық танымды сипаттайтын тұрақты оралымдарды түрлендіріп, арасына заманауи құралдар атауларын қосып жұмсау мысал бола алады.



Қорыта келгенде, жоғарыда жасалған талдау кинодискурстың мазмұндық және лингвистикалық құрылым тұрғысынан жүргізілетін зерттеулердің маңызды нысаны бола алатынын көрсетті. Зерттеуде киносценарий ретінде анықталған мәтін түрінде жазылған кейіпкерлердің диалогтары ықтимал болатын қарым-қатынас жағдайларын барынша адекватты түрде көрсетеді және әлеуетті коммуникативті жағдайлардың репрезентативті көзі ретінде қызмет етеді. Пандемия кезінде түсірілген фильмдер материалы негізінде кинодискурстың мазмұндық, стильдік, лингвистикалық құрылымдық ерекшеліктерін талдау қарым-қатынас жағдаятына әсер ететін факторларға байланысты кейіпкерлер қолданатын тілдік бірліктердің прагматикалық ерекшеліктерін анықтауға мүмкіндік береді. Зерттеу нәтижесінде тіл ұстанушы халықтың дүниетанымы мен ойлау жүйесінің қалыптасу және өзгеру ерекшеліктері, сонымен қатар ақиқат шындықтың бұрмалануының кейбір себептері күнделікті өмірде орын алатыны анықталды. Сонымен еліміздің тарихында тағы бір ақтаңдақ болып қалған індет кезіндегі тілдік және ойлау жүйемізге әсер еткен экстралингвистикалық факторларды, оның ішінде прагматика тұрғысынан жан жақты зерттеу ісі келешек еншісінде.

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**Кілт сөздер:** кинодискурс, антропоцентристік бағыт, адресат, адресант, прагматика, прагматикалық пресуппозиция, сөзжұмса, тілдік элемент, логоэпистема, коммуникация.



## Math with Songs

**Sena GÜMÜŞ**

**Fırat University, Department of Mathematics and Science Education, Türkiye**  
[senatemizer.s@outlook.com](mailto:senatemizer.s@outlook.com)

**Tayfun TUTAK**

**Fırat University, Department of Mathematics and Science Education, Türkiye**  
[tayfuntutak@hotmail.com](mailto:tayfuntutak@hotmail.com)

### Abstract

In this study, teaching with songs was applied in order to determine the effect of teaching the subjects of measurement and circle, which are included in the sixth grade mathematics course in secondary school, on academic success and retention. This study was conducted in the 2021–2022 academic year with a total of 47 sixth grade students studying in 2 different branches of a secondary school in Bolu. The study was designed in a quasi-experimental design with an unequal control group. One of the classes was assigned as the experimental group and the other as the control group. There are 23 students in the experimental group and 24 students in the control group. Achievement test developed by the researcher as a data collection tool; It was applied as pre-test, post-test and permanence test. During the application process, the subjects were taught with songs in the experimental group, while the subjects were taught with the activities in the current program in the control group. As a result of the research, it was determined that teaching with songs was more effective in ensuring both academic success and permanence compared to the application with activities in the current program.

**Keywords:** Mathematics education, music, song, academic success, permanence.

### INTRODUCTION

Mathematics and music are two important disciplines that are involved in most aspects of our lives. These two disciplines in our lives were noticed many years ago by the Greek scientist Pythagoras, known as the father of numbers. Approximately 26 years ago, music was taught as a branch of mathematics in the Pythagorean school (Garland and Kahn, 1995).

Pythagoreans (500 BC) grouped mathematical studies under four main headings: absolute numbers (arithmetic), applied numbers (music), static quantities (geometry) and quantities in motion (astronomy). In the Middle Ages, these four branches were named quadrivium (Yıldırım, 2004). The relationship between mathematics and music can be considered and examined from many different



aspects. Music can be related to mathematics in terms of origin, neurology and ability. The basis of music is mathematics and the harmonic structure of music is mathematical. Neurological studies examining brain activities have also shown that music is related to mathematics. There are also studies establishing a relationship between mathematics and musical ability, as if supporting neurological studies (Karşal, 2004). However, in this research, taking all these relationships into consideration, the cognitive relationship of music and mathematics is discussed. In other words, the effect of music on mathematics education has been investigated. Because using mathematics and music, which are important representatives of science and art, in harmony without ignoring their relationship with each other, can produce positive results. While the question of how we can teach better, especially in education, preoccupies our minds, the use of a popular element such as music in classroom environments may be among the answers that can be given to this question.

Unfortunately, it is not possible to talk about a universal method or approach in teaching that is suitable for everyone, for every subject, and is always valid (Babayiğit et al., 2020; Babayiğit, 2020). The lack of understanding of this point has the biggest share among the reasons for the low success observed in mathematics lessons. Because teaching cannot achieve success in the monotony of telling and listening in any field. In mathematics, this is completely impossible. Therefore, first of all, teachers should give up their rigid attitudes conditioned by a wrong understanding of education and develop materials to transform mathematics into a lively thinking activity that is open to new breakthroughs (Yıldırım, 2004).

One of the steps taken in this regard is the interdisciplinary approach. Since the 2000s, interdisciplinary teaching has become a concept that falls into the fields of expertise in the education society. While interdisciplinary teaching has been used in preschool education for years, there is a combination that should be emphasized, which is music and mathematics (Edelson and Johnson, 2003). Because mathematics and music combine the two hemispheres of the brain, creating a powerful force for learning. Combining mathematics and music allows students to use not only their cognitive but also their other areas (emotional, social, creativity, language and physical development, etc.) (Church, 2000). In the light of this information, the problem statement of the research can be expressed as follows: "Does teaching with songs about area measurement and circles in sixth grade mathematics courses in secondary school have a significant effect on the academic success of students and the permanence of the information learned?"

## Method

### Purpose of the research

The purpose of this research is to examine the effect of the teaching practice enriched with the help of songs on the subjects of area measurement and circle in the sixth grade secondary school, on the academic success of the students and the permanence of the information learned. For this review, answers were sought to the following questions;

1. Is there a statistically significant difference between the achievement pre-test and post-test scores of the control group?



2. Is there a statistically significant difference between the achievement pre-test and post-test scores of the experimental group?
3. Is there a statistically significant difference between the retention test scores of the experimental group and the control group?

### **Model of the research**

In this research, a model with unequal control group, one of the quasi-experimental models, was used. Pretest-posttest is very similar to the control group design. No attempt is made to equalize the elements in groups through impartial assignment. An experimental and a control group are selected from the existing groups (classes in the school environment) through impartial assignment. Care is taken to ensure that the groups are still similar in terms of certain characteristics.

### **Data Collection Tools**

In this study, a mathematics achievement test developed by the researcher, whose validity and reliability was tested, was used to collect data.

### **Analysis of Data**

Normal distribution tests were effective in determining the appropriate type of statistics for the data analysis of the study. Since the group size was less than 50, the scores were examined for normality with the help of the Shapiro-Wilks test. Since the statistical hypothesis in the analysis was established that the distribution of scores does not differ significantly from the normal distribution, the calculated p value being greater than .05 means that the scores do not deviate excessively from the normal distribution. When the distribution of scores deviates excessively from normal, statistics that require the assumption of normality should not be used (Büyüköztürk, 2012).

Taking into account the results of normality tests, the data obtained within the scope of the research were analyzed with the help of the SPSS package program. In the analysis of the questions regarding intra-group comparisons specified in the sub-objectives, the t test was preferred for related samples and the Wilcoxon signed-rank test was preferred in cases where the difference scores of the subjects did not show a normal distribution (Büyüköztürk, 2012). In comparisons between groups included in the sub-objectives, the t test was used for unrelated samples and the Mann Whitney U test was used in cases where the distribution of scores did not meet the normality assumption (Büyüköztürk, 2012).

### **Findings and Results**

In this study, teaching with songs was applied in order to determine the effect of teaching the subjects of measurement and circle, which are included in the sixth grade mathematics course in secondary school, on academic success and retention. This study was conducted in the 2021–2022 academic year with a total of 47 sixth grade students studying in 2 different branches of a secondary school in Bolu.



The study was designed in a quasi-experimental design with an unequal control group. One of the classes was assigned as the experimental group and the other as the control group. There are 23 students in the experimental group and 24 students in the control group. In the study, music-related teaching was given to the experimental group, while the control group was not intervened. Achievement test was applied before and after the study as pretest and posttest. In addition, the achievement test was reapplied as a permanence test three months after the end of familiarization. The findings obtained as a result of the applications and the results obtained in the light of these findings are given below.

There is a statistically significant difference between the pretest and posttest scores of the control group [ $t(23)=-3.768$ ;  $p=0.001$ ]. In addition, the average of the students' pre-test scores was (11.1250) while the average of the post-test scores was (15.1250). According to this finding; The success of the control group students increased after the application with the activities in the current program.

There is a statistically significant difference between the pretest and posttest scores of the experimental group [ $t(22)=-6.689$ ;  $p=0.000$ ]. In addition, the average of the students' pre-test scores was (10.3913) while the average of the post-test scores was (20.3478). According to this finding; The success of the experimental group, which learned with songs, increased after the application.

The average rank of the retention test scores of the 23 experimental group students was 30.41; The average rank of 24 control group students is 17.85. According to the rank averages, we can say that the control group's average scores are lower than the experimental group. Additionally, this difference was found to be statistically significant ( $z=-3.150$ ;  $p=0.002$ ). According to this; We can say that teaching mathematics with songs was more effective in ensuring the permanence of the information learned.

In this study, it was aimed to investigate the effect of music, especially songs, on learning. For this reason, in the study; The effect of teaching with songs on the mathematics course success of 6th grade students and the permanence of the acquired knowledge was examined.

Within the framework of the findings, it can be said that teaching with songs in secondary school mathematics classes makes a positive contribution to the academic success of students and the permanence of the acquired knowledge. When the academic achievement score averages of the students in the experimental group, where teaching with songs was applied, and the control group, where the activities in the current program were applied, were compared, it was determined that the preliminary learning about the subjects in both groups was equal at the beginning. Although the post-test mean scores of both groups were higher than the pre-test means scores, a significant difference was found in favor of the experimental group when the post-test mean scores were compared with each other. This result is parallel to the results of similar studies conducted by other researchers (Kocabaş, 2009; Tümer, 2010; Taşık, 2013; Erdoğan-Kaya, 2014; Aslantaş, 2014; Yağışan, Köksal and Harun, 2014).

When the data across TIMSS is examined, it is observed that as the enjoyment students get from learning mathematics increases, their mathematics achievement increases. In the TIMSS study conducted in 2011, it was revealed that the frequency of use of applications that keep students' interest in the course has a significant positive impact on their success. For this reason, teachers should ensure the active participation of the student in the lesson through various methods (Büyüköztürk et al.,



2014). Integrating music and mathematics does not require a musical exercise or expensive equipment (Edelson and Johnson, 2003). Therefore, it is very easy to adapt songs that enable active participation to classroom environments.

The relationship between all students in the school and mathematics can be increased in a fun way by singing mathematics songs and having other students listen, not only in lessons but also in social activities such as the school choir and school radio. By constantly singing songs in such programs, it can be ensured that they remember the information they have previously learned and that the permanence of this information can be increased. Thus, forgetting information from previous periods, which is one of the important problems of mathematics teaching, can be prevented.

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## Explicit and implicit attitudes towards selected spice products

**Ph.D. Joanna NEWERLI-GUZ**

**Gdynia Maritime University, Poland**

### **Abstract**

Consumer behavior on the market, their attitudes, needs and purchasing decisions have been in the centre of interest of entrepreneurs for many years. Understanding the factors influencing these behaviors can significantly contribute to gaining a competitive advantage and achieving market success. In recent years, particular attention has been paid to the psychological aspects of consumer behavior and the assessment of behaviors related to food and nutrition.

According to attitude-based theory, consumer attitudes are divided into two types: explicit and implicit. Explicit attitudes are commonly studied, while in the case of implicit attitudes research is scarce. The subject of these tests – the consumer – can have them at the same time, in addition, they can be different without creating a conflict.

The study examines the explicit and implicit attitudes towards selected spice products. The research method used in this study was a computer simulated avoidance method Aleksandra Fila-Jankowska and Konrad Jankowski [Fila-Jankowska, Jankowski 2008]. This method made it possible to determine the tendency to behave in relation to the stimuli representing the studied phenomenon, and the influence of the form of the product and its brand on the attitudes of a selected group of respondents was examined.



## "Uzarlik" medicinal plant

**Nurgeldi ODEKOV**

**Satbayev Kazakh National Research Technical University, Kazakhstan**

### **Abstract**

It contains various substances that have a beneficial effect on the human body, such as alkaloids such as garmalol, garmin, peganin, macroelements such as potassium, magnesium, iron, and microelements such as manganese, aluminum, and nickel. This plant is useful in diseases of the central and peripheral nervous system, dry joints, various infections, skin diseases and fighting against insects.

"Uzarlik" has been used among Turkmen since ancient times. Our ancestors often hung it in their houses, smoked it occasionally and spread its smoke around. In this way, they prevented the spread of several infectious diseases. Even today, one can see a bunch of this plant in every Turkmen house. It has already been proven that bacteria, harmful insects and snakes escape from the smell of an uzarlik.

This is due to the very strong effect of alkaloids in the herb and seeds of the plant. In Turkmenistan, the symbol of medicine has an image of an uzarlik. This is no accident. The plant is used against more than 50 diseases in Turkmen folk medicine and scientific medicine. Information about medicinal properties of the plant can be found in Abu Ali Ibn Sina's "Laws of Medical Science", Sayyid Ismail Gurjani's (Jurjany) "The Book of Medicine" and Muhammed Hossein's "Treasure of Ointments".

This plant is a well-known plant used in folk medicine to treat "hundreds of diseases". From early times, its seeds were used in eye diseases, diaphoretic, anti-antecticide, and general stimulant. Our people use the plant for two purposes - medicinally and as a dye plant. It is used as a remedy for swelling, flatulence, varicose veins and malaise. The duration of this treatment is 3-4 months. The patient should follow a strict diet (it is strictly forbidden to eat acidic foods and drink alcohol)

When you have a toothache, you should mix the seeds of this plant with black grapes and then apply it to the aching tooth. Muhammed Hossein writes about the use of this plant in Eastern folk medicine: "This plant is a gentle remedy, cures chest diseases caused by dampness, and removes the smell from the intestines; removes soluble and thick, purulent masses in the stomach and intestines. In folk medicine, a herbal decoction prepared from the herb, seeds and flowers of the plant is used for colds and fever. Dryness, itching and other skin diseases are treated by washing the patient's body with boiled water.



The peoples of Central Asia use the extract of this plant as a mouthwash when their gums hurt. In Afghanistan, the smoke of this plant is used to treat asthma. An ointment prepared from the seeds of the plant is useful in asthma and kidney diseases. In medicine, peganine hydrochloride (in the form of capsules and ampoules) is used as a laxative in myopathy and myasthenia gravis, as well as in constipation and intestinal atony. It is recommended to use Garmin in epidemic epicephalitis, dysentery and Paraxon disease.



## The role of the strategy map in managing a strategic medical entity during the COVID 19 pandemic

**Joanna JASIŃSKA**

**Warsaw Medical University named Tadeusz Koźluk, Poland**

**\* dr hab. MBA, prof. Warsaw Medical University named Tadeusz Koźluk,**

**Vice-Rector for Education and Development, Warsaw. Poland**

**E-mail address: \* [joanna@epoczta.pl](mailto:joanna@epoczta.pl)**

### **Abstract**

Healthcare facilities that want to effectively manage the existing resources, as well as better and more efficiently respond to changes in the environment, looking for new management methods. Especially in times of limited resources of medical staff during the fight against the COVID 19 pandemic. Taking into account the above factors, managing a medical entity will require managers to be interested in the strategy map. The strategy map was analyzed and its role in the strategic management of a medical entity was shown. National and foreign literature and legislation were used for the analysis.

**Keywords:** strategy maps, hospital, change management

### **INTRODUCTION**

As a result of the COVID 19 pandemic, the healthcare system has become an entity that requires special management skills. Healthcare entities, wanting to manage the existing resources more effectively, and to respond better and more efficiently to changes taking place in the environment, are looking for new management methods.

Taking the above factors into account, managing a modern healthcare facility requires managers to be interested in the strategy map. The aim of the article is to present a map of the strategy and its role in the strategic management of a healthcare facility, in particular during the COVID 19 pandemic. The analysis was made with the use of domestic and foreign literature and legal acts. Conclusions formulated in the study may be helpful in the management of health care organizations.



### Characteristics of strategic management in health care institutions

Strategic management has been of interest to managers of health care facilities for many years. Unfortunately, in Poland, the procedure of creating an organizational strategy, forced on many hospitals by the legal system, turned out to be impossible to implement in many cases; managers did not implement strategic control. Therefore, it is necessary to consider what actions should be taken in order for the strategic management of a medical facility to bring the expected results.

The principles of building a strategy in relation to health care facilities can be limited to several conditions [Baum H-G, 2017, p. 34]:

- the healthcare facility must have a well-organized internal information system,
- the health care facility must as precisely define its future position, using all available sources of knowledge and possibilities to influence the environment,
- the healthcare facility must define the internal conditions for the implementation of the strategy, i.e. the resources it will have at its disposal,
- the healthcare facility must make the best choice from several policy options developed jointly by management, regulatory authorities and workers. In order to select variants, it is necessary to distinguish several critical determinants significantly affecting the future of the hospital,
- a healthcare facility must develop a strategic plan, i.e. a path to reach the proposed solutions, using available resources,
- health care facility managers must obtain the support of the staff for the implemented strategy,
- health care facility managers should ensure ongoing supervision and control of progress in the implementation of the strategy at every stage of the strategy implementation and later at the stage of its implementation.

These activities guarantee not only the development of a good strategy, but also a stable future and lower risk associated with changes in the environment [Becker B.E., Huselid M.A., Ulrich D, 2019, p. 224]. The difficulties in developing and implementing strategies in healthcare facilities are obvious. Among the many difficulties encountered in health care institutions at the stage of strategy formulation, [Chen H., 2017, p. 73]:

- difficulties in determining which of the services provided by a health care institution are the most important,
- no common organizational goals for doctors, nurses and administrative staff,
- lack of coordination and proper cooperation between the staff of the health care facility and the doctor and medical workers caring for the patient before and after hospitalization,
- a threat to the functioning of the organization on the local medical services market,
- imbalance between the quality of medical care, patient satisfaction, employee satisfaction and research and financial goals,
- the problem of internal communication and communication with the highest management in the area of strategic goals,
- problems with meeting legal requirements in the field of environmental protection,
- increased employee dissatisfaction.



To counterbalance the above problems, you need to develop a mission and then think about how to translate the defined goals into actions.

### Strategy map – concept

One of the ways to translate the strategy into operational activities is the strategic scorecard proposed by R.S Kaplan and D.P. Norton. The Balanced Scorecard as a management concept was developed in the 1990s from research initiated by Robert S. Kaplan of Harvard Business School and David P. Norton, founder and president of Renaissance Solution Inc., on measuring organizational performance. The strategic scorecard gives management a universal tool for translating the vision and strategy of the organization into a set of logically related performance measures [Kaplan R.S., Norton D.P., 2013a, p. 41].

The strategic scorecard presents the strategy, i.e. the way in which the healthcare unit will fulfill its mission in the form of the so-called strategy maps.

The strategy map is the first step in building a strategic scorecard. According to R. Kaplan and D. Norton, the strategy map is intended to present the process of transformation of intangible assets into tangible financial effects. Thanks to this, it is the basis for strategy management [Kaplan R.S., Norton D.P., 2001b, p. 77]. Kaplan and Norton also believe that the strategy map is a generalized architectural structure describing strategy. It is used to analyze the consistency of a strategy and understand it. They make it possible to capture in a logical manner the structure of connections between particular strategic elements [Kaplan R.S., Norton D.P., 2016b, p. 11–12].

Building a map of a healthcare institution's strategy shows the role of tangible and intangible factors, which allows them to be properly selected for the strategy being implemented, and thus increases their effectiveness. This makes it possible to identify, on the one hand, redundant assets that need to be liquidated, and, on the other hand, missing assets and skills that must be replenished. health care facility [Hannabarger Ch., Buchman R., 2017, p. 411]. Creating a strategy map is based on five principles [Lin Z., Yu Z., Zhang L 2018, p. 7]:

- the strategy balances the opposing forces. Investing in intangible assets in the long term is opposed to cutting costs in the short term;
- the strategy is based on a differentiated value proposition for the client.

This means that the value offered is to correspond strictly to the needs consumers, and this in turn is associated with a good recognition of their needs; value is created in internal business processes. Results in the financial and client's perspective, they are a consequence of actions taken within the framework of the processes:

- the strategy is made up of parallel, complementary themes;
- strategic fit determines the value of intangible resources.



The strategy is a plan to achieve the long-term goals of the organization. It implies a transition from the present situation to the desired state expressed in the vision. The vision as a goal reflecting the level of aspirations and dreams of the organization's management usually differs from the prognosis of the health care facility's condition if the current course is maintained. As the future is always uncertain, especially during the COVID 19 pandemic, the strategy is a set of hypotheses (i.e., unproven assumptions) about an effective way to move from the current point to the desired state of health care organization in the future.

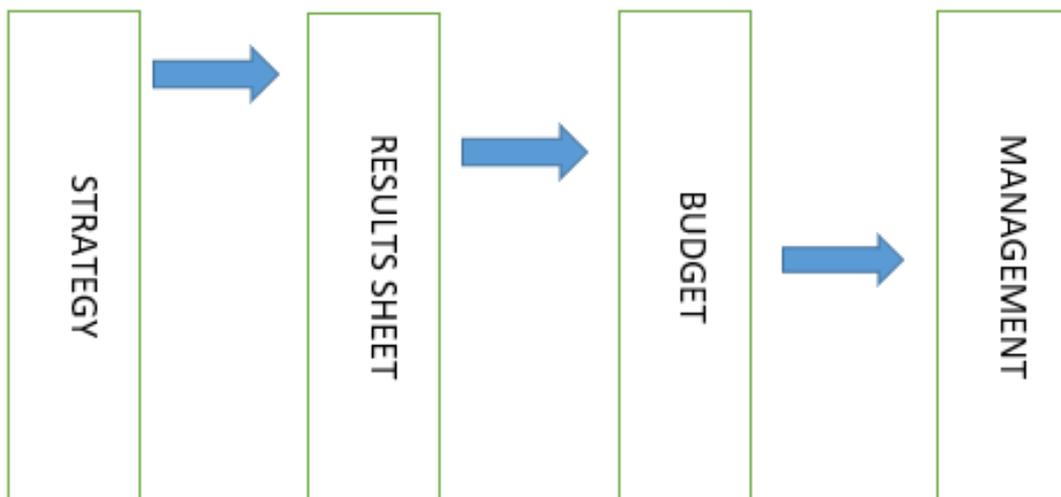


Figure 1. Strategy oriented management

In order to use the strategy map as a strategic management tool, it is necessary to create a coherent system of strategic goals, connected with cause-and-effect relations. The prerequisite for using a strategy map as the basis of a *Scorecard* is an efficient strategic planning system in the organization. As shown in Figure 1, the development of a strategy map should be preceded by the definition of the mission and vision as well as the formulation of the organisation strategy. It is worth noting that in some entities, the implementation of BSC entails the commencement or arrangement of the strategic planning process [Niven P.R 2018, p. 3].

The strategy of a healthcare facility is a set of hypotheses concerning the transition from the current state of the facility and achieving the desired state in the future. The strategy map groups these hypotheses into four perspectives and combines them into a coherent whole through the causal relationships between them [Niven P.R., 2018, p. 132].

If a healthcare facility has the right people, knowledge and technological infrastructure at its disposal, it will be able to successfully implement processes that bring the expected value to patients and the local community. Thus, it will ensure the achievement of financial goals - efficiency and growth - ensuring constant improvement of the organization's value. The use of a strategy map and strategic



scorecard allows you to integrate all activities around health care facility strategy, which may contribute to increasing the effectiveness of its implementation. The strategy map translates into practical actions through actions included in the strategic scorecard [Schmutte A.M., Hobsch R 2018, p. 132].

The structure of the strategy map is based on four perspectives: financial, client (patient), internal processes and knowledge and development. The description of the actions to be taken in each perspective is determined by the operational activities that make up the strategic initiatives for each perspective. All perspectives are created on the same principle, i.e. strategic goals and specific goals are defined for each perspective.

- What do we exist for?
- What is our business?
- What do we want to achieve
- What must our position and process system be to achieve?
- assumed vision?
- How to describe the strategy through a set of logically related goals?
- in four perspectives?
- How to translate the strategy map into a system of indicators?

*The financial perspective* indicates the management of the entity's financial resources and answers the question: "What should the financial results be to meet the expectations of the owners?". However, from the point of view of a healthcare facility, whose main goal is to balance costs with revenues and maintain financial liquidity, it will be more important to answer the questions: "How to stay in the medical services market, how to maintain relative financial liquidity or how to maximize costs?".

Because the price of the medical procedure is imposed by the payer, in the financial perspective it should be examined whether the medical procedure is provided at an appropriate cost. Healthcare facilities may have strategic financial goals: increase in revenues, reduce costs, improve efficiency, and improve resource use. These goals should constitute a reference point for the goals and measures formulated under the other perspectives [Kaplan R.S, Norton P.N, 2016, p. 16].

*The patient's perspective* answers the question: "How do customers perceive us?" Patients constitute the most important group of clients in the healthcare sector, without whom the diagnostic and therapeutic process could not take place. The patient is at the heart of a healthcare facility's strategy. In this perspective, it is necessary to define who is a hospital patient, how the hospital intends to compete for it, and what medical services are most expected and desired from the patients' point of view [Kaplan R.S, Norton P.N., 20016, p. 17]. In this perspective, typical goals are: customer satisfaction, increasing their loyalty, loyalty, acquiring new customers or their profitability.

Relationships with the payer or medical staff are also important in health care institutions. They contract and finance the entity's operations on behalf of the client. On the other hand, the goals and measures reflecting them must take into account the needs of both groups of clients, and their implementation should contribute to the improvement of the financial situation [Figge F., Hahn T, Schaltegger S., Wagner M., 2017, p. 253].



*The perspective of internal processes* is identification and improvement the most important activities and key processes for the goals formulated in the financial and patient perspective. It answers the question: "What processes should be improved in a given unit?". In this perspective, the focus should be on the effectiveness of key internal processes implemented. These processes are considered effective when they meet expectations customers in a responsible financial manner. Internal processes of a health care facility should be understood broadly and include: innovation, proper treatment process and patient care after completion of the treatment course [Hannabarger Ch., Buchman R., 2019, p. 253].

Goals and their measures formulated in the perspective of internal processes should focus on those internal processes that will have the greatest impact on patient satisfaction and achievement of financial goals. The perspective of internal processes has a very significant impact on the goals set in other perspectives. Objectives in this perspective enable faster and better quality patient service and increase operational efficiency hospital, which translates into an improvement in its economic results [Hannabarger Ch., Buchman R., 2019,p. 182–183].

*The development perspective* answers the question: "Is it possible to develop further and create value?". The cause-effect chain of strategic goals, passing through all four perspectives, begins in the development perspective [Lin Z., Yu Z., Zhang L., 2018, p. 18]. The development perspective determines the resources necessary to introduce changes in the implementation of tasks in terms of the patient, financial and internal processes. Medical resources and qualified medical staff should be an important area of the hospital's interests. The goals set in this perspective are the basis for the long-term development and improvement of the organization and are achieved over time. They may be related to the development strategies of such areas as the introduction of a new medical procedure, the development of new management methods, the development of applied medical technologies or the development of medical personnel competences, carried out by a healthcare facility. Individual goals should be defined for medical personnel [Lin Z., Yu Z., Zhang L., 2018, pp. 183–184].

An example of a strategy map for a healthcare facility is shown in Table 1.

Table 1. Strategic Scorecard for a hospital - an example.

<b>The patient's perspective</b>	
<b>Strategic objectives</b>	<b>Meters</b>
Increase the satisfaction of patients and their families	- patient satisfaction index - number of complaints from patients and their families
Improve access to health services	-- number of patients waiting for health care -- bed occupancy rate
<b>The perspective of internal processes</b>	



Improve resource efficiency	- average hospitalization time
Implement quality improvement programs	- bed occupancy level
<b>Development perspective</b>	
Improve employees' skills	- number of trainings - the number of specializations obtained by employees
<b>Financial perspective</b>	
Increase your revenues	- valuable level of contract with the payer - value of revenue from the sale of health services - value of income from the hospital's medical activities
Increasing financial stability	= liquidity ratio - profitability index
Increase the level of hospital modernization for better service delivery	- the number of new generation medical equipment purchased - the number of trained doctors, nurses and midwives in the field of new methods of diagnostics and therapy

Source: own study.

The individual levels on the strategic scorecard are directly related to each other and influence each other. For example, the appropriate organization of hospital departments and their employees (development perspective) affects the quality and efficiency of patient service, and thus the level of their satisfaction (patients' perspective), and also affects the costs of implementation. medical benefits, i.e. also on the financial result, which is part of the financial perspective.

The process of creating a strategy map is continuous, i.e. its implementation ends only when the designers have no doubts as to the correctness of the created relations. Verification of the correctness of the construction of the strategy map may take place indirectly by analyzing the correlation between the measures assigned to individual strategic perspectives and initiatives.

### Methodology for constructing a balanced scorecard

A health care institution interested in the method of FMC must have a clearly defined strategy, which is a specific action plan. With regard to this issue, there is often an error affecting the downstream elements of the process, not only for hospitals, but also enterprises. The managerial staff very often cannot determine the position of their unit in the situation of the current COVID 19 pandemic, because they forget about the basic elements of management, for example about the life cycle of the organization.



It should be noted that the implementation of a balanced scorecard does not have to be related to the problems of the organization, although Polish hospitals most often use a balanced scorecard at a time critical for them. Undoubtedly, the phase of the organization's life cycle in which a given hospital is located is important. For example, a Polish hospital: *Lower Silesian Specialist Hospital in Wroclaw* is in the maturity phase. At this stage, the hospital reaches stabilization under in terms of size, cost and resources. It also benefits from the achieved level of growth, and thus - has an experienced managerial staff, aware of the strength of the health care unit on the market. This also means that the hospital is well known in its surroundings in which it functions.

Organizations in this phase often have significant resources, experienced management, and low costs thanks to economies of scale. Achieving excellent results, they do not pay attention to financial liquidity. The aforementioned specialist hospital is interested in a card due to the COVID 19 pandemic.

Another important, even necessary element in the implementation of the balanced scorecard method is the definition of strategic and financial goals. A goal is the future desired state or result of an organization's operation. Strategic goals define the desired market position, e.g. achieving a leading position in the market in terms of the quality of medical services. The financial goals determine the level of financial parameters, such as the rate of return on investment expenditures or the low level of costs that the organization should achieve in the planning period. Achieving strategic goals should lead to improving the competitive position of the organization, and financial goals - to improve its financial condition.

It should be emphasized that both types of goals should be set and achieved both in the long and in the short term. Goals should be organized according to the perspectives of the strategic scorecard.

Within each perspective of the strategic charter, not only strategic goals are formulated, but also measures of achieving goals are indicated, target values for each of the measures in the short and long term, and strategic initiatives necessary for achieving goals. For example, for the goal of „*caring for operational efficiency*,, a hospital could adopt measures such as average length of patient stay and bed occupancy rate. Then, specify target values for each gauge in in both short-term (e.g. one month) and several years (e.g. 3 years) perspective. The management of the hospital aims to achieve a situation where the average length of stay is 5 days and the bed occupancy rate is 92%. However, in order to actually achieve such results, apart from ambitious plans, it is necessary to identify initiatives that will make it possible. For each initiative, a schedule of implementation should be created along with the allocation of persons responsible for the performance of individual tasks and specified available budget for their implementation.

Thus, the strategy is implemented through strategic initiatives that allow the organization to move from the current state to the desired state in the future. In the literature on the subject, there is a lot of information about goals and the measures assigned to them, but in a few items we can find answers to the questions of how to do it, how to correctly associate goals and measures of their implementation.

In practice, even setting the goals of the organization is a problem, which means a poorly defined strategy, which results in the above-mentioned too arbitrary locations in the life cycle of the organization. It should be remembered that the goals and measures are individual for each



organization, and most importantly, they are selected on a non-accidental basis. Especially the first ones have to be verified and discussed by management. It is necessary to use specific techniques supporting this process. Selection of meters by the so-called discussing in practice most often takes place in a messy and chaotic manner [Lin Z., Yu Z., Zhang L., 2018, pp. 183–184].

Managers, who want to implement the tool as soon as possible, forget about the basics. It seems important therefore, a reminder of detailed techniques, known, for example, from the subject of organizational and management methodology. As it turns out, there are many methods that allow solve these problems and select goals and measures in a logical and orderly manner. These are often forgotten, overlooked or cursory methods.

- ***methodology of selecting and measuring indicators***

Referring to the basics of management organization methods, as well as techniques, which are detailed methods, at the very beginning we will come across a method referred to as management by objectives. It is worth noting that the full procedure of management by objectives consists of the following stages: 1) work preparatory, 2) setting goals and tasks, 3) developing organizational change plans, 4) implementing organizational change plans, 4) management controlling the processes of achieving goals by lower-level managers, 5) periodic reviews of work results, which include quarterly and annual reviews of reviews of managers' work [Hass-Symotiuk M., 2018, p. 176–179]. .

Undoubtedly and not accidentally, the above-mentioned stages of management by objectives resemble the implementation scheme of the strategic method of the debit card.

- ***delphi method***

The Delphi method is a very well-known and important strategic scorecard management tool due to selecting goals and measures. It is one of the methods of generating solutions based on free associations [Hass-Symotiuk M., 2018, p. 183–184].

The name comes from the name "Delphi" - the famous city of central Greece, where there was a mythical oracle. The Delphi method consists in creating scenarios for the shaping of certain phenomena in the future, using mainly specialists in the field of knowledge related to the analyzed problem. For the first time it was used in the Rand Corporation in the 1960s. In addition to specialists, an important role is played by liaison officers responsible for maintaining contacts between specialists, as well as for statistical processing of information presented by specialists. We are dealing here with the function of a coordinator (in this case, they are liaison officers), whose appointments when implementing a strategic scorecard are required by the card's creator.

The Delphi method works according to the following stages:

- a group of liaison officers edits the problem presented to it for solving in the form of a questionnaire containing open and closed questions,
- specialists answer the questions contained in the questionnaire, present their point of view, then send their answers to the liaison officers,



- liaison officers develop statistically responses and synthesize results calculating the median and quartiles among groups of responses, then, together with an anonymous list of comments, send them to specialists,
- specialists reconsider the problem, compare their point of view with anonymous comments from liaison officers and other specialists and send them back to the experts.

This cycle is repeated until unambiguous opinions are obtained, suggesting one, agreed way to solve the problem, or several different ways of solving it, together with a list of arguments justifying these choices. In practice, this cycle is most often repeated four times.

The presented methods are based on the opinions of experts, they provide specific and quick solutions. Sometimes, however, it is necessary to use opinions from the outside and go beyond the usual patterns of thinking. This is achieved by more creative methods, sometimes even based on some kind of abstraction.

### **Result Map - the essence of mapping**

An important element in verifying the efficiency of the organization's functioning, including the hospital as a whole, and the selected department, is the selection of a specific method of describing given processes. Currently, during the COVID 19 pandemic, hospitals need tools with which they will be able to communicate to their employees in an understandable and clear manner the strategies of the organization, as well as the methods of their implementation. One of the most common tools is the process map, which is a graphical presentation of what is done in organization of operations.

Creating a process map, also in a hospital, requires the identification of all entities that take part in the process, and the identified elements of the process are recorded in column layout. This allows for the creation of a general structure of the examined object - from the level of the organization. On the other hand, starting from the organizational structure, the tasks and activities performed in the organization are analyzed (process diagram). The allocation of activities performed to individual components of the organizational structure allows for the preparation of a description of the course of the process of transforming specific streams (feeds) into subsequent activities carried out by these components of the structure, until the final result of the process is obtained [Chow C.W., Ganulin D., Haddad K., Williamson J., 2018, p. 183–184] . The map, therefore, shows the participation of individual components of the structure in the performance of the task and at the same time allows the assessment of this participation both in the perspective of the final result and the necessary supply (input), as well as involvement of own resources.

In simpler terms, a process map can be said to show vertical and horizontal connections within an organization - the connections between the structure of an organization and its operations. As for the concept of the map, it can be assumed that, depending on the degree of accuracy, the process map describes in sufficient detail the way in which processes are implemented in the organization. Mapping the management process aims to identify all elementary processes, as well as to organize them regularly and chronologically. Management process mapping it combines all the processes carried out in the organization and is the starting point for the development of strategy maps. Mapping in line with this approach will allow for construction performance measurement tools, such as a balanced



scorecard, which in turn is based on a detailed map - a strategy map. The strategy map is an important tool which enables the development of a balanced scorecard and learning by controlling and adjusting the adopted strategy . [Chow C.W., Ganulin D., Haddad K., Williamson J., 2018, p. 193–202] Although there is widespread agreement, both in the literature on the subject and in practice, about the need to develop a strategy, there is a lot institutions, including hospitals, treat the strategic plan as a document that has little relation to reality. The implementation of a balanced scorecard allows you to combine the strategy with a set of measurable goals, between which the relationship is captured by the map strategies.

In the hospital strategic map, which is a type organization non-profit, it is important to distinguish between two types of stakeholders; They are: beneficiaries, i.e. patients, as well as founders, i.e. institutions that finance the operation of medical care facilities (e.g. companies purchasing a medical care package for their employees). The organization must work in such a way that both of these groups are satisfied.

In addition, the hospital should take care of its reputation, the quality of services provided, and take into account the needs of the local community. The procedural perspective should take into account, inter alia, implementation of quality improvement programs (na e.g. by shortening the waiting time for specialist examinations or rehabilitation). It must indicate where changes should be made and what processes should be improved to satisfy beneficiaries and funders [Chow C.W., Ganulin D., Haddad K., Williamson J., 2018, p. 220–222] . There is also a need to improve medical and inpatient care over the patient. Due to the fact that these goals are achieved by medical personnel, their qualifications are important.

Examples of measures in this perspective may be: time waiting times for admission to hospital, complication rate, bed occupancy rate or the average length of a patient's stay in the hospital. It should be recognized that the hospital, while implementing its mission, must first of all give satisfaction to patients and their families with the services provided there. To achieve this, it must provide modern, high-quality services, using modern technologies, e.g. by reduce infections - safety for workers and patients is the goal. Patient satisfaction affects the reputation of the hospital and its good image in opinion payer. This is reflected in the hospital funds received from the payer for further development. The patient and stakeholder perspective gives the public a general feeling safety [Chow C.W., Ganulin D., Haddad K., Williamson J., 2018, p. 223–228] .

The hospital must be a reliable institution that receives funds and implements them properly. Process improvement helps to maximize the value for the patient. This, in turn, is related to the high productivity of employees, the condition of which is that the staff were motivated, patient-oriented and at the same time well-trained. The high skills of the employed staff are not only the result from training, but also from his motivation to work. The financial liquidity and solvency of the hospital are also very important. It cannot be expected that the people employed in it will be out focus only on work, that the mere fact of doing work will motivate them to act. The staff must also be sure that they will receive a salary - hence, liquidity is so important financial hospital. In hospitals, control and cost reduction are necessary.



## **Discussion on the application of the strategy map by Polish hospitals and its role in strategic management**

World experience, including Polish experience, on the management of the strategy map is so great that it can be successfully applied and its effects can be predicted. There are sets of gauges used in hospitality and methods of their selection as well all kinds of suggestions for additional card perspectives, there is also knowledge about breaking the current perspectives into two more detailed ones. Undoubtedly, strategic scorecard management is able to provide many interesting solutions in the management of Polish hospitals.

The introduction of strategy maps in hospitals can only be successful if many additional steps are taken and all participants in the strategy are ready to change the mindset. However, there are many advantages to implementing it in hospitals. The strategy map imposes discipline on improperly managed units, because it is a pragmatic aid in achieving the organization's goals, moreover, it takes into account the interests of all groups using medical services, thus avoiding stressful situations from suing. However, it takes hard work to be successful. A. Krey suggests making the organizational structure more flexible first, as rigid hierarchies inhibit changes. Employees' doubts about making changes should also be taken seriously [Krey A., 2018, p. 223–228].

The use of strategy maps in hospitals is possible and seems to be the right solution. Already on the first level, the tool as a template is able to organize the activities of the hospital. Further development allows to capture unnecessary tasks performed by hospitals and integrate them into one coherent whole. The advantages of using a strategy map in a hospital, especially in the COVID 19 pandemic, mentioned R. Lewandowski, confirm that the method is right. Therefore, the founding and supervising authorities of hospitals should consider the application of solutions.

It should be noted that health care in Poland has never been a strong link in the economy. Health care units, especially public ones during the COVID 19 pandemic, providing services to the widest range of patients, in most cases try to survive, while trying to meet the expectations of stakeholders. If health care wants to survive in a pandemic and perform public health tasks, it must implement the hospital's activities to make it possible. Therefore, essential is the idea of sustainable management. The interpenetrating economic, social and environmental elements are reflected in the management method. The hospital must satisfy both patients and its founding bodies and financing its activities.

It is about managing hospital resources in a way that suits him it will last a long time and treat as many patients as possible.

## **CONCLUSIONS**

1. The strategy map helps with the process strategic management in healthcare organizations. It reflects the "heart" of the strategy and defines the ultimate criterion for the success of the strategy. It shows how the development of tangible and intangible infrastructure will support the strategy to combat the COVID 19 pandemic.



2. The strategy map helps to maintain the integrity of the strategy, pointing to systemic cause-and-effect relationships, so that the key elements of the strategy overlap and reinforce each other.
3. The strategy map in conjunction with the strategic scorecard, by integrating financial and non-financial information, also presents a comprehensive assessment of the effectiveness of the medical entity.
4. From a practical point of view, the use of the strategy map method in Polish hospitals is not as obvious as in scientific studies. Contact with the practice shows that tools of this type are neither widely known nor used. In fact, a small number of entities use or consider the application of the tool in question in the near future. The vast majority of hospitals resort to minimum solutions set by supervisory authorities.
5. It can be concluded that the undertaken research topic is extremely important from the point of view of stakeholders and the turbulent environment of hospitals. The conducted research returns attention to the large number of external factors affecting the efficiency of hospitals. The literature research undertaken in the work allows to show the possibilities offered by the use of a strategy map, especially in the COVID 19 pandemic.
6. The words of A. Krey mentioned in the work are confirmed, suggesting that the scorecard imposes discipline on improperly managed hospitals because it is a pragmatic help in achieving the goals of the organization, taking into account the interests of all stakeholders. It should be noted that ten years have passed since Krey's publication, and many Polish health care units still need such a discipline, which was confirmed by the author's in-depth interviews with the administration and management of hospitals.

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## Cemil Kavukçu'nun "Gölgeli Muhabbetler" Adlı Eserinde Yazar – Okur İlişkisi

**The Relationship Between Author and Reader in Cemil Kavukçu's Work "Gölgeli Muhabbetler"**

**Doç. Dr. Ahmet USLU**

**Kütahya Dumlupınar Üniversitesi, Türkiye**

[ahmet.uslu@dpu.edu.tr](mailto:ahmet.uslu@dpu.edu.tr), ORCID: 0000-0001-9014-9797

### Öz

1980 sonrası Türk hikâyeciliğinin önemli isimlerinden biri olan Cemil Kavukçu, devrin siyasî, sosyal yaşantısını ele aldığı felsefi derinlikli hikâyeler yazar. Kavukçu'nun son hikâye kitabı olan "Gölgeli Muhabbetler" gündelik hayatla birlikte geçmişe dönük hatıraların yeniden hatırlanması ve okura sosyal ve siyasî mesajların verildiği sekiz hikâyeden oluşur. Hikâyeler birbiri ile bağlantılı olmakla birlikte yazarın anlatıcı olarak başkahraman olması, hikâyeleri sonlandırmadan bitirmesi okura hikâyeleri tamamlama ve kendinden bir şeyler katma imkânı tanır. Son hikâye ile birlikte yedi hikâyenin birleşim noktası olarak ana tema şekillenir. Hikâyeler anlatıcının bakış açısı ile birlikte yarım bırakılan olaylar, metin altı akış okuru hikâyeleri anlamaya zorlamakla birlikte yorum yapma imkânı da tanır. Konuşma cümleleri havasında bir kahve muhabbetini hissettiren hikâyeler, toplumun gündelik hayatı ile birlikte sosyal yaşantısına dair izler de taşır. Hikâyeler hemen her okurun başından az çok geçmiş ya da tanık olduğu olayları ele alması bakımından okuru içine çeken, yazar ile okuru birleştiren bir yapıya sahiptir. Kavukçu hikâyelerinde gündelik hayatı ve lise hayatını, daha sonra lise arkadaşları ile bulunduğu günleri ele aldığı hikâyelerde içinde yaşadığı toplumun kültürel, ahlakî değerlerine yabancılaşmasını, kültürel hafıza kaybının ve değişen içinde değişmeyen fark edilmesini amaçlarken farklı uyarıcılarla geçmişle bağını kurmaya başlayan bireyler kurgular. Hikâyelerdeki kişilerin kurguda doğrudan bir müdahaleleri olmasa da onlar toplumu temsil eden model kişilerdir. Bu kişiler, okurun aynı zamanda kendisini bulduğu ve yazarla konuştuğu, kendi kafasında oluşan sorulara cevap aradığı sıradan ancak örnek olabilecek kişilerdir. Kavukçu diğer hikâyelerinden farklı olarak anlatıcıyı olay kahramanlarından değil bizzat kendisini olayların içinde başkahraman ve anlatıcı olarak konumlandırır. Doğrudan bir olay üzerine yoğunlaşmayan hikâyeler, sosyolojik, psikolojik ve felsefi yorumlara açık, okuru düşünmeye zorlayan hikâyelerdir. Bu çalışmada, yazar-anlatıcı ile okur arasında konuşma şeklinde açık yorumla imkân tanıyan hikâyeler yazar – okur ilişkisi içerisinde incelenecektir.

**Anahtar Kelimeler:** Yeni Türk Edebiyatı, Cemil Kavukçu, Hikâye, 1980 Sonrası Türk Hikâyeciliği, Gölgeli Muhabbetler.



## Abstract

Cemil Kavukçu, one of the significant figures in Turkish storytelling after 1980, writes philosophically profound stories addressing the political and social life of the era. Kavukçu's latest storybook, "Gölgeli Muhabbetler," consists of eight stories that involve the recollection of past memories alongside everyday life and deliver social and political messages to the reader. Although the stories are interconnected, the author's role as the narrator and his manner of leaving the stories unfinished before concluding them allow the reader the opportunity to complete the stories and add their own interpretation. The main theme takes shape as the culmination of the seven stories alongside the last one. The stories, along with the narrator's perspective and the events left unresolved, compel the reader to understand the stories and also provide the opportunity for interpretation. Resembling casual conversations over coffee, the stories convey traces of societal life alongside everyday life. By addressing events that almost every reader has experienced or witnessed, they engage the reader and establish a connection between the author and the reader. In Kavukçu's stories, the aim is to highlight the alienation from the cultural and moral values of the society one lives in, the loss of cultural memory, and the recognition of the unchanging within the changing, as individuals begin to establish a connection with the past through various stimuli. Although the characters in the stories do not directly intervene in the narrative, they represent model individuals within society. These individuals serve as both ordinary yet exemplary figures where the reader finds themselves, engages in conversation with the author, and seeks answers to the questions forming in their mind. Unlike his other stories, Kavukçu positions himself as the main character and narrator within the events rather than the characters directly involved in the event. The stories, which do not focus directly on a single event, are open to sociological, psychological, and philosophical interpretations, compelling the reader to think. In this study, stories that allow for open interpretation in the form of a conversation between the author-narrator and the reader will be examined within the author-reader relationship.

**Keywords:** New Turkish Literature, Cemil Kavukçu, Story, Turkish Storytelling after 1980, Shaded Conversations.

## GİRİŞ

1980'den Türk hikâyeciliğinin önemli isimlerin biri olan Cemil Kavukçu, hikâyelerinde yaşanan siyasî ve toplumsal olaylar, toplumun bütün kesimlerini etkileyen acı olaylar, belirsizlikler, geleceğin belirsizliği ve bu belirsizliğin verdiği kuşku ve kaygıların etkisinde kalan bir yazardır. Toplumun ve ülkenin çalkantılı döneminde hikâyeye yazan Kavukçu, modernizmin ve teknolojinin baş döndürücü bir hızla hayata girmesi karşısında toplumun bütün kesimlerinde olduğu gibi o da bu hızlı değişim ve dönüşüm karşısında yabancılaşır. Bu yabancılaşma karşısında sessiz kalmayan Kavukçu, modernizmle birlikte hayata giren teknoloji ve sanayileşmenin getirdiği yeni ahlaki yargılar, değişen insan ve toplum ilişkileri karşısında tepkisini eserleri ile ortaya koymaya çalışır. Ahlakî eserlerin yozlaşmasına, insanların farklı kimliklerle toplumda ahlaki değerlerden uzak, çıkarıcı bir yapıya bürünmesinde, çıkar eksenli ilişkilerin ön plana çıkması, toplumsal değer yargılarının çökmesine hikâyelerindeki karakterler aracılığı ile bir karşı duruş sergiler. "Ancak Kavukçu'nun gösterdiği bu tepkiler, bütünüyle toplumcu gerçekçi bir anlayışın ürünü değildir. Zira yazar, daha çok toplumun aykırı ve yitip kesimine ait hayatın farklı bir yüzüne ayna tutmaya çalışır" (Erol, 2013: 83).

Cemil Kavukçu, hikâyelerinde doğup büyüdüğü çevreden bağımsız kalmaz. "Kavukçu'nun öykülerinde tematik "çeşitlilik"ten çok tematik "odaklaşma" gözlenir. Çağdaş insanın yalnızlık, korku,



iletişimsizlik ana ilgi alanları olurken, bunları aşmak için kasabada geçen çocukluğu, ergenliği önemli bir kaynak/açılım olarak değerlendirmiştir. Kasabanın hem insanı saran, yaşatan sıcak/dost atmosferi hem de gelecek vadetmeyen boğucu yanı üzerinde durmuştur” (Tosun, 2015: 23). Öykülerinin ana karakterlerini gündelik yaşamımızda önemsemediğimiz, dikkatimizi çekmeyen küçük insanların hayatlarını, “tutunamayanları”, bir köşeye itilmişleri, sokak serserilerini, delileri, meczupları, alkolikleri gündeme taşır. Bu açıdan bakıldığında Cemil Kavukçu, Sait Faik – Orhan Kemal çizgisinde yer alan, onların kesiştiği noktalarda kendine yer edinen daha çok olay üzerinde durmayan durum öyküleri yazmayı tercih eder. “Olaysız, entrikasız olguların, durum ve atmosfer öykülerinin yazarı olarak tanınan Kavukçu, anlık duyulardan ve isabetli gözlemlerden geniş bir öykü evreni yaratabilmektedir” (Erol, 2013: 873).

Cemil Kavukçu’nun öykülerinde “anlatı zamanının okurun kısa bir zaman diliminde algılayabileceği boyutların dışında olması” (Gümüş, 2003; 39) anlatının metinler arası bir çerçevede değişik zaman ve mekanlara pencere açılması, metnin okur tarafından rahatlıkla anlamasını zorlaştıran etkenlerdir. Bu zorluk her ne kadar bir problem olarak görülse de yazar – okur ilişkisi açısından okura daha geniş bir yorum yapma imkânı tanır. Hikâyelerinde küçük insanın hayatına yer verilmesi ve metnin açık uçlu bırakılması okurun hikâyede kendisine ait bir şeyler bulmasını ve hikâyeyi bir anlamda kendisinin tamamlamasına imkân tanıyarak, yazar – okur arasındaki ilişkiyi sağlam bir zemine oturtur. “Kahramanlarının yaşantılarını gerçekçi bir bakışla tasvir edip okurun güvenini kazanan yazar, anlatmak istediği durumu birçok karakterin bakış açısıyla vererek okura adeta “evet, demek ki öyleymiş” dedirtir” (Erol ve Tutak, 2015: 112).

Yazar anlatıcı bakış açısını tercih eden Kavukçu, karakterlerini aynı mekânda bulunan kişiler arasından seçer. Kalabalıklardan uzak kasaba hayatını mekân olarak tercih eden yazar, kasabanın değişik mekânlarını kullanır. Bu mekânlar “insanlar için kimi zaman özgürleştirici, kimi zaman tutsaklaştırıcı alanlar olurken, kimi zaman da (bire) sığınak” (Koçak, 2008: 18)tır. Kavukçu’ya göre modernleşen ve ahlaki, insanî değerlerden uzaklaşan şehirlere göre kasaba kendi kimliğini devam ettiren, kendine ait yaşam biçimini oluşturan mekânlardır. Kavukçu için kasaba bir kaçış mekânı olarak kullanılır. “Ben yaşamadığım, duyumsamadığım şeyleri yazmıyorum” (Kavukçu, 1996: 69-70) diyen Kavukçu için mekân ve insanın birlikte bir bütün oluşturduğu anlayışı hâkimdir. Küçük insanın kendi değerlerini kaybetmeden hayata devam etmesi onun ilgisini çeken ve şehirden kaçışının bir sebebidir. “Yapaylaşma yönündeki bu benzeşme/kimliksizleşme süreci, Kavukçu’nun öykülerinde işlediği önemli izleklerden biridir” (Koçak, 2008: 14).

Cemil Kavukçu’nun son hikâye kitaplarından biri olan “Gölgeli Muhabbetler” adlı hikâye kitabında da kurgu, yazar ve okuru metinde birleştiren ve okura yeni yorum kapıları açan bir yapıdadır. “Her çağın çözümlenmeyi, düzenlenmeyi, yaşama uydurulmayı bekleyen yeni gerçeklikleri; kendilerine uygun yeni bir bakış açısı” (Doğan, 2006: 51) ile ele alınan konularda asıl amaç okurun bu hikâyelerde kendisini bulabilmesi, hikâyeye kendinden bir şeyler katabilmesidir. Kavukçu’nun “öykünün iç zenginliğini teşkil eden bu nevi hatıra, çağrışım ve konuşmaları tesadüfi değildir” (Kaplan, 2014: 351). Hikâyelerin geçmiş, şimdi ve gelecek zamanı içine alacak şekilde geniş bir zaman diliminde ele alınması hikâye kurgusunda geçişlerin meydana gelmesi, hikâyeleri tekdüzelikten kurtarır. Mekanik bir anlatım yerine metinde sağlanan bu geçişkenlik hikâyelere karşı okuru uyanık tutar.

### **Gölgeli Muhabbetler Adlı Hikâye Kitabında Okur ve Yazar İlişkisi**



İlk baskısı Ocak 2024'te yapılan "Gölgeli Muhabbetler" yazar anlatıcının karşısında kendisini dinleyen birine anlattığı, ancak bu kişinin kendisini dinlemediği, aklının başka yerde olduğu birisidir. Bu nedenle yazar anlatıcının anlattıkları ya havada kalır ya da yarıda kesilerek okur için bir yorum imkânı tanır. İki bölümden oluşan hikâyeye kitabında "Gölgeli Muhabbetler" Berber, Gölgeli, Makasçı Kâmil, Simitçi, Vesikalık Fotoğraf, Keşke adlı altı hikâyeden, "Geçmiş Günlerden Bir Teselli" adlı bölüm ise Boğazova ve Dasbest Buluşması olmak üzere iki hikâyeden oluşur. "Gölgeli Muhabbetler" bölümünde ele alınan karakterler ve olaylar günlük hayatta hemen herkesin karşılaştığı ama üzerinde durmadığı küçük insanları seçtiği karakterlerden oluşur. Bu kişilere odaklanan yazar anlatıcı, gündelik yaşamda herkesin karşılaştığı, muhatap olduğu ancak üzerinde durmadığı kişiler ve konuşmaları gerçekçi bir anlatımla ele alır. Bu nedenle de kısa süreli birlikteliklerde yapılan sıradan sohbetler, yine günlük hayatta okurun da yaşadığı yarıda kesilmiş hikâyelerden oluşur. "Geçmiş Günlerden Bir Teselli" bölümünde ise yazar diğer hikâyelerinde olduğu gibi okuru geçmişe, çocukluk günlerine götürür.

"Berber" hikâyesinde yazar anlatıcı karakterlerle olan ilişkisini ve kurgunun nasıl oluştuğunu dile getirir: "Böyle antika tipler hep seni mi bulur, diyor gülmekten yaşaran gözlerini avuç içleriyle silerken. Bilmem, belki de ben onları bulmuyorumdur, diyorum. Laf olsun diye, düşünmeden söylüyorum bunu, yoksa kimse beni bulmadığı gibi ben de kimseyi aramıyorum. Anlattıklarımın inandırıcı olup olmaması umurumda değil, hikâyelerimin ya da anlatım biçiminin hoş gittiğini sanıyorum; ben de yiyecek bekleyen ağzı açık kuş yavrusuna dönüşen arkadaşımın bu halinin keyfini çıkarmak için sözü döndürüp dolaştırıyor, giriş taksimini uzun tutuyorum. Beni dinlerken Avcılar Atıcılar Kulübü'ndeymiş gibi hissettiğini söylemişti bir keresinde. Bu şu demekti: Atıyorsun ama dinletiyorsun" (Kavukçu, 2024: 15). Kelimeleri değiştirerek yeni anlamlar üretmek farklı bir dil oluşturarak okura çevresinde gördüğü şeylerin aslında farklı olabileceğini düşündürür. "Site içerisinde köpek dolaştırmak yasaktır" yazısını "Site içerisinde köpek gibi dolaşmak yasaktır, şeklinde ifade etmesi, Alzheimer hastalığını Ali Zaymer olarak adlandırması normali değiştirerek yeni bağlamlarla hayatı bir anlamda hafife almanın ifadesidir. Berber de bu konuşmaya babaannesinin bir zamanlar Nevrol Cemal diye ilaç kullandığından bunun da ona benzediğinden bahsetmesi ile devam eder. Hikâyede berber belli bir karakter değildir. Berberler, her insanın gittiği ve hayattan, siyasetten konuşulan bir anlamda boş konuşmaların sebepsiz ve vakit geçirmek için yapıldığı bilinir. Berberler de müşterilerini oyalamak için konuşkan tipler olur: "Bilirsin, berber dediğin geveze, biraz da palavracı olur, bazıları ise gevezenin gevezesi olur ki makastan çok çeneleri çalışır" (Kavukçu, 2024: 16). Kavukçu, berberle olan konuşmasını tıraş olurken olan biteni doğrudan okura hitap ederek anlatır. "Bilirsin" ile başlayan cümlede muhatap doğrudan doğruya okurdur. Tıraştan sonra berberlerin ense aynası getirerek göstermesi anlamsız olmasına rağmen berberlerin yaptığı bir davranıştır. Kesildikten sonra kısa ya da uzun demenin çok anlamı yoktur. Bu anlamsızlığa rağmen bir alışkanlık olarak berberler bunu yaparlar. Berberdeki hikâyeye olay, kesilen saç kıllarının birisinin berberin parmağını delerek içine girmesidir. Olması mümkün olmayan bir durumu yazar gerçekçi bir dille anlatır. Hikâyedeki tek olay budur. "Uydurmuyorsun tabii; sonuçta sağlık belirtisi, mızrak gibi saç sağlam kafada bulunur. Bu kez de kendi söylediklerine kıkırdamaya başladı. Eee, sonra, dedi. Ne sonrası, hikâyeye bu kadar" (Kavukçu, 2024: 19). Hikâyenin bir konusu yoktur. Ancak küçük insan ve hayatta çok da dikkat etmediğimiz berberlerin tanışın tanınmasını kim olursa onunla bir sohbet etmeye başlaması ama mutlaka bir konu bulması bu mesleğin bir parçasıdır. Okur için de bu böyledir. Hikâyeye,



okur için kendi yaşadığı ama dikkatini çekmeyen bir olayı kendi başından geçen ilginç berber hikâyeleri ile tamamlar. Bu uç bir örnek olarak verilse de berberler, konuşmayı seven kişiler olarak mutlaka her okurun yaşadığı ancak önem vermediği bir konuyu aklına getirir. Yazar anlatıcı, okur için gündelik hayatta önem vermediği kişilerle ilgili bir farkındalık oluşturur.

“Gölgeli” hikâyesinde ise televizyonda şarkı söyleyen sanatçıları konu olarak alır. Eski şarkıcılara ait şarkıların yeni sanatçılar tarafından çok kötü söylendiğini ve müziğin ön planda tutularak anlama dikkat edilmemesini eleştirir. Şarkıda geçen “Ne diyor sevdiği ya da sevdiğini sandığı kıza, bütün günahlarını bana ver, sevaplarım senin olsun diyor” (Kavukçu, 2024: 22) ifadelerine dikkat çeken yazar anlatıcı, bunun dini açıdan da sıkıntılı olduğunu söyler. Bu konuşmadan sonra eski bir hatırasını dile getirir. Kızıldeniz’de bir gemide dört yıl boyunca hiç dışarıya çıkmadan kalan gemi kaptanı ana konudur. Hayaletlerle konuşmaya başlar ve yakıtı olmayan gemiyi karaya yüzülebilir mesafeye taşır. Dört yıldır tıraş olmayan kaptan dışarı çıkacağı zaman makasla saçlarını keser, sakallarını olabildiğince kısaltır. Yazar anlatıcının bu hikâyesi karşısında dinleyen arkadaşı konuşmayı bölerek kestiği saçlar ayağına batmış noktasına gelecek bu hikâye, diyerek sözü keser. Israrlarına rağmen yazar anlatıcı hikâyeyi devam ettirmez. Bu hikâyede gerçekçi olması imkânsız bir olay anlatılırken okur için de farklı yorum yapma imkânı oluşturulur. Toplumdan ve insanlardan dört yıl boyunca ayrı kalmış, yalnızlaşmış ve yeni dünyada nasıl bir yer edineceğini bilemeyen kaptan gibi topluma girmeye korkan insanlar da vardır. Ancak topluma girmek için bazı hazırlıkların yapılması ve bulunduğu mekâna göre değil gideceğin mekâna göre hazırlık yapılması düşüncesi işlenir. Okur, yalnız insanlar için bir bakış açısı ve olayları farklı değerlendirerek farklı sonuçlara ulaşabileceğinin yolunu açar.

“Makasçı Kâmil” hikâyesinde oğlunu okutmuyarak yanına çıkararak alan Maskasçı Kâmil, ana karakterdir. Oğlunu usta – çırak ilişkisi içinde yetiştiren Makasçı Kâmil sanayide amortisör tamiri yapan bir ustadır. Oğlunun sigara içtiğinin farkındadır. İlk başlarda tuvalette sigara içen oğlu, babasının her zaman olduğu gibi bisiklete binip bir iki saat sonra geleceği bir gün dükkânda sigara yakar ancak babası dükkâna beş dakika sonra geri döner. Tokat yemek için bekleyen oğlu, Makasçı Kâmil’in bu durumu doğal karşılayarak “bundan sonra bana dükkânda Kâmil Usta diyeceksin dışarıda baba” diyerek iki rolü birbirinden ayırır. Hikâyedeki ikinci olay ise Makasçı Kâmil’in sigarasına ot karıştırarak içmesidir. Bunu öğrenen Hamamcı Oran (Orhan), Makasçı Kâmil’den bu ottan ister. Ancak gece vakti Makasçı Kâmil’in evine gelerek arkadaşlarının kendisi ile dalga geçtiğinden ot yerine küspe içtiğini söyleyerek kendisi ile dalga geçtiğini söyler. Ancak hamamdan Makasçı Kâmil’in evine peştemalle gelmiştir. Makasçı Kâmil de madem küspeydi hamamdan buraya neden peştemalle geldin? der. Hikâyeyi burada bitiren yazar anlatıcı mizahî bir olayı, hayatın doğal akışı gibi anlatarak bitirir. Dinleyen ise hikâyenin devamını beklese de hikâye burada biter. Sanayide usta – çırak gibi toplumun üzerinde durmadığı insanlar bu hikâyenin ana karakteridir. Çocuğun yetişmesi ve meslek sahibi olması için uğraşan baba, baba ile usta rollerini ayırır. Dayak, sanayi çalışanları içinde usta – çırak arasında görülen ve kabul edilen normal bir durum olmasına rağmen bu küçük insanlar da bilinçlidir. İkinci olayda da küspe ve ot arasındaki farkı anlatırken kullanılan mizahî olay basit gibi görünen ve dikkat çekmeyen basit bir olayda bile farkındalığı ortaya çıkartması bakımından önemlidir. Kavukçu, hayatın farklı insan tiplerinden, küçük insanlardan bahsederken okurun da hayata farklı bir gözle bakmasını ve her insanın ayrı bir hikâyesi olduğunu belirtir. Okur için de gündelik hayatta dikkat çekmeyen kişi ve olaylar dikkatle incelendiğinde görüldüğünden farklıdır. Bu insanlar, hayat okulunda bilinçli insan olmayı öğrenmiş kişilerdir.



Simitçi hikâyesinde de yazar anlatıcının muhatabı doğrudan okurdur: “Bu sabah küçük, sıradan, birçok kişinin ilgisini bile çekmeyecek bir olaya tanık oldum; bana ilginç geldi ama sen ne dersin bilemem” (Kavukçu, 2024: 35) Simitçi daha önce aracı iterek kullanırken değiştirmiş ve elektrikli hale getirmiş diğer simitçiler gibi “simiiit” diye bağırmayan yazar anlatıcının vatvati olarak adlandırdığı simitçinin yaptığı bir klaksondan bahseder. Simit arabasının üzerinde de APACHE yazmaktadır. Yazar anlatıcını dinleyen kişi olayı daha çekici hale getirmek için bu kesin gizli polis, der. Ancak simitçi yolda giderken kendisine doğru gelen köpek, dinleyen için narkotik köpeği olarak adlandırılrsa da bu sahibi olan sıradan bir köpektir. Köpek bir poğaça alır ve parasını arkasındaki adam ödeyerek simitçi ile biraz sohbet ederler. Yazar anlatıcı için bu sıradan simitçi, üç yıl önce şehre geldiğinde kendisi ile konuşan ve günaydın diyen ilk kişidir. Hiç alışveriş yapmamasına rağmen bu selamlaşma her gün devam eder. Dinleyicinin simitçi üzerinden hafiyecilik planları tutmamıştır. Araya girerek sürekli olayı kesmesi karşısında yazar anlatıcı hikâyeyi anlatmayı bırakır. Hikâyede bir olay yoktur. Ancak yine küçük insan, sokakta her gün rastladığımız küçük insanın hikâyesi onu önemli hale getirir. Dinleyicinin bu hikâyeden polisiye bir hikâye çıkartmaya çalışması ise insanların olaylara bakışının ön yargılı olduğunun bir göstergesidir. Simitçi, okur için de her gün karşılaştığı ve ekmek parası peşinde koşan biridir. Simit alıp geçen okur için bu küçük insanlarla olan diyalogunu ve onlarla konuşmanın, selamlaşmanın, köpek sahibinin yaptığı gibi iki kelam da olsa konuşmanın önemli olduğu üzerinde durulur. Okur için bu hikâye de farkındalık oluşturan ve küçük insan olarak gördüğü insanların da bir hikâyesi olduğunun ve onların bir insan olarak önem verilmeye olan ihtiyacını dile getirip bu tip insanlara dikkat çekerek farkındalık oluşturur.

“Vesikalık Fotoğraf” da kurgusu ile dikkat çeken bir hikâyedir. Okurla konuşan yazar anlatıcı, önce Avcılar ve Atıcılar Kulübünden bahseder. Boğazova’da aslanı çifte ile vurup üzerine ayağını koyarak çektiği fotoğrafın, fotoğrafçının vitrininde durduğunu anlatması herkes için o kadar inandırıcıdır ki herkes vitrinde böyle bir fotoğraf olmadığını bildiği halde bu hikâyeye inanır ve gittiklerinde olmadıklarını bildikleri bu fotoğrafı görebileceklerini düşünürler. Meyhanede ise dikkat çeken karakter Ramiz Hoca’dır. Ramiz Hoca dükkâna gelenlerden kimden vesikalık fotoğraf isterse o kişi bir hafta içinde ölür. Yazar anlatıcı, hikâyeyi anlattığı kişiye sorar, senden de fotoğraf istedi mi, diye. Dinleyici kafasını iki yana sallayarak istemediğini ifade etse bile hikâye ilginç bir sonla biter: “Başımı iki yana sallama, yalan söylediğini biliyorum. Biri istemiş işte! Omuz silkip durma! Neden yoksun o zaman?” (Kavukçu, 2024: 44) Hikâye, avcılar ve atıcılar kulüplerindeki av hikâyelerinin gerçek olmadığını ama insanların gerçeğe değil inanmak istediğine inandığını vurgular. Bu gündelik hayatta her olay için çoğu insan benzerdir. İnsanlar gerçeğe değil de inanmak istediklerine inanmayı daha çok tercih eder. Ramiz Hoca’nın ise vesikalık fotoğraf istediği kişinin bir hafta sonra ölmesi bir kurgu olmasına rağmen önemli olan yazar anlatıcı tarafından çarpıcı bir sonla bitirilmesi bakımından önemlidir. Ölen insanların, öleceklerinin önceden belli olduğu ve bu ölümlerin sadece hayatı kaybetmek anlamında değil hayatta gerçekle hayal arasındaki farkın anlaşılabilmesi bakımından dikkat çeken bir unsurdur. Okur için de hayatta dikkat çekmeyen bazı olaylar habersizce gelen ölümün habercisidir. Hayat, yaşam ile her an gelebilecek ölüm arasında hayal gibidir.

“Keşke” adlı hikâye pişmanlıkların insanlar üzerindeki etkisini fark ettirir. Resim yapmayı seçen yazar anlatıcı görünen, ete kemiğe bürünmüş bir insan olmanın ötesinde duyguların da en az insan vücudu kadar önemli olduğu üzerinde durur: “Oysa, diyorum, acı sadece madalyonun bir yüzü; ben var olan her şeyim; acılarımla düşüncelerimle, gerçekleşmeyen düşlerimle. Ben olmayı seçtiğim ya da



seçemediğim her şeyim ve evren kadar sınırsızım” (Kavukçu, 2024; 46). Annesinin kendi resmini yapmasını istediğinde tamam demesine rağmen yapmaması, annesinin ve çocukların olduğu bu resmi yapmamış olmasının verdiği üzüntü bu olayı rüyasında görmesine neden olur. Ancak artık o resmi yapması mümkün değildir. Dinleyici, keşke der, hemen yapsaydın. Belki de annenin asıl isteği senin o resmi yapman değil, seninle dertleşmek için gelmesiydi. Senin de resme henüz başlamamış olman onu kırmış olmalı ki resim düşüncesinden vazgeçmiş, bak rüyalarına girmiş. Yazar anlatıcının keşke demesi pişmanlığın fayda vermediğinin, küçük bir isteğin insanları kaybettikten sonra aslında ne kadar önemli olduğunu göstermesi bakımından nemlidir. Her insan için hayatta o an yapıldığında kıymetli olan ancak vakit geçtiğinde kayıplarla birlikte insan da derin bir acı, hüznün ve keder bırakan pişmanlıkları vardır. Anı yaşamak, yaşamaya çalışarak, işleri, önemli insanların isteklerini ertelemek pişman olmamanın bir çaresi olarak anlaşılabilir.

“Gölgeli Muhabbetler”in ikinci bölümü “Geçmişteki Günlerden Bir Teselli” başlığını taşır ve iki hikâyeden oluşur. İki hikâye birbirinin devamıdır. Boğazova’da lise yıllarında altı öğrencinin kamp yapma istekleri ile başlayan birinci hikâyede arkadaşlığın nasıl başladığı ve bu altı arkadaşın DAAS BETS adlı bir grup kurarak yaptıkları anlatılır. Kavukçu bu bölümde çocukluk yıllarına geri döner. Arkadaşları ile birlikte kamp yapmak birlikte hareket etmek ve arkadaşlığın ayrılmayan bir dostluk, kardeşlik gibi olduğu günleri anlatır. Lise yılları, okul hatıraları her insan için ayrı bir değer taşır. Çocukluğunda geçen bu kamp hikâyesinde Boğazova’nın temizlik, saflık ve doğallığı ile aklında kaldığını ve zorluklara rağmen zararsız bir grubun burada yaşadıkları bölgenin ayrıntılı betimlemesini içerir. İkinci hikâye ise Daasbets buluşmasıdır. Daha önce lise arkadaşı olarak Daasbets grubunu kuran altı genç yıllardan sonra tekrar bir araya gelirler. Ancak kişiler değişmiş, mekânlar değişmiş artık hiçbir şey tanınmayacak hale gelmiştir. Bu değişim ve dönüşüm, çocukluk yıllarındaki o samimi, içten dostluğun da kaybolmasına neden olmuştur. Zaman, insanları değiştirdiği gibi geçmiş hatıralarda bütün güzellikleri ile hatıralarda yaşamaktadır. Bu iki hikâye ilk bölümdeki hikâyelerden farklı olarak geçmiş ve şimdi arasında Cemil Kavukçu’nun diğer hikâye kitaplarında da yer verdiği bir karşılaştırma, geçmişin güzelliği, şimdinin ise modernizmin insanları nasıl değiştirdiğinin bir eleştirisi olarak sunulur.

## Sonuç

“Gölgeli Muhabbetler” adlı hikâye kitabında Cemil Kavukçu, sıradan, günlük hayatta hemen herkesin karşılaştığı, bir şekilde muhatap olduğu küçük insanları konu edinir. Bu insanların da aslında önem verilmesi gereken, konuşmaları dinlenebilecek, muhatap alınacak kişilerdir. Bu kişilerin mesleklerine göre değerlendirilmesi ve “küçük insan” olarak algılanmalarının yanlışlığı konusunda bir farkındalık oluşturmaya çalışır. Yazar anlatıcının bu kişilere odaklanması, onlara anlattığı hikâyelerin gerçek olmasa da bir hayal oluşturması, muhatap olarak alması hikâyelerden daha çok okur için farkındalık oluşturması bakımından önemlidir.

Yazar anlatıcı hikâyeleri yarıda bırakarak ya da kendisini dinlediğini varsaydığı kişilerden öte okur için yeni bir yorum ve okurun bu insanlarla yarıda da kalsa okur için bu küçük insanların önem verilmesi gereken kişiler olduğunu göstermesi bakımından önemlidir. Buradaki konuşmalar okurun tamamlayabileceği ya da tamamlanmasının beklediği hikâyelerdir. Anlatılan hikâyelerin okura yeni bir



yorum ve anlam imkânı tanınması bakımından farklı bir yapıya sahiptir. Yazar anlatıcının seçtiği mesleklerin aslında toplumda önemli işleri yaptığı, bir bakıma insanların zorunlu olarak gittiği, gitmek zorunda olduğu, karşılaştığı insanlardan seçmesi okur için bir farkındalık oluşturacak önemdedir. İnsanların hayatta karşılaştıkları insanlara önem vermeleri, onlarla konuşmalarının önemini vurgulaması ve anlattığı hikâyeleri yarıda bırakarak okurda bir farkındalık oluşturarak gerek bu küçük insanlara önem verilmesi gerektiği ve bu hikâyelerin tamamlanıp tamamlanmamasından çok muhatap olarak almak ve konuşmak gibi insanların üzerinde durmadığı konularda farkındalık oluşturması bakımından önemlidir.

Cemil Kavukçu'nun "Gölgeli Muhabbetler" adlı hikâye kitabı okur için farkındalık oluşturacak, gündelik hayatta sıradan gördüğümüz hiçbir olayın hiç kimsenin aslında öyle olmadığı gerçeğinin gösterilmesi, okurda bir farkındalık oluşturarak bir anlamda okuru sarsarak bu insanlara odaklanmalarının vurgulanması bakımından kurgu olarak ilgi çekici ve Kavukçu'nun diğer hikâyelerinden farklı olduğunu söyleyebiliriz.

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## **The Impact of Unusual Events on the Financial Condition of Companies – on selected examples**

**Ph.D. Anna Dereń**

**The College of Economics and Computer Science, Poland**

### **Abstract**

The aim of the presentation is to indicate the impact of global phenomena, such as the Covid-19 pandemic and the war in Ukraine, on the financial results of companies operating in various industries. Globalization, while facilitating life, also carries risks, including the rapid spread of economic crises. The pandemic and the war in Ukraine have had a varied impact on businesses, depending on the nature of their operations. Companies engaged in online trade, courier services, medical services, and the production of hygiene or medical products have seen growth, while businesses in the gastronomy, apparel, and entertainment industries have faced financial difficulties. The presentation aims to illustrate the diversity of firms' responses to unusual events and the influence of these phenomena on their economic condition. The analysis examines the impact of the economic environment on the operations of different companies, focusing on three entities: Sfinks S.A. (gastronomy industry), Mercator Medical S.A. (medical industry), and Monnari Trade S.A. (apparel industry). The Covid-19 pandemic and the war in Ukraine were crucial factors shaping the business environment. Mercator Medical S.A. experienced increased business activity during the pandemic, enabling expansion and investment without external capital. In contrast, Sfinks S.A. faced financial difficulties, leading to restructuring due to declining revenues and asset depreciation. Meanwhile, Monnari Trade S.A. maintained stability during the challenging pandemic period through swift management actions. Additionally, the outbreak of the war in Ukraine led to increased operational costs for companies, particularly due to rises in raw material and energy prices. Changes in consumer behavior negatively impacted the gastronomy and apparel industries, while the medical sector saw a decline in revenues due to a decreasing number of Covid-19 cases. The presentation thus highlights the varied responses and strategies of entities to the dynamically changing economic environment.



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## **The Animistic ‘Sarna’ Religion at Crossroad: Struggle for survival or detribalisation of the Tribals of Central India?**

**Diksha SINGH**

Senior Research Assistant at International Documentation Centre for Endangered Indigenous languages and Cultures, Dr. Shyama Prasad Mukherjee University Ranchi. Jharkhand 834008  
email: [dikshaa98576@gmail.com](mailto:dikshaa98576@gmail.com)

**Bimal KACHHAP**

Assistant Professor, S.S.J.S.N college, Garhwa Jharkhand 822114. Email:  
[adityakachhap9@gmail.com](mailto:adityakachhap9@gmail.com)

**Sushant BHAGAT**

Research Assistant at International Documentation Centre for Endangered Indigenous languages and Cultures, Dr. Shyama Prasad Mukherjee University Ranchi. Jharkhand 834008  
email: [584bhagat@gmail.com](mailto:584bhagat@gmail.com)

**Riya LAKRA**

Research Assistant at International Documentation Centre for Endangered Indigenous languages and Cultures, Dr. Shyama Prasad Mukherjee University Ranchi. Jharkhand 834008  
email: [riyalakra0208@gmail.com](mailto:riyalakra0208@gmail.com)

### **Abstract**

With the formation of a separate State Jharkhand from erstwhile Bihar, the Political efforts have well amalgamated with religion. Jharkhand being a tribal dominated state, they constitute a significant vote bank. It was right from the formative years, the political parties understood the alliance of religion with politics. There was a surge in the religious activities of the tribals, especially the Animistic faith. The unifying efforts of the Sarna Faith witnessed a new energy and all kinds of assessment, reforms, and the process of integration found its way among the Sarna faith. There was a drastic change in socio-religious practices which encompasses gender roles as well. These changes unified the Sarna faith followers but there was a cost for it. In the entire process many of the ancestral practices were foregone and new practices which were adapted seemed to be borrowed from the religious sects of the neighbourhood. This positions the Sarna Faith at a crossroad. The changes that have been adopted may



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challenge their sociocultural identity. This paper makes an effort to understand these efforts and ascertain whether it is a struggle for survival or are they under the process of detribalisation?

**Keywords:** Sarna, Detribalisation, Animistic, Socio-religious change, tribal identity.



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## 5.Sınıf Temel Kavramlar ve Puzzlemaker

**Betül SABİR**

*Prof. Dr. Tamer KUTLUCA*

Dicle Üniversitesi Eğitim Bilimleri Enstitüsü, Türkiye

[betulsabir@gmail.com](mailto:betulsabir@gmail.com)

### Öz

Puzzlemaker 11 farklı bulmaca türü oluşturup, oluşturduğunuz bulmacaları yazdırabileceğiniz oldukça işlevsel bir programdır. Bu program ile hazırlanan çalışmaların birçok öğrencide oluşmuş olan matematik sadece işlemlerle ilgili sıkıcı bir derstir algısını yıkarak öğrencilerin matematiğe karşı olumlu bir tutum geliştirmesini sağlayacağı düşünülmektedir. Ayrıca programda bulunan kelime arama, çaprazlama gibi bulmacaların öğrencilerin matematik kavramlarını ezberlemek yerine anlamlı olarak öğrenmelerine faydalı olacaktır. Bu çalışmada puzzlemaker programı kullanılarak matematik bulmacalarının nasıl hazırlanabileceği 5.sınıf temel geometrik kavramlar konusu aracılığı ile açıklanmıştır.

**Anahtar Kelimeler:** Puzzlemaker, temel geometrik kavramlar, matematik öğretimi



## Literary D(a)emon: The Author according to Antoine Compagnon

**Kosovar BERISHA**

**PhD cand./University of Prishtina**

**Kosovo**

### **Abstract**

The discursive book "Literature, Theory, and Common Sense" by the French literary theorist Antoine Compagnon presents his focused research endeavor around seven theoretical-literary issues: literature, authorship, world, readers, style, history, and value. Examining them in interrelation with each other, these seven knots constitute his theoretical system, where each knot initially responds to a relation with itself and then to the relation with other knots. Organized around these seven concepts, the book provides a synoptic genealogy of literary theories from antiquity to contemporaneity, placing them in debate with each other, on the one hand, and with what is known as "common sense," on the other hand, to also leave room for authorial stance, which adheres to a middle path and mostly reaches an aporetic conclusion. This paper focuses particularly on Compagnon's treatment of the fierce theoretical debate of the 1960s on the role and function of the author, an issue to which he dedicates the largest chapter of the book titled "author." In this paper, through the spirit and method of metacritical and commentary, it aims to identify Antoine Compagnon's contribution to the debate on the author, while focusing on the rivalries and conflicts that different theories of literature maintain with each other in relation to the steadfast resistance that "common sense" imposes on them.

**Keywords:** author, literature, intention, interpretation, literary theory



## **Influence of Physical Activity on the Quality of Life of Women in the Premenopausal Period**

**lek. Jakub GRUSZKA**

**Warszawski Szpital Południowy Katedra Ginekologii i Położnictwa, Polska**

**lek. Anna ZWIERZYŃSKA-FURMANEK**

**Zakład Anatomii, Collegium Medicum, Uniwersytet Jana Kochanowskiego w Kielcach, Polska**

**lek Karolina KOMAR-GRUSZKA**

**Szpital Dziecięcy im. Prof. Dr med. Jana Bogdanowicza w Warszawie, Polska**

**dr n. med. Olga ADAMCZYK-GRUSZKA**

**Collegium Medicum, Uniwersytet Jana Kochanowskiego w Kielcach, Polska**

### **Abstract**

The study aimed to assess the impact of physical activity on the quality of life of women in the premenopausal period, with particular emphasis on the analysis of ovarian reserve size and leptin levels. A review of scientific literature and analysis of clinical trial data related to this topic were conducted. The results indicate that regular physical activity positively affects the overall health status of women in the premenopausal period by improving physical fitness, reducing the risk of heart disease, diabetes, and certain types of cancer. Moreover, a significant association between physical activity and ovarian reserve size is observed, which may be crucial for fertility and chances of natural conception. Additionally, physical activity may regulate leptin levels, which could be important for weight control and reducing the risk of obesity-related diseases in premenopausal women. The conclusions of the study suggest that promoting physical activity may be an effective strategy in maintaining the health and good quality of life of women in the premenopausal period.

**Keywords:** premenopause, physical activity, leptin, AMH

### **INTRODUCTION**

Physical activity is crucial in maintaining the health and quality of life of women of reproductive age. Physical exercise can influence women's health, improve their physical condition and reduce the risk of cardiovascular diseases, metabolic syndrome, PCOS, insulin resistance, diabetes and female genital cancer. Physical activity affects the size of the ovarian follicular reserve and, therefore, the fertility of women of reproductive age. The greater the ovarian follicular reserve, the greater the chances of natural conception. Physical activity maintains the appropriate level of sex hormones, which affects



the clinical condition and health of women. It can also regulate the concentration of leptin, a hormone responsible for appetite and metabolism. Regular physical exercise lowers its level, which helps maintain a healthy weight and reduces the risk of obesity-related diseases. The study will be conducted among women in their reproductive years after the Covid 19 pandemic.

### **Aim of the study**

The aim of the project is to determine the impact of physical activity on the quality of life of women during the reproductive period, biochemical blood parameters, including the concentration of sex hormones and the size of the ovarian follicular reserve.

### **Material and methods**

The study population was a group of 200-250 women aged 30-45 from the Świętokrzyskie Voivodeship. The research included: a diagnostic survey, measurement and assessment of selected blood parameters, and documentation analysis. The authors of the project used the International Physical Activity Questionnaire (IPAQ) and the WHOQOL-BREF Questionnaire. The analysis of women's medical records was carried out using an original scientific and research protocol. Questions regarding the demographic and social situation of the respondents were included in the information attached to the IPAQ questionnaire.

The research tools used made it possible to assess the differences in the level of quality of life of the surveyed women depending on physical activity and to determine the relationships between the mentioned features and the size of the ovarian follicular reserve. An important achievement of the research is the identification of socio-demographic determinants of the quality of life and physical activity of the surveyed women. The comparative analysis took into account such features as: place of residence, education, socio-professional status, main source of income, marital status and other variables. The interview uses standardized research tools that meet psychometric criteria. The advantage of the project is the original research subject. An innovative attempt to determine the correlation between the physical activity of women during the reproductive period, the time of onset of premenopause and the assessment of ovarian follicular reserve may be considered innovative. Determining the relationship between physical activity and hormone levels may contribute to explaining the mechanisms responsible for the development of body weight disorders, which are common in the examined age period. The study anticipates potential therapeutic benefits:

- improving physical health through regular physical activity
- increasing fertility by increasing the size of the ovarian follicular reserve
- general improvement of life by increasing physical and mental fitness
- correction of body weight by lowering leptin levels
- increased health awareness of women during their reproductive years, which may influence long-term preventive measures.



## Conclusions

Participating in research may offer participants the opportunity to engage in educational and self-discovery processes, which may have a positive impact on their health behaviors, lifestyle, and reproductive abilities.

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## Examining the Efficacy of Reading Strategy Instruction on Comprehension and Motivation in High School EFL Students

Elsa VULA

Nazli TYFEKÇI<sup>1</sup>

Elda DOMI

University “Fehmi Agani” in Gjakova, Kosovo

### Abstract

Reading in a foreign language is essential for academic success. It helps students improve their language skills and exposes them to different cultures and perspectives. By reading in a foreign language, students can expand their vocabulary, enhance their comprehension, and develop critical thinking skills. Additionally, it allows them to access a broader range of academic resources and stay updated on the latest research and developments in their field of study. Overall, reading in a foreign language is valuable for academic success. This research examined the efficacy of teaching reading strategies to Gjakova High School students studying English as a second language. In addition, the research aimed to determine if instructing these techniques would enhance the student's awareness of their reading abilities and foster a greater desire to read in English. The effectiveness of the teaching was evaluated through the use of a questionnaire and reading assessment, as well as through semi-structured interviews and group conversations with the students. High school English GPA, reading skills, and frequency positively correlated with success in reading comprehension tests. Moreover, the perceived frequency of reading strategy and motivation are positively correlated. The obtained results from qualitative data processing show that some respondents have made significant progress, not only in reading but also in motivation to read, self-confidence, and independence. Overall, the findings suggest that students who excel in high school English and have strong reading skills are likelier to perform well on reading comprehension tests. Additionally, students who perceive themselves as using reading strategies frequently and are motivated to read are also more likely to succeed in reading comprehension. These results highlight the importance of developing reading skills and fostering motivation and self-confidence in students to promote their overall reading success.

**Keywords:** Learning Reading Strategies, Motivation to Read in English, Reading Comprehension in English, Reading Strategies

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<sup>1</sup> Corresponding Author



## Introduction

Reading is a skill that has evolved over centuries, allowing us to access and interpret information in written form. Through reading, we can delve into different perspectives, acquire knowledge, and explore new worlds. It has become an essential tool for communication, education, and personal growth, shaping our understanding of the world and our identities. Reading has also played a crucial role in developing critical thinking skills. Engaging with various texts teaches us to analyze information, evaluate arguments, and form opinions.

Moreover, reading fosters empathy by exposing us to diverse experiences and emotions, enabling us to understand and connect with others on a deeper level. Ultimately, the power of reading lies in its ability to ignite our imaginations, inspire creativity, and empower us to become lifelong learners. When someone reads, he/she changes both physiologically and intellectually. Many scientists agree that the brains of bilingual or multilingual people are connected in a different, prosperous way. Barac and Bialystok (2011) provide a summary of research on bilingual children from their inception in the late 19th century to the last five years and conclude that bilingualism or early multilingualism has a positive impact on cognitive development and metalanguage awareness that also extends to late middle age.

On the contrary, “Bilingual attention control experience enhances the development of cognitive control in bilingual children, retains the advantage of cognitive control in adulthood, and protects older bilinguals from the weakening of this function with age” (Bialystok 2007, p. 210). These findings suggest that the benefits of bilingualism extend beyond childhood and into old age. Bilingual individuals have been shown to have better cognitive control, which allows them to focus their attention and ignore irrelevant information. This enhanced cognitive control not only helps in everyday tasks but also acts as a protective factor against age-related cognitive decline. Therefore, it is evident that being bilingual or multilingual from an early age has long-lasting positive effects on cognitive development and mental well-being throughout a person’s life. Indeed, many scholars provide evidence of the benefits of mastering at least two languages. Therefore, reading enriches us even on an intellectual level. Reading as a human activity has only existed for a few thousand years, but modern life would be unimaginable without it.

Reading in a foreign language is “the way to spread our general culture and open the doors of the world,” quotes one of the respondents in this research. Indeed, reading in a language other than our mother tongue allows us to access information otherwise unavailable. Suppose someone masters reading in a foreign language. In that case, it will be possible to read literary works written in that language without the mediation of a translator and thus have a completely different experience. Reading in a foreign language is considered a necessary skill for study success and the main way to learn foreign languages independently. Likewise, reading in a foreign language is one of the requirements that the highest schools place on us. However, the European Survey on Language Competences results, conducted for the first time in 2011, show that 46% of high school students who read in their first foreign language (English) scored A2 under A2 in the Framework of Common



European Reference for Languages. So, after ten years of learning English, they cannot use a simple language to communicate everyday topics.

Moreover, almost 20% of these students achieved a result at the pre-A1 level, which is particularly worrying. Some of these students improve their reading skills during high school, but many still need to achieve a B2 grade in English, precisely what is expected of high school students. Many obligations demotivate them. They cannot afford them, do not even achieve temporary results, and often give up their studies. Insufficient ability to enroll in studies is one of the most common reasons for dropping out of studies. Science has demonstrated the benefits of multilingualism; the European Union has made multilingualism one of its objectives and has made language learning a priority in the Strategic Education and Training Framework 2020. Since 2008, Kosovo has made teaching a foreign language a mandatory subject starting from the first grade of primary school. This decision was based on the European Union's recommendations and the positive results of a European project to teach early foreign languages. Unfortunately, the institutions did not provide the conditions for early learning and foreign language learning as they existed during the project's implementation, which is one of the reasons why our students achieved below-average results. That being said, regardless of many factors crucial to early learning success, such as the number of contact hours (in) competent teachers, (in) appropriate materials, and continuity of teaching, it is challenging to achieve high results. All of the above can contribute to the fact that more students fail to achieve the results in reading in a foreign language than expected. Aware of the large number of students coming to high schools with poor reading skills in their mother tongue and foreign language and the problems it may cause them to succeed in their studies (Carrell 1989) or even discourage them from staying, it was decided to conduct research that aims to show that even at university it is not too late to help them improve their reading skills by understanding a foreign language, increasing metacognitive awareness of reading strategies and motivation to read in English. The research demonstrated that even at the university level, it is possible to assist students in improving their reading skills in a foreign language. By increasing their metacognitive awareness of reading strategies and motivation to read in English, these students were believed to overcome the challenges they faced due to poor reading skills in their mother tongue and foreign language. This intervention aimed to help them succeed in their studies and prevent them from becoming discouraged and dropping out. For example, professors in a university language program may implement an interactive reading workshop where students are taught various strategies, such as skimming and scanning, to improve their comprehension.

Additionally, they may incorporate engaging and culturally relevant reading materials to motivate students to read in English, such as articles on current affairs or excerpts from popular literature. This targeted intervention can empower students to overcome language barriers and develop strong reading skills, ultimately increasing their academic success and retention rates. By equipping students with skimming and scanning techniques, they can quickly identify a text's essential information and main ideas. This enhances their reading speed and helps them understand complex texts more efficiently. Moreover, using culturally relevant reading materials fosters a sense of connection and relevance and exposes students to a wide range of vocabulary and language structures. As a result, students become more confident in their English reading abilities, leading to improved performance in other academic subjects and a greater likelihood of staying in school.



Based on Yapp, de Graaff, and van den Bergh's study (2021), it was found that the L2 reading strategy intervention effectively improved L2 reading comprehension among first-year college students. Students who participated in the intervention showed significant improvement in their reading comprehension performance, particularly between the second and third measurement occasions, indicating that the effect of the intervention exceeded that of natural growth in reading skills. The intervention particularly benefited less proficient readers, who derived more benefits than their more proficient counterparts. Additionally, the study observed that students from general secondary education or university preparatory education backgrounds improved more in their average L2 reading performance than students from senior vocational education, likely due to the latter group's less frequent exposure to complex academic texts in English and a general lack of background knowledge in L2 reading. Overall, the study supports the explicit instruction of reading strategies in L2 and suggests that such interventions can be a valuable addition to higher education, especially for students from vocational backgrounds. Whereas based on Al-Jarrah and binti Ismail (2018) the most commonly used reading strategies among the Arab EFL learners in the study were logical knowledge under linguistic schema, formal construction under formal schema, cultural knowledge under cultural schema, and prior knowledge and conceptual knowledge under content schema. Specifically, logical knowledge was the most frequently used strategy within the linguistic schema, with seven out of ten participants employing strategies such as studying the title, reading the main topic, and understanding the title. Formal construction was the dominant strategy under formal schema, with five participants using it to grasp the contextual or extrinsic idea from the text. Whereas regarding Koch and Spörer's study (2017) was indicated that students who participated in the intervention, which was an adaptation of reciprocal teaching, showed improvements in reading comprehension and reading speed compared to the control group that did not receive training on how to teach reading strategies. The intervention utilized an evidence-based teaching method, including modeling, scaffolding, and repeated practice. The success of the training was measured using a pre-posttest control group design with standardized tests for reading comprehension and reading speed. Repeated measures ANOVAs were used to compare the development of students in the two conditions. In the post-test, the students in the intervention group outperformed the control group students in reading comprehension and reading speed.

### Definitions of reading

Although it can be said that everyone knows what reading is, it is still challenging to define it. This will be illustrated below by outlining several different approaches to the definition of reading. Perfetti, in his oft-cited 1985 book "Reading Ability," defines reading as "the skill of transforming the written word into a spoken word." This definition emerged several years after Widdowson defined reading as "the process of obtaining linguistic information through the written medium." While the first definition emphasizes decoding, the second emphasizes understanding and indicates a shift in the focus of reading research in the second half of the 1970s. Aware of the limitations of his original definition, Perfetti supplemented it by stating that "reading can be interpreted as thinking guided by the written word" (Urquhart and Weir 1998, p. 17). Today, it is known that decoding and understanding are necessary for successful reading. Grabe describes them as "a complex ability to



extract or build meaning from a text” (Grabe 2014, p. 8). It notes that reading definitions are being upgraded, adapted, or changed in line with theoretical knowledge and new research. According to Koda and Zehler (2008), reading is also a critical aspect of literacy and “an essential component of academic learning.”

Smith (1992) continues to state that reading applied in the context of the written word is only an example of the specific use of the term. Psychologists’ interest in reading dates back to the beginning of psychology as a separate discipline<sup>1</sup> and followed the stagnation after World War I; it flourished in the modern beginnings of psycholinguistics in the mid-1960s. More recently, research has moved away from classical psycholinguistic themes and toward a broader view of how meaning is grounded in perception and procedures. This shift in focus has been driven by advancements in technology and cognitive science, allowing researchers to explore the intricate connections between language, perception, and cognition. Today, psycholinguistics encompasses various subfields, such as neurolinguistics, computational linguistics, and cognitive psychology, all working together to unravel the complexities of language processing and comprehension. Researchers hope to gain a deeper understanding of the fundamental mechanisms underlying human language acquisition and communication by investigating how meaning is grounded in perception and procedures.

Furthermore, psycholinguistics explores the role of language in shaping our thoughts, beliefs, and cultural identities. It investigates how language affects our perception of the world and influences our cognitive processes, including memory, attention, and problem-solving. Researchers aim to develop interventions and therapies to improve communication and language skills in individuals with language impairments by studying language development and language disorders. Ultimately, the field of psycholinguistics strives to bridge the gap between language and cognition, shedding light on the intricacies of human communication and the human mind.

### Purposes of reading

As was mentioned, readers read different texts for different purposes. Reading for educational purposes involves acquiring knowledge and understanding concepts. Students read textbooks, research papers, and scholarly articles to deepen their understanding of a subject. The goal is to extract, critically analyze, and apply information to their studies. Reading for educational purposes is essential for students as it helps them grasp complex ideas and develop analytical thinking skills. By reading textbooks and research papers, students can understand a subject comprehensively, enabling them to apply the acquired knowledge in their studies. This type of reading involves active engagement with the text, highlighting key points, and critically analyzing the information to support their academic endeavors. Ultimately, reading for educational purposes paves the way for intellectual growth and enhances students’ ability to excel in their chosen fields.

Furthermore, reading can broaden students’ perspectives and expose them to different ideas and viewpoints. By exploring diverse perspectives, students can develop a more well-rounded

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<sup>1</sup> The year of the foundation of psychology as a separate discipline is 1879 when Wundt's laboratory was founded (Garnham et al. 2006).



understanding of the subject matter and become more open-minded. Additionally, reading improves students' communication skills as they learn new vocabulary and sentence structures, allowing them to express their thoughts and ideas more effectively. Overall, reading for educational purposes is essential for academic success (Aslantaş & Er, 2016) and personal development. Although Alderson (2000) argues that research on the impact of reading purposes on the reading process is not significant, it does suggest evidence of a difference between the five macro-purposes of reading. A similar categorization is given by Grabe (2014) when referring to reading for educational purposes such as: reading to search for information, for quick comprehension, learning, integrating information, evaluating, criticizing and using information and for general understanding (Grabe 2014).

### *Research Methods*

For testing the hypotheses, a quasi-experimental study was designed and conducted. Participants were divided into groups, and quantitative and qualitative data were collected by a mixed method. The mentioned method was used for data triangulation, i.e., to enable the most profound and complete insight into the phenomena measured and described in this research, which cannot be directly observed: reading strategies and motivation to read. Since questionnaires and interviews are most often used in research on reading and motivation strategies, this research also used questionnaires as a collective source of quantitative and qualitative data and interviews as a source of qualitative data on the use of reading strategies and motivation to read. By collecting both quantitative and qualitative data from several different sources, it has been attempted to get a complete picture of the motivation and strategic behavior, habits, and attitudes towards reading, in addition to significant statistical processing that allows generalization of conclusions and interprets interpreting to the meaning, they attach to them.

### Research question

According to the research aims, bearing in mind, of course, the findings from similar research to data, the following questions arose:

1. Is there a difference between the respondents depending on how well they performed on a reading test with comprehension, knowledge of reading strategies, and motivation to read in English?
2. Does metacognitive awareness of reading strategies affect comprehension results and metacognitive awareness of reading strategies affect motivation to read in English?
3. Do explicit teaching of reading strategies have a positive effect on reading comprehension, metacognition, and motivation to read?

### Hypotheses

The following hypotheses are defined according to the research goal and research questions.



### Hypothesis 1:

Depending on their reading comprehension scores, metacognitive awareness of reading strategies, and motivation to read English, respondents differ in their ability to read.

### Hypothesis 2:

Average grades in English at high school, self-assessment of reading skills in English and more frequent reading in English are related to the results of reading comprehension tests in English.

### Research Aims

The main goal of the research is to determine whether there are positive effects on the explicit teaching of reading strategies as an independent variable on reading comprehension in English as a foreign language. In addition, greater interest was displayed in other respondents who showed greater metacognitive awareness<sup>1</sup> of reading strategies after such teaching and whether teaching strategies would affect their greater motivation to read in English as a foreign language. Furthermore, it was sought to determine whether control variables such as grade point average in high school English classes, self-assessment of English reading skills, and the frequency of reading in English were related to comprehension reading, reading strategies, and motivation to read. Finally, it sought to gain insights into how respondents understand foreign language reading and reading strategies, what (de) motivates them to read in English, and how important they attach to different motivational factors and reading strategies.

### Participants

The director authorized the study and included participation from students of the High School Gymnasium “Hajdar Dushi” in Gjakova. The students were sorted into four groups based on the first letter of their last name. A total of 150 students took part in the study. One group was selected at random for this research. However, the research was conducted continuously during the mentioned period, so the initial sample of 150 respondents decreased due to the need for more interest and attention. Thus, the final number of respondents who participated in the research was 78 (N = 78).

### Instruments

The purpose of the research is reflected in the ability to collect a large number of targeted data, standardized and organized by a large number of respondents. Also, this data collection should be submitted physically through questionnaires or interviews. The advantages of these questionnaires are that they ensure the respondents’ anonymity and thus avoid the respondents’ bias.

### *Results*

This chapter will list the results obtained from the processing of data collected from the previously described instruments. Firstly, the results related to their perception of English language success in high school and satisfaction with that success will be presented, followed by a section dedicated to

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<sup>1</sup> The key to successful strategic reading, especially for academic reading, is considered to be metacognitive awareness.



respondents' satisfaction with English language teaching. Afterward, it will be presented in detail the answers that emerge from the questions about the respondents' perception of reading and its skills and habits, followed by the reading strategies. Lastly, the results will be shown on the motivation regarding reading in English and the analysis of the results obtained according to the research hypotheses.

Due to the scope and specific aims of the research, the only data collected was based on the success of English language respondents in each generation of high school "Hajdar Dushi," and their processing reveals a high average grade ( $M = 4.5$ ).

Table 1 below shows that most respondents have a GPA of 5.0 in all high school grades, which supports their excellent success in mastering the English language.

Table 1. Average Grade Per Number of Students in English

<i>Average grade (0-5)</i>	<i>Number of students</i>	<i>Percentage (%)</i>
<i>&lt; 3,0</i>	0	0
<i>3,0</i>	2	2,6
<i>3,5</i>	7	9,0
<i>4,0</i>	16	20,4
<i>4,5</i>	24	30,8
<i>5,0</i>	29	37,2
<i>In total</i>	<b>78</b>	<b>100</b>

Nevertheless, it should also be noted that 12 respondents (15.3%) have at least one good grade in English in high school, which indicates the group's heterogeneity and the teaching problems that occur in such a group. It can be concluded that the students achieved a high average grade in the English subject in high school regardless of attending any additional English classes.

## Findings

### Perception of Success of English in High School and its Satisfaction Success

Bearing in mind that our respondents learned English exclusively in a didactic environment and that "attitudes and motivation can be most effectively influenced in the classroom itself," the collected data is based on the factors that the respondents consider the most important for better success in English in high school. Suppose the factors are grouped into those related to the student (own motivation for success, regular writing assignments, and attending additional English classes), teachers (teacher's personality and teaching methods), and class situation (class size, working atmosphere, and quality of teaching materials). In that case, it has been found that the majority of respondents (54.05%) attach



dominant importance to factors related to the student (see Figure 1), which is very positive given that it is something that they can control themselves, as opposed to the factors related to the teacher (27.03%) or class situation (5.41%). In this way, respondents will be able to influence their motivation and thus contribute to better success.

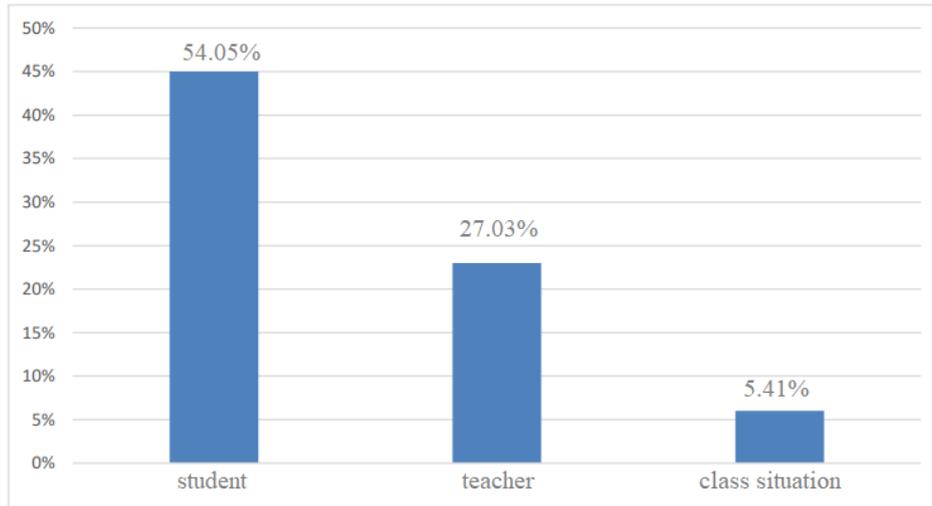


Figure 1. Answers Regarding the Most Important Grouped Factors for Better Success in English

A further representation of each factor is represented in Figure 2, with respondents answering on how it affects the success of English subject in high school.

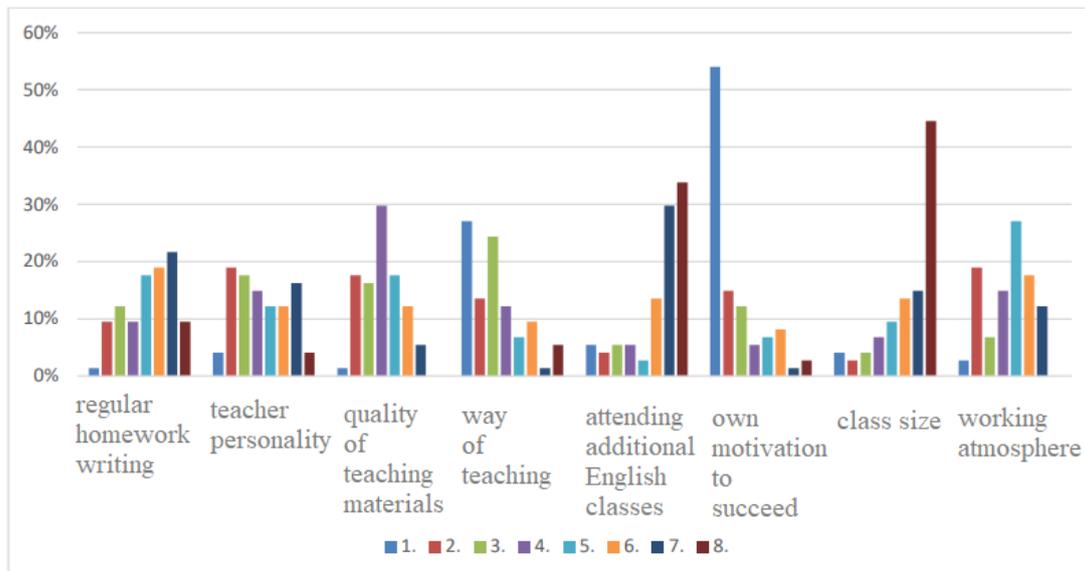


Figure 2. Answers Regarding the Most Important Factors for Better Success in English



It should be noted that the respondents mainly attributed the personality of teachers and the quality of teaching the 2nd or third place in importance, which corresponds to the previously acknowledged statement about the significant influence of the didactic environment on students' motivation for success. Furthermore, the work atmosphere is low on the list of importance for many respondents. However, almost 20% of them consider it the second most influential factor for being successful in English in high school. Comparing these results to those related to the class size factor (44.59%), it can be established that respondents believe that a thriving work atmosphere can be achieved in the classroom regardless of its size. On the other hand, such data indicate the existence of a group of respondents who rely on classroom learning and for whom the social dimension of learning is essential. In contrast, a different group of respondents rely more on independent learning at home, which is further supported by group interviews.

### Reading in English

General Questionnaire 1 also collected data on how respondents understand the reading process in a foreign language (English) and the difference between reading in their mother tongue and a foreign language.

To the question, "What would you answer if someone asked you what it means to read in English?" the answers were quite different, which then were grouped into the following categories:

- Answers focused on the difference between the mother tongue and the foreign language.
- Answers that explained reading in a foreign language as a lesson.
- Answers that explained reading in a foreign language as the acquisition of a general culture.
- Answers that described reading in a foreign language as a valuable use of time.
- Answers that explained reading in a foreign language as a process.
- Answers that described reading in a foreign language as a particular experience.

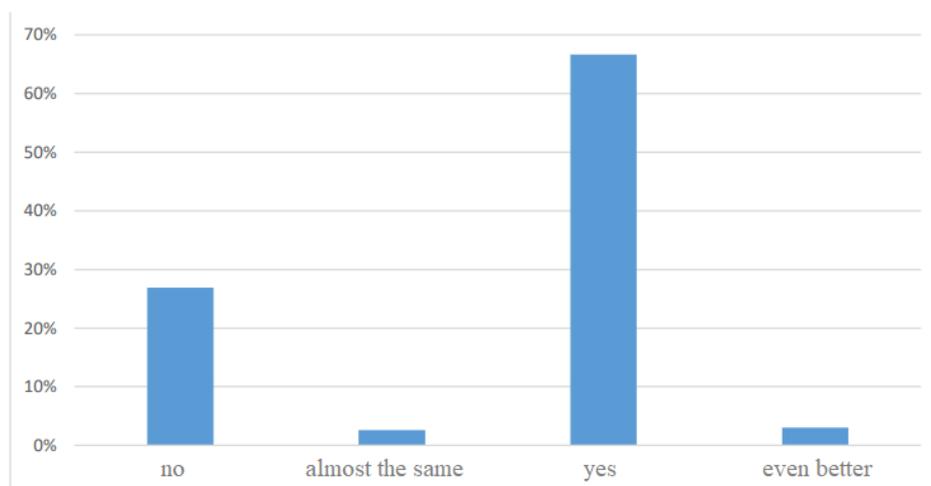


Figure 3. Answers Regarding the Difference in Comprehension in a Native/Foreign Language



The results that came out from the question from General Questionnaire 1, “Can a person read English and his/her mother tongue equally well?” are displayed in Figure 3. The question was formulated in this way to encourage respondents to think more broadly, which ended up exactly achieving that. As Figure 3 shows, most respondents believe that one can read meaningfully in a foreign language as well as in their mother tongue (67%), and 3% of respondents believe that this is almost to the same extent, if not even better in regards to understanding a foreign language (“if the person” lives “in a foreign language,” “if the person lives in an environment where only that language is used”). However, a significant number of respondents (27%) believe that someone can never read comprehensibly in a foreign language like in his/her mother tongue.

### Frequency of Reading in English

It is stated in the literature with multiple examples that reading frequency and range are closely related to reading motivation and reading comprehension, respectively. Although most of the research is related to the mother tongue and the respondents are much younger than the respondents in this research, the relation between the frequency of reading in English and the average grade in high school satisfaction with grades and reading self-assessment in English was attempted to be established. This will be further presented in Figure 4, as there is a considerable difference between the frequency of reading English as a first foreign language and other languages.

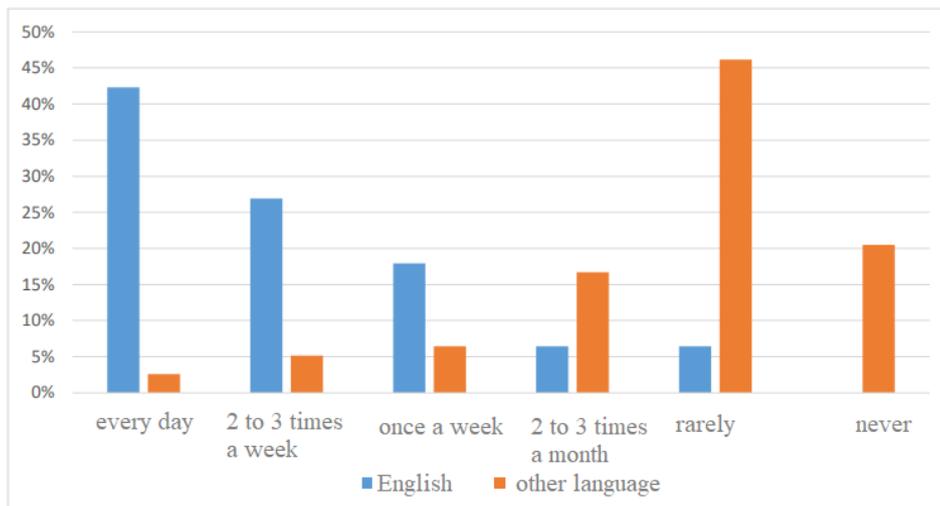


Figure 4. Answers Regarding the Frequency of Reading for First and Other Language

While 42.31% of respondents read in English every day, only 2.56% do so in another foreign language (in this case, German language). Moreover, only 6.41% rarely read in English, while 46.25% of respondents said they rarely read in another foreign language. Particularly devastating is that 20.51% of respondents have yet to read in another foreign language. It can be assumed that the reason for such



a large discrepancy in reading frequency between English and another foreign language is twofold. The first reason is their excellent perception of reading skills in English compared to the other foreign languages, and the other reason is their more significant need to read in English compared to the other foreign languages. Interestingly, in a joint conversation, respondents confirmed they would consider themselves better at reading in English than in other foreign languages. However, their excellent need to read in English was confirmed only in leisure reading.

### Learning Strategies for Reading

Before presenting the analysis results of the data obtained from the Learning Strategies Questionnaire, how respondents defined and explained this key term will be highlighted. Note that, just like strategy researchers, they used several different names to begin their definition. A respondent defines *strategies* as techniques or rules; interestingly, a respondent defines them by the same name (“Learning strategies are strategies for improving reading”). On the other hand, two respondents called them methods, i.e., plans, while 15 other respondents (19.23%) defined them without a direct meaning. A relatively small proportion of respondents stated that they needed to learn the learning strategies (12.82%), and one respondent showed a complete lack of interest in knowing what they were.

Most respondents see strategy as a way (57.69%), but descriptions of their implementation goals vary. Two respondents describe learning strategies as a way to organize writing or organize reading. At the same time, one definition refers to understanding the text (“Learning strategies are a way of organizing reading in a foreign language to understand text better”), and the other refers to time efficiency (“Learning strategies are a way of organizing reading in the context of time”). Three respondents describe reading strategies as “a way of learning” (“Learning strategies are how an individual absorbs knowledge more”), “Learning strategies are how different people learn different things or foreign languages. “It should be noted that these respondents recognize the individual nature of strategies just like their peers, who give the following answers: “Everyone has their way,” “Everyone has their strategy,” “Everyone has their strategy as they learn and read,” “Individual,” “way of reading.” In addition, five respondents describe them as ways to memorize data or text. Six respondents in their definitions also emphasize speed and efficiency as their important features (“Learning strategies are a way to understand and read a foreign text as quickly as possible,” “Learning strategies are ways of reading texts”), which then aims to enable the reader to understand and memorize as much text at a time. 37.18% of respondents explained learning strategies to read or access a text. Only two met this definition as follows: “Learning strategies are the way I read because I do not read newspapers textbooks in the same way” and “Learning strategies are the way you approach the text (the way you read, the way you think). “Of particular importance to us is that about one a-quarter of respondents (26.98%) 150 cited comprehensions as an important element in the definitions, as evidenced by “Learning strategies are ways of reading that help us better develop comprehension reading skills.” “Learning Strategies are the way it helps each other to understand the text,” “Learning strategies are the way it tries to understand the text.”



### Perception of Using Reading Comprehension Strategies in English

Data on perceived use were obtained from respondents using the Reading Strategies Questionnaire and displayed in Figure 5. After conducting descriptive statistics analyses, it was partially confirmed that the results were derived from descriptive responses. These responses were categorized into three groups: strategies for resolving problems, auxiliary strategies, and global strategies. Reading strategies with global scope are universally used when reading. It involves thinking about the reading itself and why it is taking place.

Moreover, global reading strategies can be used for all types of reading; thus, they relate directly to the text and tend to reflect the information. Problem-solving strategies sound precisely like the strategies you can use to solve problems when reading is executed. An example of a problem-solving strategy, according to The Writing Resource Blog (2001), would be reading slowly and adjusting your reading speed to handle complex material, re-reading when you get off track, paying close attention and re-reading when a text becomes challenging, stopping to think about what you have read, and visualizing the information to increase retention.

The reader uses auxiliary strategies to facilitate the text by simplifying it, using visualization, and skipping unknown words. Moreover, auxiliary strategies mainly focus on the general understanding of the complete concept instead of micro-analyzing every single part of the text.

Namely, the respondents in the first phase of the research state that they use problem-solving strategies the most ( $M = 3.91$ ) but use auxiliary strategies the least ( $M = 3.18$ ) and not global strategies ( $M = 3.52$ ). The order of frequency of use of individual subgroups is almost the same in the third phase of the research ( $M = 3.99$  for reading problem-solving strategies;  $M = 3.69$  for global strategies;  $M = 3.46$  for auxiliary strategies). In addition to determining which subgroup respondents use most often, it has been revealed that they often use reading problem-solving and global strategies and rarely/moderately use auxiliary strategies.

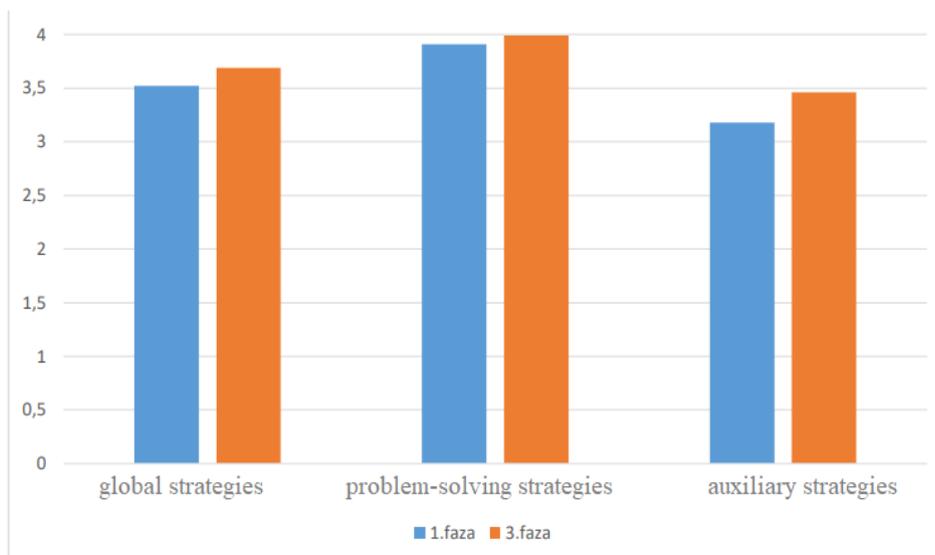


Figure 5. Answers Regarding Reading Strategies used by Respondents



### *Discussion*

During the last two teaching hours in the third phase of the research, the respondents were interviewed in groups. All presented results of reading comprehension tests and the questions were regarding the data collected and processed. In addition, this whole procedure was presented to them. This allowed them to ask themselves everything they were interested in about the research and to look back at the teaching of the English language course.

Based on the conversations with them, the following conclusions arose:

- 1) Since the working atmosphere during classes is ranked low in importance for success in learning, 20% of respondents still put it in second place. Regarding influence, it is shown that there are two groups with different learning styles: those who rely on teaching materials and those to whom the social dimension of learning and interaction with the teacher is also essential. Therefore, it is considered extremely important to enable both groups to learn in the way that suits them best, which is confirmed by a series of studies on learning and teaching styles. Although the respondents state that their work atmosphere is not the key to success in the English course, they still believe that it significantly reduces their motivation to learn, and not exclusively learning for an exam.
- 2) Most respondents considered that their motivation is the key to success in an English course, but only 15% of respondents are satisfied with that. They stated that it is difficult for them to find motivation to learn because they believe they will achieve good results with relatively little effort, unlike other courses requiring much learning to achieve similar success. That being said, they invest energy in self-motivation to take these exams because they have almost exclusively one goal: to achieve enough ECTS credits for enrolment.
- 3) Respondents unanimously stated that they are better at reading in English, and only some think that they have adopted their second language well enough to read professional literature. Since it is much harder for them to read in another foreign language, they read in English more often and prefer doing that. Although they like reading in English (even if it is just for fun), they still do it way less often than when they have to read before enrolling for an examination, mainly due to the limited/lack of time.
- 4) Although 80% of respondents state that they would consider reading skills in English necessary for their future work, they still mention that this will be something they will have to face in the future since, currently, they must focus on taking exams during their studies. Moreover, they do not see the benefit of thinking about the reading process because they know how to read in English, which would be a waste of time.

However, the respondents in the experimental group stated that learning about reading strategies is helpful because it is concrete and practical and can help them achieve their goal more easily - taking the exam. Weaker readers were delighted, while several interested readers stated that they had tried to apply reading strategies in German and were satisfied with the result.



5) Respondents generally expected better results on comprehension reading tests. The weakest among them are satisfied with the success, especially those who have made significant progress from the first to the third phase of the research. They stated that they felt much more confident and believed they could overcome some other obstacles unrelated to reading in English during their studies.

Respondents from the group of excellent readers are somewhat disappointed with the results but admit that they did not take the reading comprehension test that seriously in the first phase of the research, so they did not fully answer it as “if it was a real exam.” Almost all respondents stated that solving the reading comprehension test in the third phase of the research was an enormous burden for them, considering that they wrote the colloquium on the same day and that the semester was generally over. Then, their stress levels were very high. They added that they were drained, frustrated, and more concentrated than they should have.

Referring to the results achieved and the primary hypothesis, there is not a direct relation between better performance on comprehension tests and the usage of reading strategies or metacognitive awareness. However, motivation to read in a foreign language was slightly improved amongst respondents who used reading strategies. It was also observed that greater reading frequency did not necessarily indicate success in understanding a foreign language. That being said, the hypothesis and the research aim did not positively affect the respondents’ performance in comprehension tests in the way that was initially targeted.

Although relatively new, learning strategies are today one of the basic human activities which, without life in modern society, is unimaginable. Nowadays, an individual is expected to learn fluently not only his native language but also at least one foreign language. Since the first-year students of “Hajdar Dushi” gymnasium face for the first time the obligation to read a large number of professional texts in a foreign language, the research was conducted to understand the reading habits and skills with which they come to study, their thoughts and attitudes about reading, their strategic competencies and motivation for reading and the problems they face when reading in foreign languages.

The paper also presents the research conducted to determine the effects of teaching reading strategies on (A) comprehension of English texts, (B) metacognitive awareness of the use of English reading strategies, and (C) motivation to read English. It also sought to determine if the control variables were related to each other and the dependent variables. Although a statistically significant difference in success was expected in the reading comprehension test between respondents and students in the study’s first phase, this was not confirmed at the end. This is particularly interesting given the significantly higher metacognitive awareness of the use of reading strategies among respondents and their greater motivation to read in English. This result can be explained by the difference between declarative knowledge of reading strategies and their actual and successful use. Thus, although respondents are more aware of a range of reading strategies and state that they use them more often than other students, it is concluded that awareness and greater frequency of use do not reflect better performance on the comprehension test.

Namely, respondents are more motivated to read in English but not necessarily as required to study. However, in selecting additional reading materials, the inclusion of texts was as diverse as possible



within the legal topics provided by the curriculum. In addition, respondents mentioned the saturation on these topics at the end of the research, which certainly encourages further research into this phenomenon.

### *Conclusion and Recommendations*

To summarize, reading comprehension is used in a variety of classroom activities. It is a crucial skill that students need to develop in order to succeed academically. Whether analyzing a text, answering questions, or participating in class discussions, reading comprehension plays a vital role in understanding and engaging with the material being taught. Additionally, it helps students to think critically, make connections, and draw conclusions based on the information they have read. Furthermore, reading comprehension extends beyond the classroom and is essential in everyday life. From reading newspaper articles to understanding instructions, having strong reading comprehension skills enables individuals to navigate the world around them effectively.

Moreover, it is a valuable tool for lifelong learning, allowing individuals to explore new topics and gain knowledge independently. Ultimately, honing reading comprehension skills enhances academic success and fosters personal growth (Ozer et al., 2023) and intellectual curiosity. The main point is to allow students to come into contact with real-life language and enhance their knowledge in the best way possible. It makes them active and responsible for the reading process. In order to achieve this, six critical reading strategies are recommended to help students grasp a foreign language and slightly improve their results in comprehension tests. According to Mulatu and Regassa' study (2022) regarding the teaching practices of reading skills in grade nine at Dil-Ber Secondary School in Ethiopia revealed that the teachers needed to properly implement the three phases of teaching reading, which include pre-reading, while-reading, and post-reading stages. Specifically, the pre-reading and post-reading stages needed to be given more emphasis. As a result, the pedagogically suggested teaching reading techniques and procedures must be appropriately applied. The study also found that teachers primarily used the students' textbooks and did not utilize supplementary reading materials such as magazines, newspapers, and novels. Additionally, vocabulary teaching needed more emphasis, which is a critical element in teaching reading skills.

These strategies include previewing the text, making predictions, asking questions, making connections, summarizing, and evaluating. Using these strategies, students can engage with the text on a deeper level and better understand the content. Also, in Al-Ahdal and Alolaywi's research article (2022) regarding the reading strategies of Saudi EFL learners, revealing that both male and female students exhibit low performance on IELTS tests, with females slightly outperforming males. The study, employing a mixed-method approach, identifies that learners use a variety of reading strategies, including skimming, scanning, guessing meanings from context, and summarizing. It emphasizes the importance of developing cognitive and metacognitive reading strategies to improve reading abilities over time. Additionally, the research indicates no significant gender differences in using metacognitive skills during inquiry-based learning. The article suggests the necessity of training in metacognitive skills for better learning outcomes and recommends further research on reading strategies in the Saudi context. Peer reviews acknowledge the article's overall quality while recommending enhancements in result presentation, statistical analysis, and gender representation.



Additionally, these strategies also encourage students to think critically and analyze the text, which can lead to improved comprehension skills and overall academic success. Ultimately, the goal is for students to comprehend the material and develop a lifelong love for reading and learning.

In conclusion, below are presented six key strategies that can help solve problems regarding reading skill implementation:

- Sharing reading goals*: Students are encouraged to share their reading goals, especially with their teachers, to define the proper reading strategies. Sharing reading goals will help students and teachers understand the vision of the reading process.
- Sharing success criteria*: Teachers sharing success criteria with students will help them develop better study methods. This is a critical component of building a successful reading strategy.
- Providing feedback*: Providing feedback is essential to the student's development and progress. In addition, providing feedback to teachers helps them enhance their teaching methods and use of materials.
- Mutual evaluation (of peers)*: Peer evaluation contributes to acknowledging one's mistakes. It also helps provide others with constructive feedback, allowing them to enhance their work.
- Self-assessment* is a critical step in everyone's work, as it helps students review their progress. It also contributes to acknowledging a student's strengths and weaknesses.
- Use of effective questioning techniques* is a method used by teachers to help students independently assess themselves. It provides guidelines for students to approach their work critically.

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## 2021 ve 2022 Yılları Liseye Geçiş Sınavı (LGS) Matematik Sorularının Öğrenme Alanları ve Yenilenmiş Bloom Taksonomisi Bağlamında Karşılaştırmalı Değerlendirilmesi

**Pınar ÜNLÜ ERASLAN**

**Matematik Öğretmeni, Dicle Üniversitesi, Eğitim Bilimleri Enstitüsü, Diyarbakır**

**Tamer KUTLUCA**

**Prof.Dr., Dicle Üniversitesi, Z.G. Eğitim Fakültesi, Diyarbakır**

### Öz

Bu araştırmada 2020-2021 ve 2021-2022 LGS matematik dersi sorularının Bloom taksonomisine ve alt öğrenme alanlarına göre incelenmesi amaçlanmıştır. Bu kapsamda belirtilen yıllarda LGS’de yer alan toplam 80 matematik sorusu incelenmiştir. Araştırmada nitel araştırma desenlerinden durum çalışması deseninden, veriyi toplamak için doküman incelemesinden yararlanılmıştır. Bu çalışmada verileri analiz etmek için tümdengelimsel içerik analizi kullanılmıştır. Hatırlama basamağında herhangi bir sorunun sorulmaması, çalışmada dikkat çekici bir sonuç olarak düşünülmüştür. Çalışmadan elde edilen sonuçlar bağlamında, taksonomi açısından soruların bütün basamaklara hitap edecek düzeyde ve dengeli şekilde dağıtılması gerektiği önerilmiştir.

**Anahtar sözcükler:** LGS, Matematik, Bloom taksonomisi



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## Ortaokul Öğrencilerinin Matematik Öğretmeni Hakkındaki Metaforik Algılarının İncelenmesi

Hatice Nur KONAKLI

Sorumlu yazar. Milli Eğitim Bakanlığı, Cebelibereket Şehit Ali Alkan Ortaokulu, Osmaniye/Türkiye. [haticenurkonakli@gmail.com](mailto:haticenurkonakli@gmail.com)

Prof. Dr. Davut KÖĞÇE

Niğde Ömer Halisdemir Üniversitesi, Eğitim Fakültesi, Niğde/Türkiye. [kogced@gmail.com](mailto:kogced@gmail.com)

### Öz

Bu araştırmanın amacı ortaokul öğrencilerinin matematik öğretmeni hakkında metaforik algılarının sınıf seviyesi, cinsiyet, anne-babanın eğitim durumu ve matematik dersini sevme değişkenlerine göre incelenmektir. Bu amaçla araştırma nitel araştırma yaklaşımlardan olgubilim yöntemine göre yürütülmüştür. Çalışmanın örneklem grubunu 2023-2024 eğitim öğretim yılında Osmaniye ilinde Milli Eğitim Bakanlığı'na bağlı bir ortaokulda öğrenim görmekte olan 5., 6., 7. ve 8.sınıf toplam 230 öğrenci oluşturmaktadır. Veri toplama aracı olarak araştırmacılar tarafından geliştirilen ve “*Matematik öğretmeni.....gibidir. Çünkü.....*” ifadesinin bulunduğu “Metaforik Algılarının İncelenmesi Anketi” kullanılmıştır. Bu kapsamda elde edilen metafor verileri içerik analizine tabi tutulmuştur. Araştırma sonucunda ortaokul öğrencilerinin matematik öğretmeni hakkında birçok metafor geliştirdikleri, en fazla geliştirdikleri metaforların *hesap makinesi* ve *melek* metaforları olduğu, sınıf düzeyine göre en az metaforun beşinci sınıfta öğrenim gören öğrencilerin geliştirdiği, kız öğrencilerin erkek öğrencilere göre daha çok metafor geliştirdiği, öğrencilerin metafor geliştirebilmelerinde anne ve babanın eğitim durumu ve matematik dersini sevmenin etkilendiği sonucuna ulaşılmıştır.

**Anahtar Kelimeler:** Ortaokul Öğrencisi, Matematik Öğretmeni, Metaforik Algı

### Abstract

The aim of this research is to examine the metaphorical perceptions of secondary school students about their mathematics teacher according to the variables of grade level, gender, educational status of the parents and liking the mathematics lesson. For this purpose, the research was conducted according to the phenomenology method, one of the qualitative research approaches. The sample group of the study consists of a total of 230 students in the 5th, 6th, 7th and 8th grades studying in a secondary school affiliated with the Ministry of National Education



in Osmaniye province in the 2023-2024 academic year. It was developed by the researchers as a data collection tool and is like "Mathematics teacher.....". The metaphor containing the expression "Because....." "Metaphorical Perceptions Examination Survey" was used. In this context, the metaphor data obtained were subjected to content analysis. As a result of the research, secondary school students developed many different metaphors about their mathematics teachers, the most developed metaphors were calculator and angel metaphors, the least metaphors according to grade level were developed by fifth grade students, female students developed more metaphors than male students, students' ability to develop metaphors was based on mother. It was concluded that the education level of the father and liking mathematics course were affected.

**Keywords:** Secondary School Student, Mathematics Teacher, Metaphorical Perception

## GİRİŞ

İnsan yaşamı için önemi ve bilimsel gelişmelere olan katkıları nedeniyle matematik öğretimi önem kazanmakta ve öğretimine okul öncesinden başlanılarak ilköğretim ve sonrasında geniş zamanlar ayrılmaktadır (Altun, 2018). Fakat öğretimine atfedilen öneme rağmen matematik dersi öğrencilerin büyük bir çoğunluğu tarafından zor olarak algılanmaktadır (Dursun & Dede, 2004). Öğrencilerin bu algılarının oluşmasında birçok faktör olmasına rağmen en büyük neden matematik öğretmeniyle ilgili yaşantılarıdır. Çünkü matematik öğretmeni, öğrencilerinin dersine karşı algı ve tutumlarıyla ilgilenmez ve dersinde sadece öğrenme konularına odaklanırsa matematiğin yapısından kaynaklanan etmenlerin de etkisiyle matematik dersi zor bir ders haline gelir (Aydın & Pehlivan, 2010). Matematiği korkulan bir ders olmaktan çıkarmak için öğrencilerin matematikle ve matematik öğretmeni ile ilgili olumlu algı ve tutumlar geliştirmeleri önemlidir. Ortaokul matematik öğretim programında "Öğrencilerin matematiğe yönelik tutum geliştirmelerini sağlamak." (Milli Eğitim Bakanlığı [MEB], 2009) ifadesi ile öğretmenin rolünü vurgulamaktadır. Bu bağlamda öğrencilerin matematik öğretmeni hakkındaki algılarının onların matematiksel kazanımlara ulaşmalarında ve başarılı olmalarında önemli olduğu ifade edilebilir (Koç, 2014). Özellikle eğitim ortamlarında yer alan, okul, sınıf, öğrenci, öğretmen vb. kavramlarına yönelik algıları saptamada kullanılan araçlardan birisi de metaforlardır. (Yetim & Karaca, 2018)

Metafor, bireylerin herhangi bir olgu, durum veya süreç hakkındaki algı ve tutumlarının belirlenmesini sağlayan, söz konusu öğelere karşılık gelen zihinsel kavramlardır. (Şahin, 2013). Bu bağlamda ortaokul öğrencilerinin matematik öğretmeni hakkındaki metaforik algılarının ortaya çıkarılmasının özelde matematik öğretmeni hakkındaki olumsuz algıların giderilmesine yönelik uyarlamalar yapılmasına genelde ise etkili bir matematik eğitim sürecinin gerçekleştirilmesine katkı sağlayacağı düşünülmektedir. Ortaokul öğrencilerinin matematik öğretmeni hakkındaki metaforik algılarının incelemeyi amaçlayan bu çalışmanın araştırma soruları aşağıdaki gibidir:

1. Ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri metaforlar nelerdir?
2. Ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri metaforların sınıf düzeyine göre dağılımı nasıldır?
3. Ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri metaforların cinsiyete dağılımı nasıldır?



4. Ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri metaforların annenin eğitim durumuna göre dağılımı nasıldır?
5. Ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri metaforların babanın eğitim durumuna göre dağılımı nasıldır?
6. Ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri metaforların matematik dersini sevmeye durumuna göre dağılımı nasıldır?

## YÖNTEM

### Araştırma Modeli

Bu çalışmada nitel yaklaşım kapsamında fenomenoloji (olgubilim) deseni kullanılmaktadır. Fenomenoloji günlük yaşamda sıklıkla karşılaştığımız, bize yabancı olmayan fakat anlamsal karşılığı tam olarak kavrayamadığımız olguları araştırmak için kullanılmaktadır (Yıldırım & Şimşek 2016). Bu desenin seçilmesinde öğrencilerin matematik öğretmeni hakkındaki olgularının metaforlar aracılığıyla detaylı ve derinlemesine incelenmesine olanak tanınması neden olmuştur.

### Evren ve Örneklem

Bu araştırmanın evrenini 2023-2024 eğitim-öğretim yılında öğrenim gören ortaokul beş- sekizinci sınıf öğrencileri oluşturmaktadır. Örneklemi ise bu evrenden seçilen 2023-2024 eğitim-öğretim yılında Osmaniye ilinde MEB' da öğrenim görmekte olan ortaokul beş - sekizinci sınıf öğrencileri oluşturmaktadır. Örneklemeye dahil edilen öğrencilerin dağılımı ile ilgili bilgiler aşağıda Tablo 1'de verilmiştir.

**Tablo1.** Örneklem öğrencileri hakkında bilgi

	5.Sınıf	6.Sınıf	7.Sınıf	8.Sınıf	Toplam (%)
<b>Kız</b>	30	28	25	30	113 (%49,13)
<b>Erkek</b>	26	27	35	29	117(%50,87)
<b>Toplam (%)</b>	56 (% 24,34)	55 (%23,91)	60 (%26,03)	59 (25,65)	<b>230</b>

Tablo 1 incelendiğinde 56, 5.sınıf öğrencisinin 30'unun kız, 26'sının erkek; 55, 6.sınıf öğrencisinin 28'i kız, 27'si erkek; 60, 7.sınıf öğrencisinin 25'i kız, 35'i erkek; 59, 8.sınıf öğrencisinin 30'unun kız, 29'unun erkek olduğu görülmektedir.

### Veri Toplama Aracı

Bu çalışmanın verileri araştırmacılar tarafından hazırlanan "Metaforik Algıların İncelenmesi Anketi" ile toplanılmıştır. (Ek 1) Ölçek iki bölüm olarak tasarlanmıştır. Ölçeğin birinci bölümünde öğrencilerin okul, sınıf, cinsiyet, matematiği sevmeye durumlarına ilişkin kişisel bilgi soruları yer almaktadır. İkinci bölümde ise "Matematik öğretmeni.....gibidir. Çünkü....." ifadesi bulunmaktadır. Öğrencilere doldurmaları için 15 dakika süre tanınan bu ölçek, araştırmanın veri toplama aracını oluşturmuştur.



## Verilerin Analizi

Bu araştırma kapsamında elde edilen metafor verilerinin analiz edilmesinde içerik analizi tekniği kullanılmıştır. İçerik analizinin güvenilirliğinin sağlanıp sağlanmadığına yönelik ise Miles-Huberman (1994) güvenilirlik katsayısı hesaplanmıştır. Miles-Huberman (1994) güvenilirlik katsayısı ” Güvenirlik = (Benzer kategorilerin sayısı) ÷ (Benzer ve farklı kategorilerin toplam sayısı) ” formülü ile hesaplanılarak sağlanmaya çalışılmıştır. Bu hesaplamalar sonucunda iki farklı araştırmacının analiz kategorileri arasındaki benzerlik % 95 oranında bulunmuştur. Bu oranın %70 ve daha fazla olması (Miles & Huberman 1994) bu araştırmadaki kategorilerin güvenilirliği sağlandığını ifade etmektedir.

## BULGULAR

Bu bölümde araştırma örneklemini oluşturan ortaokul beşinci, altıncı, yedinci ve sekizinci sınıf öğrencilerinin matematik öğretmenleri hakkındaki metaforik algıları ve bu algılarını belirtmede kullandıkları ifadeler, araştırma problemleri kapsamında bulgular aracılığıyla sunulmuştur. Bulguların sunumunda frekans ve yüzde değerlerinin yer aldığı tablolardan faydalanılmıştır. Bu bağlamda öncelikle yapılan çalışmada elde edilen verilere gelen bir bakış açısı sunması bakımından ortaokul öğrencilerinin matematik öğretmenleri hakkında geçerli metafor geliştiren ve geliştiremeyen öğrencilerin sınıf düzeyine ve cinsiyetlerine göre dağılımı Tablo 2’ de verilmiştir.

**Tablo 2.** Matematik öğretmenleri hakkında geliştirilen metafor sayısının sınıf düzeylerine ve cinsiyetlerine göre dağılımı

Sınıflar	Kız Öğrenciler		Erkek Öğrenciler		Tüm Öğrenciler	
	Öğrenci Sayısı	Geçerli Metafor Sayısı	Öğrenci Sayısı	Geçerli Metafor Sayısı	Öğrenci Sayısı	Geçerli Metafor Sayısı
5.Sınıf	30	24	26	16	56	40 (%71,42)
6.Sınıf	28	28	27	17	55	45 (%81,81)
7.Sınıf	25	25	35	25	60	50 (%83,33)
8.Sınıf	30	26	29	19	59	45 (%76,27)
<b>Toplam</b>	<b>113</b>	<b>103 (%57,22)</b>	<b>117</b>	<b>77 (%42,78)</b>	<b>230</b>	<b>180 (%78,26)</b>

Tablo 2 incelendiğinde; matematik öğretmenleri hakkında geçerli metafor geliştirilen kız öğrencilerin sayısının erkek öğrencilerden daha fazla olduğu; tüm sınıf düzeylerinde ise kız öğrencilerin 103 (%57,22) matematik öğretmenleri hakkında metafor geliştirmede erkek öğrencilere göre daha başarılı oldukları görülmektedir. Sınıf düzeyi bazında ise yedinci (%83,33) ve altıncı (%81,81) sınıftaki öğrencilerin geçerli metafor geliştirmede sekizinci sınıftaki (%76,27) öğrencilere göre daha başarılı



oldukları ve yaklaşık olarak aynı oranda metafor geliştiren beşinci sınıftaki öğrencilerin (%71,42) diğer sınıftaki öğrencilere göre en düşük oranda metafor geliştirdikleri görülmektedir.

Ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri metaforların dağılımları Tablo 3'te sunulmuştur.

**Tablo 3.** Ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri metaforlar

Matematik Öğretmeni Metaforları	Öğrenciler	f	%
Hesap makinesi	Ö1, Ö2, Ö6, Ö8, Ö97, Ö117, Ö119, Ö123, Ö133, Ö156	10	5,55
Arı	Ö3, Ö11, Ö14, Ö15, Ö87, Ö89, Ö92, Ö106	8	4,44
Pusula	Ö4, Ö27, Ö48, Ö49, Ö95, Ö103, Ö112	7	3,88
Melek	Ö5, Ö35, Ö93, Ö98, Ö113, Ö120, Ö121, Ö127, Ö138, Ö162	10	5,55
Bilgisayar	Ö7, Ö74, Ö114, Ö165	4	2,22
Profesör	Ö9, Ö19, Ö61, Ö118, Ö179	5	2,77
Tiyatro Yönetmeni	Ö10	1	0,55
Laptop	Ö12	1	0,55
Gemi Yelkeni	Ö13	1	0,55
Lider	Ö16, Ö17, Ö18, Ö25	4	2,22
Anne-Baba	Ö20, Ö171	2	1,11
Karınca	Ö21, Ö82, Ö104	3	1,66
Güneş	Ö22, Ö79, Ö99, Ö100, Ö116, Ö147, Ö158	7	3,88
Sabır taşı	Ö23, Ö24, Ö26, Ö69	4	2,22
Assolist	Ö28	1	0,55
Yazar	Ö29	1	0,55
Işık	Ö30, Ö33, Ö56, Ö141, Ö175	5	2,77
Silgi	Ö31, Ö59, Ö60, Ö101	4	2,22
Kalp	Ö32, Ö137	2	1,11
Anne	Ö34, Ö52, Ö70	3	1,66
Kitap	Ö36, Ö128, Ö155, Ö169, Ö170, Ö177,	7	3,88



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	Ö180		
Deniz feneri	Ö37	1	0,55
Rehber	Ö38, Ö54, Ö85, Ö102	4	2,22
Yüksek Katlı Bina	Ö39	1	0,55
Serin bir hava	Ö40	1	0,55
Oyun	Ö41	1	0,55
Bilim İnsanı	Ö42, Ö58, Ö67, Ö72	4	2,22
Anne yarısı	Ö43	1	0,55
Arama motoru	Ö44, Ö45, Ö125, Ö126, Ö142	5	2,77
Musluk	Ö46	1	0,55
Ağaç	Ö47 , Ö136	2	1,11
Mimar	Ö50, Ö66	2	1,11
Navigasyon	Ö51	1	0,55
Bilgin	Ö55	1	0,55
Zaman	Ö57	1	0,55
Robot	Ö62, Ö76, Ö111	3	1,66
Teknik direktör	Ö63, Ö172	2	1,11
Dünya	Ö64, Ö149	2	1,11
Yolculuk	Ö65	1	0,55
Rehberlikçi	Ö68	1	0,55
Mum	Ö71	1	0,55
Evren	Ö73	1	0,55
Fener	Ö75	1	0,55
İğne	Ö77	1	0,55
Einstein	Ö78	1	0,55
Yıldız	Ö80, Ö88, Ö90, Ö109, Ö144	5	2,77
Uzman	Ö81	1	0,55
Orkide	Ö83	1	0,55
Gezegen	Ö84	1	0,55
Dahi	Ö86	1	0,55

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Doğal taşlar	Ö91	1	0,55
Kaptan	Ö94	1	0,55
Abla	Ö96, Ö129	2	1,11
Mücevher	Ö105, Ö146, Ö160	3	1,66
Akıllı Tahta	Ö107	1	0,55
Çiçek	Ö108	1	0,55
Gökyüzü	Ö110	1	0,55
Google	Ö115, Ö132, Ö153, Ö161, Ö168	5	2,77
Arkadaş	Ö122, Ö124, Ö148, Ö167	4	2,22
Merdiven	Ö130	1	0,55
Bahçıvan	Ö131	1	0,55
Beyin	Ö134, Ö178	2	1,11
Şef	Ö135	1	0,55
Makine	Ö139, Ö164	2	1,11
Kahraman	Ö140	1	0,55
Cevap Anahtarı	Ö145	1	0,55
Komedyen	Ö150, Ö152	2	1,11
Bilinmeyen	Ö151, Ö173	2	1,11
Mavi Renk	Ö154	1	0,55
Harita	Ö157	1	0,55
Çevirmen	Ö159	1	0,55
Kapı	Ö163	1	0,55
Eczane	Ö166	1	0,55
Uçak	Ö174	1	0,55
Ayna	Ö143, Ö176	2	1,11

Tablo 3 incelendiğinde matematik öğretmeni hakkında toplam 180 ortaokul öğrencisinin toplam 77 farklı metafor geliştirdikleri ve bu metaforların çoğunun (f=70, %90,90) olumlu özellikte olduğu belirlenmiştir. En çok geliştirilen metaforun % 5,55 oran ile *hesap makinesi* ve *melek* metaforları olduğu, daha sonra sırasıyla; % 4,44 oran ile *arı*, % 3,88 oran ile *pusula*, %2,77 oran ile *profesör*, *ışık*, *anne yarısı*, *yıldız*, *google*, % 2,22 oran ile *bilgisayar*, *lider*, *sabır taşı*, *silgi*, *rehber*, *bilim insanı*, *arkadaş*, % 1,66 oran ile *karınca*, *anne*, *robot*, *mücevher*, % 1,11 oran ile *anne-baba*, *kalp*, *ağaç*,



mimar, teknik direktör, dünya, abla, beyin, makine, komedyen, bilinmeyen, ayna metaforlarının geliştirildiği görülmüştür. Ayrıca % 0,55 oran ile de matematik öğretmeni hakkında farklı birçok (f=41, %53,24) metaforun geliştirildiği de görülmektedir.

Çalışmaya katılan ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri metaforlardan bazıları aşağıda öğrenci ve cinsiyet kodlarıyla birlikte sunulmuştur:

**hesap makinesi:** “Matematik öğretmeni hesap makinesi gibidir. Çünkü, Soruları hızlı doğru ve pratik bir şekilde çözer.” (Ö6)

**melek:** “Matematik öğretmeni melek gibidir. Çünkü, matematikte hep iyiliğimizi ister melek gibidir. Hep başarılı olmamızı ister.” (Ö113)

**arı:** “Matematik öğretmeni arı gibidir. Çünkü, kendisi çalışır bizi de çalıştırır.” (Ö106)

**pusula:** “Matematik öğretmeni pusula gibidir. Çünkü, bize yol gösterir. Matematikte yaptığımız hataları düzeltir.” (Ö27)

**profesör:** “Matematik öğretmeni profesör gibidir. Çünkü, Matematikle ilgili her şeyi bilir.” (Ö61)

**ışık:** “Matematik öğretmeni ışık gibidir. Çünkü, matematik öğretmeni yansıttığı pozitif ışıkla dersi sevdirebilir.” (Ö175)

**google:** “Matematik öğretmeni google gibidir. Çünkü, matematikle ilgili her şeyi bilir. Matematikle ilgili ne sorsak google gibi hemen cevap verir.” (Ö168)

**anne-baba:** “Matematik öğretmeni anne-baba gibidir. Başarılarımızı desteklerken yanlış yaptığımızda onlar gibi doğru yolu gösterir.”

**çevirmen:** “Matematik öğretmeni çevirmen gibidir. Bilmediğimiz bir dili bize çevirir gibi matematiğin dilini anlatır. Böylece de bizlere yeni şeyler öğretir.” (Ö159)

**komedyen:** “Matematik öğretmeni komedyen gibidir. Çünkü, matematiği bize eğlenceli bir şekilde anlatır. Bu yüzden matematik öğretmenini seyri zevki müthiş bir komedyene benzetiyorum.”

**bilinmeyen:** “Matematik öğretmeni bilinmeyen gibidir. Çünkü, matematik konuları anlatırken bilinmeyen(x) gibi sürprizlerle doludur. Hızlı duygu değişikliği yaşar.” (Ö151)

**teknik direktör:** “Matematik öğretmeni teknik direktör gibidir. Çünkü, matematikte sınıfımızı takım gibi çalıştırarak okulumuzu temsil eder.” (Ö172)

**silgi:** “Matematik öğretmeni silgi gibidir. Çünkü, matematikte yaptığımız yanlışlarımızı silgi gibi düzeltir. Bize doğruyu anlatır.” (Ö31)

**rehber:** “Matematik öğretmeni rehber gibidir. Çünkü, bize yol gösterir. Matematikte yanlış yaptığımızda bizi doğruya yönlendirir.” (Ö38)

**bilim insanı:** “Matematik öğretmeni bilim insanı gibidir. Çünkü, karmaşık gelen matematiği bizlere öğretir. O yüzde bilim adamları gibi karışık bir beyne sahiptirler.” (Ö72)

**robot:** “Matematik öğretmeni robot gibidir. Çünkü, sürekli öğrencilerine komutlar verir. Ve duygusuz davranır.” (Ö62)



**kitap:** “Matematik öğretmeni kitap gibidir. Çünkü, matematik öğretmeni bütün konulara bir kitap gibi hakimdir.” (Ö155)

**bilgisayar:** “Matematik öğretmeni bilgisayar gibidir. Çünkü, bilgisayar gibi bize bilgi verir. Bizlerde o bilgileri sınav başarılı olmak için kullanırız.” (Ö165)

**Sabır taşı:** “Matematik öğretmeni sabır taşı gibidir. Çünkü, matematik öğretmenimizde Eyüp Peygamber sabrı var. Biz yanlış yaptığımızda ve derste konuştuğumuzda sabır gösteriyor.” (Ö69)

**oyun:** “Matematik öğretmeni oyun gibidir. Çünkü, matematiği oyun gibi eğlendirerek öğretir.” (Ö41)

**güneş:** “Matematik öğretmeni güneş gibidir. Çünkü, bilgileriyle bizleri aydınlatır. Biz öğrencileri kendi eksenini etrafında döndürür. Yani, o güneş biz dünya gibiyizdir. Biz öğrenciler matematik öğretmenlerimizin ışığından ilham alırız.” (Ö158)

**harita:** “Matematik öğretmeni harita gibidir. Çünkü, matematikteki konular arası yolculuk etmede danıştığımız harita gibidir. Konular arası ilişkileri bize gösterir.” (Ö157)

Ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri metaforların sınıf düzeyine göre dağılımları Tablo 4’te sunulmuştur.

**Tablo 4.** Ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri metaforların sınıf düzeyine göre dağılımı

5.Sınıf	f	6.Sınıf	f	7.Sınıf	f	8.Sınıf	f
Hesap makinesi	4	Pusula	2	Hesap makinesi	5	Hesap makinesi	1
Arı	4	Bilgisayar	1	Arı	4	Melek	2
Pusula	2	Profesör	1	Pusula	3	Bilgisayar	1
Melek	2	Karınca	1	Melek	6	Profesör	1
Bilgisayar	1	Güneş	1	Bilgisayar	1	Anne-Baba	1
Profesör	2	Sabır taşı	1	Profesör	1	Güneş	2
Tiyatro Yönetmeni	1	Işık	1	Karınca	1	Işık	2
Laptop	1	Silgi	2	Güneş	3	Kalp	1
Gemi Yelkeni	1	Anne	2	Silgi	1	Kitap	5
Lider	4	Kitap	1	Rehber	1	Arama motoru	1
Anne-Baba	1	Rehber	2	Arama	2	Ağaç	1



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				motoru			
Karınca	1	Bilim İnsanı	4	Robot	1	Teknik direktör	1
Güneş	1	Anne yarısı	1	Yıldız	3	Dünya	1
Sabır taşı	3	Arama motoru	2	Dahi	1	Yıldız	1
Assolist	1	Musluk	1	Doğal taşlar	1	Mücevher	2
Yazar	1	Ağaç	1	Kaptan	1	Google	3
Işık	2	Mimar	2	Abla	2	Arkadaş	2
Silgi	1	Navigasyon	1	Mücevher	1	Beyin	1
Kalp	1	Bilgin	1	Akıllı Tahta	1	Makine	2
Anne	1	Zaman	1	Çiçek	1	Kahraman	1
Kitap	1	Robot	2	Gökyüzü	1	Cevap Anahtarı	1
Deniz feneri	1	Teknik direktör	1	Google	2	Komedyen	2
Rehber	1	Dünya	1	Arkadaş	2	Bilinmeyen	2
Yüksek Katlı Bina	1	Yolculuk	1	Merdiven	1	Mavi Renk	1
Serin bir hava	1	Rehberlikçi	1	Bahçıvan	1	Harita	1
Oyun	1	Mum	1	Beyin	1	Çevirmen	1
		Evren	1	Şef	1	Kapı	1
		Fener	1			Eczane	1
		İğne	1			Uçak	1
		Einstein	1			Ayna	2
		Yıldız	1				
		Uzman	1				
		Orkide	1				
		Gezegen	1				

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Tablo 4 incelendiğinde matematik öğretmeni hakkında geçerli metafor geliştiren öğrencilerin daha çok sekizinci sınıf (f=50) düzeyinde olduğu, ardından bu sırayı yedinci (f=45) ve altıncı sınıf (f=45) öğrencilerinin takip ettiği, en az sayıda geçerli metaforun ise beşinci sınıf (f=40) düzeyinde geliştirildiği görülmektedir. Bunun yanı sıra beşinci sınıf düzeyinde en fazla geliştirilen metaforların (f=4) değeriyle hesap makinesi, arı ve lider olduğu; altıncı sınıf düzeyinde (f=4) değeriyle bilim insanı metaforu, yedinci sınıf düzeyinde (f=6) değeriyle melek metaforu, sekizinci sınıf düzeyinde ise (f=5) değeriyle kitap metaforu olduğu görülmüştür.

Ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri metaforların cinsiyete göre dağılımları Tablo 5'te sunulmuştur.

**Tablo 5.** Ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri metaforların cinsiyete dağılımı

Matematik Öğretmeni Metaforları	Kız Öğrenciler	f	Erkek Öğrenciler	f
Hesap makinesi	Ö1, Ö117, Ö119, Ö123	4	Ö2, Ö6, Ö8, Ö97, Ö133 Ö156	5
Arı	Ö15, Ö92	2	Ö3, Ö11, Ö14, Ö87, Ö89, Ö106	6
Pusula	Ö4, Ö48, Ö49, Ö95	4	Ö27, Ö103, Ö112	3
Melek	Ö35, Ö93, Ö98, Ö113, Ö120, Ö121, Ö127 Ö138, Ö162	9	Ö5	1
Bilgisayar	Ö7, Ö165	2	Ö74, Ö114	2
Profesör	Ö9, Ö19, Ö118, Ö179	4	Ö61	1
Tiyatro Yönetmeni	Ö10	1		
Laptop	Ö12	1		
Gemi Yelkeni	Ö13	1		
Lider	Ö16, Ö17	2	Ö18, Ö25, Ö171	3
Anne-Baba	Ö20	1		
Karınca	Ö21, Ö82	2	Ö104	1
Güneş	Ö22, Ö79, Ö116, Ö147,	5	Ö99, Ö100	2



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	Ö158			
Sabır taşı	Ö23, Ö24,		Ö26, Ö69	2
Assolist			Ö28	1
Yazar	Ö29	1		
Işık	Ö33, Ö56,	4	Ö30	1
	Ö141, Ö175			
Silgi	Ö31, Ö59, Ö60, Ö137	4	Ö101	1
Kalp	Ö32	1		
Anne	Ö34, Ö52	2	Ö70	1
Kitap	Ö128, Ö169,	4	Ö36, Ö155, Ö170	3
	Ö177, Ö180			
Deniz feneri			Ö37	1
Rehber	Ö38, Ö85	2	Ö54, Ö102	2
Yüksek Katlı Bina	Ö39	1		
Serin bir hava	Ö40	1		
Oyun			Ö41	1
Bilim İnsanı	Ö42, Ö67	2	Ö58, Ö72	2
Anne yarısı	Ö43	1		
Arama motoru	Ö125, Ö142	2	Ö44, Ö45, Ö126	4
Musluk	Ö46	1		
Ağaç	Ö47, Ö136	2		
Mimar	Ö50, Ö66	2		
Navigasyon	Ö51	1		
Bilgin	Ö55	1		
Zaman			Ö57	1
Robot			Ö62, Ö76, Ö111	3
Teknik direktör			Ö63, Ö172	2
Dünya	Ö64, Ö149	2		
Yolculuk	Ö65	1		
Rehberlikçi			Ö68	1

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Mum			Ö71	1
Evren			Ö73	1
Fener	Ö75	1		
İğne	Ö77	1		
Einstein	Ö78	1		
Yıldız	Ö80, Ö88, Ö90, Ö109	4	Ö144	1
Uzman	Ö81	1		
Orkide			Ö83	1
Gezegen	Ö84	1		
Dahi			Ö86	1
Doğal taşlar	Ö91	1		
Kaptan	Ö94	1		
Abla	Ö96	1	Ö129	1
Mücevher			Ö105, Ö146, Ö160	3
Akıllı Tahta			Ö107	1
Çiçek	Ö108	1		
Gökyüzü	Ö110	1		
Google			Ö115, Ö132, Ö153, Ö161, Ö168	5
Arkadaş	Ö122, Ö124, Ö148	3	Ö167	1
Merdiven			Ö130	1
Bahçıvan	Ö131	1		
Beyin			Ö134, Ö178	2
Şef			Ö135	1
Makine			Ö139, Ö164	2
Kahraman	Ö140	1		
Cevap Anahtarı			Ö145	1
Komedyen			Ö150, Ö152	2
Bilinmeyen	Ö173	1	Ö151	1
Mavi Renk	Ö154	1		

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Harita	Ö157	1		
Çevirmen	Ö169	1		
Kapı			Ö163	1
Eczane	Ö166	1		
Uçak	Ö174	1		
Ayna	Ö176	1	Ö143	1

Tablo 5 incelendiğinde matematik öğretmeni hakkında kız öğrencilerin 103 adet ve erkek öğrencilerin 77 adet geçerli metafor geliştirdikleri ve buna bağlı olarak kız öğrencilerin farklı metaforlar geliştirmekte erkek öğrencilere göre daha başarılı oldukları belirlenmiştir. Ayrıca kız öğrencilerin toplam 9 kız öğrencinin melek, toplam 6 erkek öğrencinin arı metaforunu birlikte kullandıkları ve buna bağlı olarak kız öğrencilerin belirli metaforları erkek öğrencilere göre daha sık tekrar ettikleri görülmüştür.

Çalışmaya katılan ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri metaforlardan bazıları aşağıda öğrenci ve cinsiyet kodlarıyla birlikte sunulmuştur:

**melek:** “Matematik öğretmeni melek gibidir. Çünkü, öğretmenimiz sınıfa geldiğinde herkesin gözü parlar. Ders matematik olsa bile beden dersinden daha çok eğleniriz. Melek gibi kimseyi incitmez ve kırmaz.” (Ö5-E)

**melek:** “Matematik öğretmeni melek gibidir. Çünkü, matematik öğretmeni bize matematik dersinde melek gibi yardımcı olarak geleceğimiz aydınlatır.” (Ö162-K)

**melek:** “Matematik öğretmeni melek gibidir. Çünkü, matematikte hep iyiliğimizi ister melek gibidir. Hep başarılı olmamızı ister.” (Ö113-K)

**arı:** “Matematik öğretmeni arı gibidir. Çünkü kendisi çalışır bizi de çalıştırır.” (Ö106-E)

**arı:** “Matematik öğretmeni arı gibidir. Çünkü derste asla oturmaz ve bizimle çok ilgilenir. Ve bizden daha çok çalışıyor.” (Ö15-K)

Ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri metaforların anne eğitim durumuna göre dağılımları Tablo 6’da sunulmuştur.

**Tablo 6.** Ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri metaforların anne eğitim durumuna göre dağılımı

Okur-Yazar	İlköğretim	Lise	Üniversite	Yüksek Lisans	Doktora
Anne (1)	Hesap	Hesap	Hesap	Pusula (1)	
	makinesi (4)	makinesi (4)	makinesi (2)		



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Mimar (1)	Arı (2)	Arı (5)	Arı (1)	Karınca (1)
Evren (1)	Pusula (2)	Pusula (4)	Bilgisayar (1)	Güneş (2)
	Melek (4)	Melek (6)	Tiyatro Yönetmeni (1)	Işık (1)
	Bilgisayar (1)	Bilgisayar (2)	Laptop (1)	Kitap (1)
	Lider (2)	Profesör (5)	Gemi Yelkeni (1)	İğne (1)
	Sabır taşı (2)	Lider (2)	Lider (1)	Dahi (1)
	Assolist (1)	Anne-Baba (2)	Karınca (1)	Mücevher (1)
	Kalp (1)	Karınca (1)	Güneş (2)	Akıllı Tahta (1)
	Anne (1)	Güneş (3)	Sabır taşı (1)	Google (1)
	Kitap (1)	Sabır taşı (1)	Işık (1)	Makine (2)
	Rehber (1)		Kitap (2)	Ayna (1)
	Arama motoru (1)	Yazar (1)	Deniz feneri (1)	
	Ağaç (1)	Işık (3)	Rehber (1)	
	Mimar (1)	Silgi (4)	Yüksek Katlı Bina (1)	
	Robot (1)	Kalp (1)	Bilim İnsanı (3)	
	Teknik direktör (1)	Anne (1)	Arama motoru (2)	
	Einstein (1)	Kitap (3)	Musluk (1)	
	Yıldız (3)		Mimar (1)	
	Uzman (1)	Rehber (2)	Robot (1)	
	Çiçek (1)		Dünya (1)	
	Google (1)	Serin bir hava (1)	Yolculuk (1)	
	Merdiven (1)	Oyun (1)	Mum (1)	
	Komedyen (1)	Bilim İnsanı (1)	Fener (1)	

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Mavi Renk (1)	Anne yarısı (1)	Yıldız (2)
Uçak (1)	Arama motoru (2)	Orkide (1)
	Navigasyon (1)	Gezegen (1)
	Bilgin (1)	Doğal taşlar (1)
	Zaman (1)	Mücevher (1)
	Robot (1)	Gökyüzü (1)
	Teknik direktör (1)	Google (1)
	Dünya (1)	Arkadaş (1)
	Rehberlikçi (1)	Kahraman (1)
	Kaptan (1)	Bilinmeyen (1)
	Abla (2)	Kapı (1)
	Mücevher (1)	Eczane (1)
	Google (2)	
	Arkadaş (3)	
	Bahçıvan (1)	
	Beyin (2)	
	Şef (1)	
	Cevap Anahtarı (1)	
	Komedyen (1)	
	Bilinmeyen (1)	
	Harita (1)	
	Çevirmen (1)	
	Ayna (1)	

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Tablo 6 incelendiğinde ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri geçerli metaforları en çok annesi lise (f=82, %45,55) mezunu olan öğrencilerin geliştirdiği daha sonra sırasıyla, annesi üniversite (f=43, %28,88) mezunu olan öğrencilerin, annesi ilköğretim (f=38, %21,11) mezunu olan öğrencilerin, annesi yüksek lisans (f=14, %7,77) mezunu olan öğrencilerin geliştirdiği görülmüştür. Buna ek olarak en az metaforun annesi okur-yazar (f=3, %1,66) eğitim



durumuna sahip olan ortaokul öğrenciler tarafından geliştirildiği açığa çıkmıştır. Ayrıca araştırmaya katılan ortaokul öğrencilerin annelerinin hiçbirisinin doktora mezunu olmadığı ve buna bağlı olarak ta annesi doktora eğitim durumuna sahip öğrencilerin tarafından geliştirilen hiçbir metaforların olmadığı tespit edilmiştir.

Ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri metaforların baba eğitim durumuna göre dağılımları Tablo 7’de sunulmuştur.

**Tablo 7.** Ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri metaforların babanın eğitim durumuna göre dağılımı

Okur Yazar	İlköğretim	Lise	Üniversite	Yüksek Lisans	Doktora
Anne-Baba (1)	Hesap makinesi (1)	Hesap makinesi (6)	Hesap makinesi (2)	Hesap makinesi (1)	
	Pusula (2)	Pusula (3)	Pusula (1)	Melek (1)	
	Melek (1)	Melek (4)	Melek (3)	Profesör (1)	
	Profesör (1)	Bilgisayar (3)	Bilgisayar (1)	Lider (1)	
	Lider (1)	Profesör (3)	Tiyatro Yönetmeni (1)	Güneş (1)	
	Güneş (1)	Lider (1)	Laptop (1)	Işık (2)	
	Assolist (1)	Anne-Baba (1)	Gemi Yelkeni (1)	Silgi (1)	
	Anne (1)	Karınca (2)	Lider (2)	Kalp (1)	
	Ağaç (1)	Güneş (1)	Karınca (1)	Deniz feneri (1)	
	Mimar (1)	Sabır taşı (3)	Güneş (4)	Navigasyon (1)	
	Dünya (1)	Işık (2)	Sabır taşı (1)	Dahi (1)	
	Yıldız (1)	Silgi (2)	Yazar (1)	Mücevher (1)	
	Uzman (1)	Anne (2)	Işık (1)	Akıllı Tahta (1)	
	Abla (1)	Kitap (3)	Silgi (1)	Google (1)	
		Rehber (3)	Kalp (1)	Makine (1)	
		Serin bir hava (1)	Kitap (4)		
		Bilim İnsanı (1)	Rehber (1)		
		Anne yarısı (1)	Yüksek Katlı Bina (1)		



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Arama motoru (4)	Oyun (1)
Musluk (1)	Bilim İnsanı (3)
Mimar (1)	Arama motoru (1)
Bilgin (1)	Ağaç (1)
Zaman (1)	Robot (1)
Robot (2)	Teknik direktör (1)
Teknik direktör (1)	Yolculuk (1)
Dünya (1)	Mum (1)
Rehberlikçi (1)	Evren (1)
Yıldız (3)	Fener (1)
Kaptan (1)	İğne (1)
Mücevher (1)	Einstein (1)
Google (2)	Yıldız (1)
Arkadaş (3)	Orkide (1)
Bahçıvan (1)	Gezegen (1)
Beyin (1)	Doğal taşlar (1)
Şef (1)	Abla (1)
Makine (1)	Mücevher (1)
Cevap Anahtarı (1)	Çiçek (1)
Komedyen (2)	Gökyüzü (1)
Bilinmeyen (2)	Google (2)
Mavi Renk (1)	Arkadaş (1)
Kapı (1)	Merdiven (1)
Ayna (1)	Beyin (1)
	Kahraman (1)
	Harita (1)
	Çevirmen (1)
	Eczane (1)

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Uçak (1)

Ayna (1)

Tablo 7 incelendiğinde ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri geçerli metaforları en çok babası lise ( $f=75$ , %41,66) mezunu olan öğrencilerin geliştirdiği daha sonra sırasıyla, babası üniversite ( $f=73$ , %40,55) mezunu olan öğrencilerin, babası yüksek lisans ( $f=16$ , %8,88) mezunu olan öğrencilerin, babası ilköğretim ( $f=15$ , %8,33) mezunu olan öğrencilerin geliştirdiği görülmüştür. Buna ek olarak en az metaforun babası okur-yazar ( $f=1$ , %0,55) eğitim durumuna sahip olan ortaokul öğrenciler tarafından geliştirildiği açığa çıkmıştır. Ayrıca araştırmaya katılan ortaokul öğrencilerin babalarının hiçbirisinin doktora mezunu olmadığı ve buna bağlı olarak ta babası doktora eğitim durumuna sahip öğrencilerin tarafından geliştirilen hiçbir metaforların olmadığı tespit edilmiştir.

Ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri metaforların matematik dersini sevmeye durumuna göre dağılımları Tablo 8’de sunulmuştur.

**Tablo 8.** Ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri metaforların matematik dersini sevmeye durumuna göre dağılımı

Matematiği Seven Öğrenci $f$	Matematiği Sevmeyen Öğrenci $f$
Hesap makinesi	Hesap makinesi 2
Arı	Pusula 3
Pusula	Melek 1
Melek	Bilgisayar 1
Bilgisayar	Profesör 2
Profesör	Laptop 1
Tiyatro yönetmeni	Işık 2
Gemi yelkeni	Silgi 2
Lider	Anne 1
Anne-Baba	Kitap 1
Karınca	Rehber 2
Güneş	Arama motoru 2
Sabır taşı	Ağaç 1
Assolist	Robot 3
Yazar	İğne 1



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Işık	3	Gezegen	1
Silgi	2	Kaptan	1
Kalp	2	Merdiven	1
Anne	2	Şef	1
Kitap	6	Makine	1
Deniz feneri	1	Bilinmeyen	1
Rehber	2	Mavi Renk	1
Yüksek Katlı Bina	1	Kapı	1
Serin bir hava	1	Eczane	1
Oyun	1	Uçak	1
Bilim İnsanı	4	Ayna	1
Anne yarısı	1		
Arama motoru	3		
Musluk	1		
Ağaç	1		
Mimar	2		
Navigasyon	1		
Bilgin	1		
Zaman	1		
Teknik direktör	2		
Dünya	2		
Yolculuk	1		
Rehberlikçi	1		
Mum	1		
Evren	1		
Fener	1		
Einstein	1		
Yıldız	5		
Uzman	1		
Orkide	1		

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Dahi	1
Doğal taşlar	1
Abla	2
Mücevher	3
Akıllı Tahta	1
Çiçek	1
Gökyüzü	1
Google	5
Arkadaş	4
Bahçıvan	1
Beyin	2
Makine	1
Kahraman	1
Cevap Anahtarı	1
Komedyen	2
Bilinmeyen	1
Harita	1
Çevirmen	1
Ayna	1

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Tablo 8 incelendiğinde matematik öğretmeni hakkında matematik dersini seven ( $f=144$ , %80,0) öğrencilerin matematik dersini sevmeyen ( $f=36$ , %20,0) öğrencilere göre daha fazla geçerli metafor geliştirdikleri görülmüştür. Ayrıca hem matematiği seven hem de matematiği sevmeyeni ifade eden öğrencilerin *hesap makinesi*, *pusula*, *melek*, *bilgisayar*, *profesör*, *ışık*, *silgi*, *anne*, *kitap*, *rehber*, *arama motoru*, *ağaç*, *makine*, *bilinmeyen* ve *ayna* gibi metaforları ortak olarak geliştirdikleri belirlenmiştir.

## TARTIŞMA, SONUÇ VE ÖNERİLER

Ortaokul öğrencilerinin matematik öğretmeni hakkında farklı metaforlar geliştirildiği, geliştirilen geçerli metaforların çoğunun olumlu özellikte olduğu ortaya çıkmıştır. Bu sonucu alan yazında Şengül, Katrancı & Gerez Cantimer'in (2014) matematik öğretmeni kavramı ile ilgili olarak olumlu tutuma sahip oldukları ve bu olumlu tutumu yansıtan metaforlar ürettiklerini belirttiği makale çalışmasını destekler niteliktedir. Aynı şekilde bu sonucun ortaya çıkmasında matematik öğretmenlerinin sınıf içinde oluşturduğu olumlu öğrenme ortamı ve öğretim sürecinde öğrencilerinin



farklı düşüncelerini destekleyecek sosyomatematiksel normlar kullanması ile açıklanabilir. Öğrencilerin matematik öğretmenleri hakkında en çok geliştirdikleri metaforların *hesap makinesi* ve *melek* metaforları olduğu, daha sonra sırasıyla; *profesör*, *ışık*, *anne yarısı*, *yıldız*, *google*, *bilgisayar*, *lider*, *sabır taşı*, *silgi*, *rehber*, *bilim insanı*, *arkadaş*, *karınca*, *anne*, *robot*, *mücevher*, *anne-baba*, *kalp*, *ağaç*, *mimar*, *teknik direktör*, *dünya*, *abla*, *beyin*, *makine*, *komedyen*, *bilinmeyen* ve *ayna* metaforlarının olduğu açığa çıkmıştır. Alan yazında bu sonucu Kebap & Çenberci'nin (2020) "matematik öğretmeni" kavramına ilişkin ortaokul öğrencilerinin en fazla ürettikleri metaforun *hesap makinesi* olduğunu belirten çalışma sonuçları, Kenç'in (2019) öğrencilerin matematik öğretmenine yönelik *hesap makinesi* metaforik algısına sahip olduğu çalışma sonucu ve Bahadır & Özdemir'in (2012) yedinci sınıf öğrencilerin matematik kavramına yönelik zihinsel imgelerinde en çok üretilen metaforun *hesap makinesi* olduğunu belirttiği çalışma sonuçları ile benzerlik göstermektedir. Bu sonuç ortaokul öğrencilerinin içerisinde buldukları somut gelişimsel gelişim dönemleri nedenleriyle soyut özellik gösteren matematiksel işlemleri yaparken zorlanmalarına karşın matematik öğretmenlerinin soyut işlemleri zihinsel, pratik ve hızlı bir şekilde yapması ile açıklanabilir. Yine alan yazında bu sonuçtan farklı olarak Şahin'in (2013) öğretmen adaylarının "matematik" öğretmeni kavramına yönelik en çok "otoriter ve "bilgili" metaforik algısına sahip oldukları araştırma sonucu ile farklılık göstermektedir. Bu farklılık her iki araştırmanın farklı örneklerle yürütülmüş olması ve örneklerin karşılaştığı matematik öğretmenlerinin tutum veya yaklaşımlarından kaynaklanabilir.

Ortaokul öğrencilerinin matematik öğretmeni hakkında geçerli metafor geliştiren öğrencilerin daha çok sekizinci sınıf düzeyinde olduğu, ardından bu sırayı yedinci ve altıncı sınıf öğrencilerinin takip ettiği, en az sayıda geçerli metaforun ise beşinci sınıf düzeyinde geliştirildiği sonucuna ulaşılmıştır. Ulaşılan bu sonuç alan yazında Kebap & Çenberci'nin (2020) matematik öğretmeni hakkında beşinci sınıf öğrencilerinin diğer sınıf seviyelerine göre en düşük bir oranda geçerli metafor ürettiklerini belirlediği makale çalışmasını desteklemektedir. Bu sonucun ortaya çıkması diğer sınıf düzeylerine göre beşinci sınıf öğrencilerin ortaokula henüz yeni başlamaları ve buna bağlı olarak matematik öğretmeni branşı ile ilk kez karşılaşmaları ve bu konuda geçerli metafor geliştirmekte zorlanmaları ile açıklanabilir.

Matematik öğretmeni hakkında kız öğrencilerin farklı metaforlar geliştirmekte erkek öğrencilere göre daha başarılı oldukları sonucuna ulaşılmıştır. Bu sonuca ulaşmada ortaokul yaş grubunda kız öğrencilerin kendilerini ifade edebilme yetkinliklerinin erkek öğrencilere göre daha yüksek olması ile açıklanabilir. Alan yazında bu sonuç Kebap & Çenberci'nin (2020) "matematik" öğretmeni kavramına hakkında geçerli metafor üretmekte kız öğrencilerin erkek öğrencilerden daha başarılı olduğunu ortaya koyan çalışması ile benzerlik gösterirken Şengül, Katrancı & Gerez Cantimer'in (2014) matematik öğretmenine yönelik kız ve erkek öğrencilerin ürettikleri metaforlar arasında istatistiksel olarak anlamlı bir farklılık olmadığı belirttiği çalışma ile farklılık göstermektedir. Bu farklılık araştırmacıların farklı eğitim-öğretim yıllarında çalışmalarını gerçekleştirmeleri ve buna bağlı olarak araştırma örnekleminin cinsiyet değişkenine göre zaman içerisinde farklılaşması ile açıklanabilir.

Ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri geçerli metaforları en çok annesi lise mezunu olan öğrenciler olduğu görülmektedir. Annesi üniversite mezunu olan öğrencilerin, annesi ilköğretim mezunu olan öğrencilerin, annesi yüksek lisans mezunu olan öğrencilerin geliştirdiği açığa çıkmıştır. Bu sonuca ek olarak en az metaforun annesi okur-yazar eğitim durumuna sahip olan



ortaokul öğrenciler tarafından geliştirildiği açığa çıkmıştır. Bu durumun ortaya çıkmasında annenin mezun olduğu eğitim durumuna göre öğrenciye gerekli akademik ve sosyal gelişim alanlarında bilgisi dahilinde yardımcı olması ile ilişkilendirilebilir.

Ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri geçerli metaforları en çok babası lise mezunu olan öğrencilerdir. Babası üniversite mezunu olan öğrencilerin, babası yüksek lisans mezunu olan öğrencilerin, babası ilköğretim mezunu olan öğrencilerin geliştirdiği görülmüştür. Bu sonuca ek olarak en az metaforun babası okur-yazar eğitim durumuna sahip olan ortaokul öğrenciler tarafından geliştirildiği ortaya çıkmıştır. Bu durumun açığa çıkmasında babanın mezun olduğu eğitim durumuna göre öğrenciye gerekli akademik ve sosyal gelişim alanlarında bilgisi dahilinde destek olması ile açıklanabilir.

Matematik öğretmeni hakkında matematik dersini seven ortaokul öğrencilerinin matematik dersini sevmeyen öğrencilere göre daha fazla geçerli metafor geliştirdikleri açığa çıkmıştır. Bu sunucun ortaya çıkmasında matematik dersine yönelik olumlu tutum içerisinde olan öğrencinin matematik öğretmenine hakkındaki bakış açısının da olumlu yönde olması aksi takdirde matematikten nefret eden matematik denildiğinde bile birçok olumsuz tutuma sahip olan öğrencinin matematik dersini yürüten matematik öğretmeni hakkında da olumsuz düşüncesi ile ilişkilendirilebilir.

Aşağıda araştırma kapsamında ortaya çıkan sonuçlara göre birtakım önerilerde bulunulmuştur:

- Bu çalışmada elde edilen sonuçlara dayalı olarak ortaokul öğrencileri matematik öğretmenleri hakkında hesap makinesi metaforik algısına sahiptirler. Bu algının kırılması ve matematiksel işlemlerin öğrencilerle birlikte yapılabilmesi için matematiksel işlemlere yönelik materyal desteği sağlanabilir.
- Ortaokul öğrencilerinin sınıf düzeyi bazında matematik öğretmeni hakkında geliştirdikleri metafor sonuçlarının genellenebilirliğine yönelik bu konuda farklı eğitim kademelerinde yer alan farklı örneklem öğrencileriyle yeni araştırmalar yapılabilir.
- Ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri metaforların anne ve babanın eğitim durumuna farklılık gösterdiği belirlenmiştir. Bu bağlamda eğitimin aileden ayrı bir süreç olmadığı, anne ve babanın eğitim durumuna göre öğrencisini akademik ve sosyal yönden desteklemesinin matematik eğitimi açısından önemli olması nedeniyle ebeveynleri bu konuda bilgilendirici eğitimler planlanabilir. Bu eğitimler MEB okul bünyesinde rehber öğretmenlerin ve matematik öğretmenlerinin ekip çalışmalarıyla düzenlenebilir.
- Ortaokul öğrencilerinin matematik öğretmeni hakkında geliştirdikleri metaforlar öğrencilerin matematik dersine yönelik tutumlarından önemli ölçüde etkilendiğinden matematik öğretmenleri, öğretim sürecinde ders kazanımlarına uygun olarak öğrencilerde olumlu tutum gelişimini destekleyici etkinlikleri kullanabilirler.

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## **Prawa pracowników w sytuacjach kryzysowych: rola gminy w zapewnieniu bezpieczeństwa, wsparcia socjalnego i utrzymania miejsc pracy**

**Ph.D. Marcin MAMIŃSKI**

**WSGE University of Applied Sciences, Poland**

**ORCID: 0000-0002-8046-6155**

### **Abstrakt**

Zapewnienie bezpieczeństwa obywatelom jest jedną z najważniejszych funkcji państwa, o czym stanowi art. 5 Konstytucji Rzeczypospolitej Polskiej z dnia 2 kwietnia 1997 r. Pomimo wieloletnich wysiłków, aktualne struktury i procedury zarządzania kryzysowego często nie spełniają oczekiwań, szczególnie na poziomie gminnym. Celem tego artykułu jest dokonanie analizy obecnego stanu prawnego *de lege lata* oraz sformułowanie propozycji zmian *de lege ferenda* dotyczących zarządzania kryzysem na poziomie gminy.

W sytuacjach kryzysowych, takich jak pandemie, klęski naturalne, prawo pracy staje przed wyzwaniem w zakresie zapewnienia odpowiedniej ochrony pracowników. Gmina, jako podstawowa jednostka samorządu terytorialnego, jest istotnym podmiotem w świadczeniu usług publicznych oraz zapewnieniu ochrony prawnej. Niniejszy artykuł analizuje rolę gminy w kontekście ochrony praw pracowników w sytuacjach kryzysowych, przy uwzględnieniu aspektów prawnych i administracyjnych.

Analiza opiera się na przeglądzie literatury i rzecznictwa identyfikując obowiązki gminy w zakresie zapewnienia bezpieczeństwa pracy, wsparcia socjalnego oraz utrzymania miejsc pracy. Omawiane są również kompetencje gminy w zakresie zarządzania kryzysowego oraz współpracy z innymi organami administracji publicznej i podmiotami prywatnymi w celu efektywnej reakcji na sytuacje nadzwyczajne. Podkreślana jest rola gminy w tworzeniu i egzekwowaniu miejscowych przepisów dotyczących bezpieczeństwa pracy oraz świadczenia pomocy socjalnej pracownikom dotkniętym kryzysem.



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## Turist Tercihlerinde Sosyal Medyanın Etkisi: Mardin Örneği

### The Influence of Social Media on Tourist Preferences: A Case Study of Mardin

Doç. Dr. Mehmet Necati CİZRELİOĞULLARI

Mardin Artuklu Üniversitesi, Turizm Fakültesi, Turizm Rehberliği Bölümü, Mardin, Türkiye

E-Mail: [necaticizreliogullari@artuklu.edu.tr](mailto:necaticizreliogullari@artuklu.edu.tr) ORCID NO: 0000-0002-9884-6084

#### Öz

Mardin, Türkiye'nin güneydoğusunda yer alan tarihi ve kültürel zenginlikleriyle ön plana çıkan bir şehirdir. Turist tercihlerinde sosyal medya Mardin gibi destinasyonların popülerliğini artırmada önemli bir rol oynamaktadır. Bu çalışmanın amacı, sosyal medyanın turistlerin seyahat tercihlerini nasıl etkilediğini ve bu etkinin Mardin gibi bir destinasyon üzerinde nasıl görüldüğünü incelemektir. Bu çalışma, sosyal medyanın turizm endüstrisindeki rolünü anlamak ve turist davranışlarını şekillendirmedeki önemini vurgulamak için Mardin'in sunduğu benzersiz kültürel ve tarihi zenginliklerin yanı sıra sosyal medya platformlarında nasıl temsil edildiğini araştıracaktır. Mardin'in benzersiz mimarisi, tarihi dokusu, yöresel mutfağı ve etnik çeşitliliği, sosyal medya üzerinden paylaşılan görseller ve yorumlar aracılığıyla geniş kitlelere ulaşmaktadır. Bu bağlamda, yapılan döküman incelemesi sonucunda Instagram, Facebook ve TripAdvisor gibi platformlardaki fotoğraf ve yorumlar, turistlerin seyahat planlarını oluştururken, Mardin'i tercih etmelerinde etkili olmakta ve Mardin'i keşfetmek isteyen turistlerin ilgisini çekmektedir.

**Anahtar Kelimeler:** Sosyal Medya, Turist Tercihleri, Turizm Destinasyonu, Mardin

#### Abstract

Mardin is a city located in the southeast of Turkey, renowned for its historical and cultural richness. Social media plays a significant role in increasing the popularity of destinations like Mardin among tourists' preferences. The purpose of this study is to examine how social media influences tourists' travel preferences and how this effect is observed on a destination like Mardin. This study will explore



the representation of Mardin's unique cultural and historical riches on social media platforms to understand the role of social media in the tourism industry and highlight its importance in shaping tourist behavior. Mardin's distinctive architecture, historical texture, regional cuisine, and ethnic diversity reach wide audiences through images and comments shared on social media. In this context, a document analysis will be conducted to investigate how photos and comments on platforms such as Instagram, Facebook, and TripAdvisor influence tourists' preferences in choosing Mardin as they plan their travels and attract the interest of tourists who wish to explore Mardin.

**Keywords:** Social Media, Tourist Preferences, Tourism Destination, Mardin

## 1. Giriş

Günümüzde seyahat tercihleri ve destinasyon seçimleri, dijital dönüşümün etkisiyle önemli ölçüde değişime uğramıştır. Özellikle sosyal medyanın yaygın kullanımı, turistlerin seyahat planlaması ve destinasyon seçiminde önemli bir rol oynamaktadır (Arat & Dursun, 2016). Mardin, Orta Doğu'nun eşsiz bir karışımını sunan tarihi dokusu, mimarisi, kültürel zenginlikleri ve benzersiz manzaralarıyla dikkat çeken bir şehirdir. Ancak, günümüzde bu değerlerin turistler tarafından keşfedilmesi ve tercih edilmesinde geleneksel pazarlama yöntemlerinin yetersiz kaldığı görülmektedir. Bundan dolayı, sosyal medyanın giderek artan etkisi ile birlikte, destinasyonların tanıtım ve pazarlamasında yeni bir paradigmaya yol açılmıştır (Aydın & Balcı, 2019). Bu bağlamda, turistler, seyahat öncesi ve sırasında sosyal medyayı aktif olarak kullanarak destinasyonlar hakkında bilgi edinmekte, deneyimlerini paylaşmakta ve önerilerde bulunmaktadır (Arslan & Şimşek, (2022). Mardin'in sosyal medyadaki varlığı ve popülaritesi, turistlerin destinasyonla ilgili algılarını ve beklentilerini şekillendirmektedir. Instagram, Facebook, Twitter gibi platformlar üzerinde paylaşılan görsel ve yazılı içerikler, Mardin'in tarihi sokaklarından, yöresel lezzetlerine, kültürel etkinliklerinden doğal güzelliklerine kadar geniş bir yelpazede turistlere ilham vermektedir (Atsız & Kızılırmak, 2017).

Turist tercihlerinde sosyal medyanın etkisi, son yıllarda turizm literatüründe giderek artan bir ilgiyle incelenmektedir. Özellikle belirli destinasyonların tanıtımında, pazarlanmasında ve turist deneyimlerinin şekillenmesinde sosyal medyanın rolü üzerine birçok çalışma yapılmıştır. Örneğin, Buhalis & Law (2008), bilgi teknolojilerinin turizm sektöründeki rolünü ve etkisini ele almış, turizmdeki dijital dönüşümü inceleyerek, sosyal medyanın turist tercihlerine olan etkisine de değinmiştir. Gretzel, Yuan, & Fesenmaier (2000), destinasyon pazarlama örgütlerinin reklam stratejilerindeki değişimleri ve bu değişimlerin sosyal medyanın yükselişiyle nasıl etkilendiğini ele almıştır. Govers & Go (2009), yer markalamasının fiziksel ve sanal kimliklerini, turizmdeki markalaşma stratejilerini ve bu süreçte sosyal medyanın rolünü ele almıştır. Leung, Law, van Hoof & Buhalis (2013), turizm ve konaklama sektöründeki sosyal medya kullanımını geniş kapsamlı bir şekilde ele almış, turistlerin seyahat deneyimlerini paylaşma ve etkileşime geçme alışkanlıklarını, destinasyonlar hakkında bilgi edinme süreçlerini ve pazarlama stratejilerini analiz etmiştir. Litvin, Goldsmith & Pan (2008) elektronik ağızdan ağıza iletişimin (eWOM) turizm ve konaklama yönetimindeki etkilerini incelemiş, sosyal medyanın turistlerin seyahat tercihlerini nasıl etkilediği ve destinasyonlar hakkındaki algıları nasıl şekillendirdiği üzerine odaklanmıştır. Öztürk & Sezgin (2018), Mardin'in turizm



potansiyeli ve sosyal medyanın bu potansiyel üzerindeki etkilerini incelemiştir. Yıldız & Özden (2019), Mardin'de sosyal medyanın turizm faaliyetlerine olan etkilerini araştırmış, turistlerin Mardin ile ilgili sosyal medya paylaşımlarının turizm potansiyeline olan etkisini analiz etmiştir. Aydın & Balcı (2019), Mardin'i ziyaret eden turistlerin sosyal medya kullanım alışkanlıklarını ve bu kullanımın destinasyon tercihleri üzerindeki etkilerini incelemiştir.

Bu çalışma, sosyal medyanın turistlerin seyahat tercihlerini nasıl etkilediğini ve bu etkinin Mardin gibi bir destinasyon üzerinde nasıl görüldüğünü, sosyal medyanın Mardin'e olan etkisini, turistlerin destinasyon hakkındaki algılarını nasıl şekillendirdiğini, sosyal medyanın turizm endüstrisindeki rolünü anlamak ve turist davranışlarını şekillendirmedeki önemini vurgulamak için Mardin'in sunduğu benzersiz kültürel ve tarihi zenginliklerin yanı sıra sosyal medya platformlarında nasıl temsil edildiğini araştırılacaktır.

### 1.1. Sosyal Medya

Sosyal medya, insanların iletişim kurma, etkileşim kurma ve bilgi paylaşma biçiminde devrim yaratarak çağdaş toplumun ayrılmaz bir parçası haline geldi. Günlük yaşamın her yerinde bulunması, bireyler, topluluklar ve bir bütün olarak toplum üzerindeki çeşitli etkileri konusunda kapsamlı araştırmalara yol açmıştır (Uluç & Yarcı, 2017; Babacan, 2014). Bu etkiler sosyal ilişkiler, psikolojik iyilik, bilgi yayılımı, toplumsal dinamikler olarak belirtilmektedir. İlk olarak, sosyal medyanın kişilerarası ilişkiler üzerindeki etkisini inceleyen çok sayıda çalışma, hem olumlu hem de olumsuz etkileri vurgulamaktadır (İnankul, 2018; Erol, & Hassan, 2014; Gülhan, 2019): Bir yandan Facebook, Twitter ve Instagram gibi platformlar bireylerin arkadaşları ve aileleriyle bağlantı kurmasına, sosyal desteğin geliştirilmesine ve uzun mesafeli ilişkilerin sürdürülmesine olanak tanımaktadır. Ancak bu bağlantıların kalitesiyle ilgili endişeler ortaya çıktı; bazı araştırmalar sosyal medyanın aşırı kullanımının yalnızlık, kıskançlık ve empatinin azalmasına yol açabileceğini öne sürmektedir.

Sosyal medya kullanımı ile psikolojik iyi oluş arasındaki ilişki önemli bir tartışma konusu olmuştur. Bazı çalışmalar artan özsaygı ve sosyal sermaye gibi olumlu ilişkiler bulurken, diğerleri aşırı sosyal medya kullanımını özellikle ergenler ve genç yetişkinler arasında daha yüksek düzeyde kaygı, depresyon ve düşük özsaygı ile ilişkilendirmiştir (Hanbay & Yıldırım, 2023; Köksal, Topkaya & Şahin, 2023; Ümmet, Alkan, Batal & Kaya, 2019).

Sosyal medya platformları bilginin yayılmasında, kamuoyunun şekillenmesinde ve karar alma süreçlerinin etkilenmesinde de önemli bir rol oynamaktadır. Bu platformların haber yaymak, toplumsal sorunlar hakkında farkındalık yaratmak ve kolektif eylemi harekete geçirmek için güçlü araçlar olabileceği gösterilmektedir (Çömlekçi, 2019). Son olarak, sosyal medyanın daha geniş toplumsal dinamikler üzerindeki etkisi karmaşık ve çok yönlü bir olgudur. Bir yandan iletişimin demokratikleşmesini kolaylaştırdı, dışlanmış sesleri güçlendirdi ve siyasi aktivizmi ve toplumsal hareketleri kolaylaştırdı. Öte yandan, sahte haberlerin çoğalmasına, siyasi kutuplaşmaya, mahremiyet ve sivil söylemin erozyonuna da bulaşmıştır (Sayımer, 2014; Dursunoğlu & Kömür, 2018).

### 1.2. Sosyal Medyanın Turizm Faaliyetlerindeki rolü

Instagram, Facebook ve YouTube gibi sosyal medya platformları, turizm işletmelerinin geleneksel reklam maliyetinin çok altında bir maliyetle küresel bir kitleye ulaşmasını sağlayan destinasyon



pazarlaması için önemli kanallar haline gelmiştir. Görsel olarak çekici içeriğin, kullanıcı tarafından oluşturulan incelemelerin ve etkileycilerin onaylarının, turistlerin algılarını ve karar verme süreçlerini önemli ölçüde etkileyebilmekte ve sosyal medya, destinasyon pazarlamacılarının potansiyel ziyaretçilerle gerçek zamanlı olarak etkileşim kurmasına olanak tanıyarak, destinasyon çevresinde özgünlük ve topluluk duygusunu teşvik etmektedir (Eryılmaz ve Zengin, 2014; Eröz ve Doğdubay, 2012). Sosyal medyanın yaygınlaşması turistlerin seyahatlerini planlama, deneyimleme ve paylaşma şeklini değiştirmiştir. Seyahat planlama sürecinde sosyal medyanın ilham alma, bilgi arama ve sosyal doğrulamadaki rolü, TripAdvisor ve Airbnb gibi platformlar aracılığıyla, turistlerin akran değerlendirmelerine, önerilere ve kişiselleştirilmiş seyahat programlarına erişmesine olanak tanıyarak beklentilerini şekillendirmiştir (Ersoy & Ehtiyar, 2022). Bununla birlikte, sosyal medya fenomenlerinin ve kullanıcı tarafından oluşturulan içeriğin yükselişi, geleneksel pazarlama stratejilerini yeniden şekillendirdi; turistler giderek daha fazla Instagram'a özgün, sürükleyici deneyimler arama yoluna gitmiştir (Bulunmaz, 2016; Çelik, 2014). Bunun yanında, sosyal medya, destinasyon yönetiminde de önemli bir rol oynamaktadır ve destinasyon kuruluşlarının paydaşlarla etkileşime geçmesine, ziyaretçi geri bildirimlerini izlemesine ve krizlere gerçek zamanlı olarak yanıt vermesine olanak tanımaktadır (Çiftçi, 2016). Sosyal medya analizlerinin ziyaretçi demografisi, tercihleri ve davranışları hakkında değerli bilgiler sağlaması, destinasyonların pazarlama çabalarını uyarlamalarına ve ziyaretçi deneyimlerini iyileştirmelerine olanak sağladığını göstermiştir (Kılıçarslan & Albayrak, 2020). Son olarak, sosyal medya kullanımı, sosyal etkileşimleri kolaylaştırarak, seyahat anılarını paylaşarak ve benzer düşüncelere sahip turistlerden oluşan sanal topluluklar yaratarak turizm deneyimini geliştirmiştir (Arat & Dursun, 2016). Sosyal medya platformlarının seyahat deneyimlerini paylaşma, ipuçları ve tavsiye alışverişinde bulunma ve diğer gezginlerle ilişkiler kurma platformları olarak hizmet ettiğinden, sosyal medya, turistlerin yolculuklarını fotoğraflar, videolar ve durum güncellemeleri aracılığıyla belgelemelerine, anılarını korumalarına ve arkadaşlarıyla aileleriyle paylaşılabilir dijital hediyelik eşyalar oluşturmalarına olanak tanımaktadır (Arslan & Şimşek, 2022).

### 1.3. Sosyal Medyanın Mardin destinasyonundaki etkisi

Sosyal medyada Mardin ile ilgili paylaşım yapan kullanıcıların Facebook, Instagram Trip Advisor platformlarında yaptığı yorumlar ve paylaştığı görseller turistlerin Mardin destinasyonunu tercih etmesindeki rolünü belirlemektedir.



## Mardin Ulu Camisi

●●●●○ 244 yorum • Mardin bölgesindeki 19.y

[Yorum yazın](#)

### Gezginlere kulak verin

"Tarih"

●●●●● Eki 2023

Çok güzel tarihi bir Yapı. İbadete açık. Eski mardin sokaklarının arasından yürüyerek ulaşım sağlanıyor.

Yazan: AA

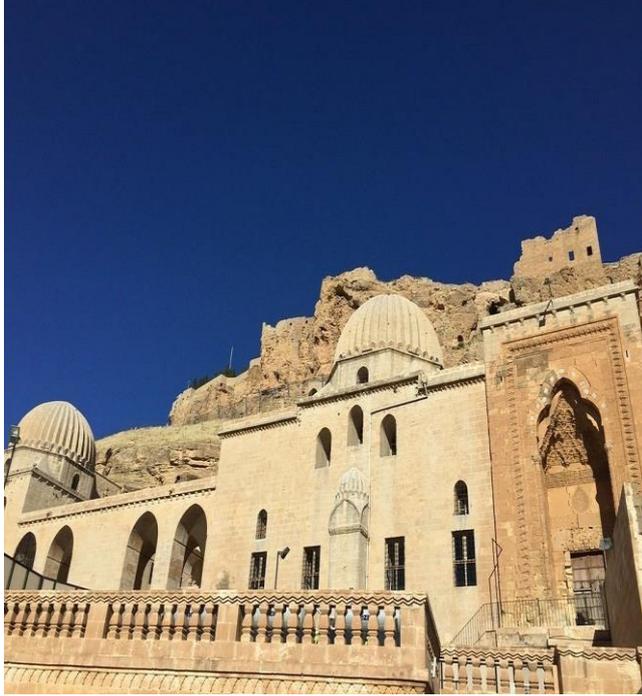
"Harika"

●●●●○ Nis 2023

Harika bir yarih, muhteşem bir manzara, mardindeki her yer gibi görmesi ve ulaşması meşakkatli :)..

Görsel 1. Mardin Ulu Cami

Görsel 1'de görüldüğü üzere, tripadvisor sitesinde Mardin gezilecek yerler sayfasında Mardin ulu camisinin tarihi yapısı hakkında 244 yorum yapılmıştır.



## Zinciriye Medresesi

164 yorum • Mardin bölgesindeki 19

[Yorum yazın](#)

### Gezginlere kulak verin

Yazan: Berat Cebe

"Zinciriye Medresesi tr"

Tem 2023

Zinciriye Medresesi eski Mardin diye tabir edilen yerin tam merkezinde yer alıyor manzarası eseri dahada eşsiz kalıyor üzerine çıkılıyor ve bütün...

Görsel 2. Zinciriye Medresesi

Görsel 2'de görüldüğü üzere, tripadvisor sitesinde Mardin gezilecek yerler sayfasında Zinciriye Medresesinin manzarası ve tarihi yapısı hakkında 164 yorum yapılmıştır.



## Mardin Müzesi

169 yorum • Mardin bölgesindeki 19 y

[Şu anda kapalı](#) [Yorum yazın](#)

### Gezginlere kulak verin

"Harika"

Tem 2022

Mardinin tamamı harika. Tamamı kültür mirası ve harika bir dokusu var. Gezip gördüğümüz yerler içinde bizi en çok etkileyen yer sanırım Mardin...

Yazan: 423fatih

"10/10"

Kas 2022

Çok eski dönemlere ait sergiler var, mükemmel düzenlenmiş, Mardin'de ilk ziyaret edilmesi gereken yer, bence Binasıda çok güzel

Görsel 3. Mardin Müzesi



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<https://www.eclss.org/ess>

11



Görsel 3’de görüldüğü üzere, tripadvisor sitesinde Mardin gezilecek yerler sayfasında Mardin müzesinin kültür mirasını temsil etmesi hakkında 169 yorum yapılmıştır.



Görsel 4. Mardin Arapları ve Kültürleri Facebook Sayfası

Görsel 4’de Mardin Arapları ve Kültürleri Facebook kullanıcısının profili incelendiğinde Mardin kültürünü tanıtmak için Mardin ve çevre bölgelerinin fotoğrafların paylaşıldığı görülmektedir.



Görsel 5. Mardinburada Instagram Sayfası



Görsel 5’de mardinburada kullanıcısı Mardin ve çevre bölgelerinin tarihi yerlerinin fotoğraflarının yer aldığı görülmektedir.

## 2. Sonuç ve Öneriler

Mardin gibi turistik bir destinasyon için turist tercihlerinde sosyal medyanın etkisi oldukça önemlidir. Sosyal medya platformları, seyahat deneyimleri paylaşmak, yerel kültürü ve manzaraları sergilemek, ve seyahat planlarını paylaşmak için önemli bir araç haline gelmesinden dolayı Mardin’in özel coğrafi konumu, tarihi dokusu ve kültürel zenginlikleri, sosyal medyada paylaşılmaya oldukça elverişli unsurlar sunmuş ve tanıtım açısından önemli bir bölge haline gelmiştir. Farklı bir perspektiften incelendiğinde, Mardin’in turizm potansiyeli üzerinde sosyal medyanın belirgin bir etkisi olduğu söylenebilir. Sosyal medya platformları, ziyaretçilerin Mardin’i keşfetmelerini, deneyimlerini paylaşmalarını ve diğer turistlere ilham vermelerini sağlar. Bu da destinasyonun tanıtımına ve popülerliğine katkı sağlamaktadır. Sonuç olarak, Mardin bölgesi, sosyal medyanın turist tercihleri üzerindeki etkisini incelemek için önemli bir model sunmaktadır. Bu etkiyi anlamak, turizm yöneticilerinin destinasyonlarını sürdürülebilir bir şekilde geliştirmek ve tanıtmak için daha etkili stratejiler geliştirmelerine sosyal medya platformları yardımcı olabilmektedir. Bu bağlamda, Instagram, Facebook ve TripAdvisor gibi platformlardaki fotoğraf ve yorumlar, turistlerin seyahat planlarını oluşturmada, Mardin’i tercih etmelerinde etkili olmakta ve Mardin’i keşfetmek isteyen turistlerin ilgisini çekmektedir.

Mardin gibi turistik bir destinasyon için sosyal medya önemli bir konudur. Bu etkinin daha etkili bir şekilde yönetilmesi ve olumlu sonuçlar elde edilmesi için şu öneriler göz önünde bulundurulabilir: İlk olarak, dijital pazarlama stratejileri geliştirilmelidir. Mardin’i tanıtmak için etkili dijital pazarlama stratejileri oluşturulmalıdır. Sosyal medya platformlarında hedef kitleye yönelik içerikler üretilmeli, etkileyici görsel ve video içerikleri paylaşılmalıdır. İkinci olarak, etkili içerikler oluşturulmalıdır. Sosyal medya hesaplarında etkileşimli içeriklerin paylaşılması, potansiyel turistlerin Mardin hakkında daha fazla bilgi edinmelerine ve etkileşimde bulunmalarına olanak tanır. Yarışmalar, anketler, ve soru-cevap etkinlikleri gibi etkileşimli içerikler bu amaçla kullanılabilir. Üçüncü olarak, platform kullanıcılarının içerik paylaşımı teşvik edilmelidir. Bu bağlamda, ziyaretçilerin kendi deneyimlerini ve fotoğraflarını paylaşmaları teşvik edilmelidir. Bu durum, sosyal medyada olumlu sözlü propaganda yoluyla Mardin’in tanıtımını artırabilir. Son olarak, yerel işletmeler desteklenmelidir. Mardin’deki yerel işletmelerin sosyal medya kullanımı teşvik edilmeli ve bu işletmelerin tanıtımı için destek verilmelidir. Restoranlar, oteller, el sanatları atölyeleri gibi yerel işletmelerin sosyal medya hesapları üzerinden tanıtılması, yerel ekonomiye katkı sağlayabilir.

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## Effect of the epic Ramcharitmanas in Psyche of International Relations (IR) of nation India since 1947

### Dr. AJOY KUMAR MANNA

Assistant Headmaster of Biraballavpara High School (H.S.), Biraballavpara, 24 Parganas, Pin.- 743234, West Bengal, India. [email-akmanna1966@gmail.com](mailto:email-akmanna1966@gmail.com)

### Dr. NIMAI CHAND MAITI

Retired Professor, University of Calcutta, Department of Education, Kolkata -700027, West Bengal, India, email- [nimaichandmaiti@gmail.com](mailto:nimaichandmaiti@gmail.com)

### Abstract

The study considers the objective to acquire an understanding of the effect of the epic Ramcharitmanas of Tulsidas (1511-1623) in International Relations of nation India since 1947. This is a qualitative study, descriptive in nature depending on secondary data collected from books, journals, research papers, articles and websites. Content analysis is used here. The major findings of the study are: i. the past is always an important 'input' and determinant of the present international relations. ii. Foreign policy of nation India highly followed by the foreign policy the epic Ramcharitmanas. iii. Both after "Operation Pawan"- Indian intervention of Indian Peace Keeping Force (IPKF) in the Sri Lankan Civil War in 1987-1990 to enforce the disarmament of the LTTE and "Operation Searchlight"- in East Pakistan (now Bangladesh) in 1971, by the West-Pakistan and consequently Indian military support to East Pakistan, India left Srilanka and Bangladesh without occupying an inches of land. iv. Till date Govt. of India intervene military operation in different countries like Pakistan (1965), Bangladesh (1971), Madives (1988) etc and maintained the policy of non- occupying other's land as like as Lord Rama helped Sugriva to get back his kingdom (Kiskindha) and also placed Bivhishana as the king of Srilanka after death of Ravana. It can be concluded that the epic Ramcharitmanas –is the guide line of Indian psyche of international relations of nation India and it is till continuing. The study recommends for introducing the classical literature in curriculum to build up psychological nature of our future generation.

**Keywords:** Epic, Ramcharitmanas, Psyche, International Relations, nation India

### 1. INTRODUCTION

The epic the Ramcharitmanas (1576) of Goswami Tulsidas is one of the trustworthy guide and living faith of the people of India. The book has been written based on the Ramayana of Rishi Balmiki (aprox 600BC-200BC) in poem pattern-Chaupai metre (four-line quatrains), Doha metre (two-line



couplets), with occasional Soratha and various Chhand metres. Tulsidas in the epic Ramcharitmanas described the story of Lord Rama, that was stored in the mind (Mānasa) of Lord Shiva (God) and Shiva narrated the same to his consort Parvati. The relation between Kosal kingdom (Ajodhya) with Kiskandha (Bali and Sugriva), Lanka (Ravana and Bivishan) non-occupying international relation policy is presented in this book. We found that Independent nation India from the year 1947 has adopted the same policy towards Pakistan, Bangladesh, Maldives, Srilanka up to present era.

### 1.1 Significance of the study

We have our glorious past regarding international relations from Rig Vedic ages. Ancient literatures are the living written records in this concern. The study of the effect of the epic Ramcharitmanas in Psyche of International Relations (IR) of nation India since 1947 is to recap the glorious past to understand the underlying essence of present international policy of nation India.

### 1.2 Objective of the study

To acquire an understanding of the effect of the epic Ramcharitmanas in Psyche of International Relations (IR) of nation India, since 1947.

### 1.3 Delimitations of the study

- i. The study is delimited into secondary data
- ii The study is delimited into the book “Ramcharitmanas” of Goswami Tulsidas
- iii The study is delimited into policy of Kosal –kingdom (Ajodhya) towards others provinces and kingdom as well as International relations of nation India since 15th August,1947-29th February, 2024.

### 1.4 Operational definitions of the key terms used in the study

**Effect**-The term “effect” refers to correlation of a particular instance relevant to another spacio-temporal situation in future. **Ramcharitmanas**- The term ‘Ramcharitmanas’ refers to the book written by Goswami Tulsidas (1576) to retaliate the story of Lord Rama –the concept of the ‘Ramayana’ of Rishi Balmiki.

**Psyche**-the term “Psyche” refers to mental or psychological structure of an action. The term is used here to indicate underlying structure of Indian foreign policy (policy of international relation) of nation India.

**International relations**- the term “International relation” refer to relation with others countries. The term used here to indicate relation of Kosal kingdom with Kiskindha and Lanka in ancient period and relation of India with Pakistan, Bangladesh, Srilanka, Maldives etc since 1947 to till date.

**India**- the term “India” refers to the nation formed on the day 15th August, 1947 and located in Southern Asia –Himalayas to Bay of Bengal and Bangladesh to Arabian Sea.



### 1.5 Methodology

This is a qualitative study, descriptive in nature based on secondary data (printed data) collected from books, journals, news papers, and websites. Content analysis both Conceptual and Relational content analyses are used here to consider the objective of the study.

### 1.6 Analysis and interpretation of data

The researcher has tried to understand the effect of the epic Ramcharitmanas in Psyche of International Relations (IR) of nation India, since 1947 with the Content analysis of some selective portion of the book Ramcharitmanas relevant to the objective of the study.

“निसिचर हीन करउँ महि भुज उठाइ पन कीन्ह ।

i. सकल मुनिन्ह के आश्रमन्हि जाइ जाइ सुख दीन्ह ॥ ९ ॥

nisicara hina karaū mahi bhuja uṭhāi pana kinha,

sakala muninha ke āśramanhi jāi jāi sukha dinha.9.”<sup>11</sup> *Ramchritmanas, p.724*)

The significance of the metre is: on the way to Dandakaranya Lord Rama, Laxman and Mata Sita met with different hermits and took rest in their hermitages. There Lord Rama found huge amount of corpse of hermits one by one killed by demons and felt upset with the incident. Being angry towards demons Lord Rama uplifted his bow and made a commitment to get rid of demons from the earth. It's a vision of the foreign policy of ancient India. Militant free nation is the motto of independent nation India till date.

“सून बीच दसकंधर देखा । आवा निकट जती कें बेषा ॥

ii. जाके डर सुर असुर डेराहीं । निसि न नीद दिन अन्न न खाहीं ॥ ४ ॥

sūna bica dasakāṁdhara dekhā, āvā nikata jati ke besā.

jākē dara sura asura derāhī, nisi na nida dina anna na khāhi. 4”.<sup>2</sup>(

*Ramchritmanas, p.754*)

<sup>1</sup> 1318\_Sri Ramchritmanas, Gorakhpur, India: Gita Press. Romanized ed p.724

<sup>2</sup> 1318\_Sri Ramchritmanas, Gorakhpur, India: Gita Press. Romanized ed p.754



The significance of the metre is: Demon king Ravan of Lanka abducted Mata Sita in disguise of Bramhin from Dandakaranya jungle when there was none by the side of Sita and finally Ravan lost his kingdom and life in the hands of Lord Rama.

We found that independent nation India is much concerned about the entries of militant from neighbour countries to keep peace of nation and in case it happens then bold step has been taken against it.

iii.

“तुरत चले कपि सुनि प्रभु बचना । कीन्ही जाइ तिलक की रचना ॥

सादर सिंहासन बैठारी । तिलक सारि अस्तुति अनुसारी ॥ ३ ॥

turata cale kapi suni prabhu bacana, kinhī Jāi tilaka ki racanā.

sādara simhasana baithārī, tilaka sārī astute anusari.3.”<sup>3</sup>

(*Ramchritmanas*, p.1012)

Inner meaning of the metre is: after death of Ravana-demon king of Lanka, Lord Rama commanded the monkeys to proceed at once in the town for the preparations of the coronation ceremony of Vibhīṣana and Vibhisana became the king of Lanka by the grace of Lord Rama. It means Lord Rama did not occupy Lanka after death of Ravana though he can occupy Lanka. We also found similar expression in Valmiki Ramayana-

“अनुरक्तं च भक्तं च तथा पूर्वोपकारिणम् ।

एष मे परमः कामो यदिमं रावणानुजम् ॥ १० ॥

लङ्कायां सौम्य पश्येयमभिषिक्तं विभीषणम् ।

एवमुक्तस्तु सौमित्री राघवेण हात्मना ॥ ११ ॥<sup>4</sup>

(*Srimad-Valmiki-Ramayana*, Part-i, p.777)

<sup>3</sup> 1318\_Sri Ramchritmanas, Gorakhpur, India: Gita Press.Romanized ed p.1012

<sup>4</sup> 453\_Srimad-Valmiki-Ramayana, Gorakhpur, India: Gita Press.Romanized ed p.777



The meaning of the metres is: according to Valmiki Ramayana Lord Rama said to his beloved brother Laksmana- son of Sumitra "Consecrate, O gentle one, on the throne of Lanka the yonder Vibhisana, who is fond of, nay, devoted to me, and has done good offices to me in the past. It is my foremost desire, O gentle one, that I should see this younger brother of Rāvaṇa, Vibhiṣaṇa, consecrated on the throne of Lanka." 5 p. 778 (*Srimad-Valmiki-Ramayana, Part-i, p.778*)

iv.

“ए सब सखा सुनहु मुनि मेरे । भए समर सागर कहँ बेरे ॥

मम हित लागि जन्म इन्ह हारे । भरतहु ते मोहि अधिक पिआरे ॥ ४ ॥

e saba sakhā sunahu muni mere, bhae samara sāgara kahā bere.

mama hita lagi janma inha hare, bharatahu te mohi adhika piāre.4.”<sup>6</sup>

(*Ramchritmanas, p.1049*)

The inner meaning the metre of the epic Ramcharitamanas is: Lord Rama said to Muni Bishwamitra that, all these were His comrades those who helped Him to cross the bars and to win the battle of Lanka. They staked their life for Him (Rama). So, Sugriva, Vibhisana, Angada, Hanuman and the rest were more important and centre of love even than Bharata for him. Their glorious presence of them in coronation ceremony of Lord Rama were highly solicited.

“ भरतादि अनुज बिभीषणांगद हनुमदादि समेत ते ।

गहँ छत्र चामर ब्यजन धनु असि चर्म सक्ति बिराजते ॥ १ ॥

bharatādi anuja bibhīṣanāṅgada hanumadadi sameta te,

gahē chatra camara byajana dhanu asi carma sakti birājate.1.”<sup>7</sup>

(*Ramchritmanas, p.1054*)

<sup>5</sup> 1318\_Sri Ramchritmanas, Gorakhpur, India: Gita Press. Romanized ed p.1054



v.

“लछिमन तुरत बोलाए पुरजन बिप्र समाज ।

राजु दीन्ह सुग्रीव कहँ अंगद कहँ जुबराज ॥ ११ ॥

lachimana turata bolāe purajana bipra samāja,  
rāju dinha sugrīva kahā amgada kahā jubaraja.11”<sup>6</sup> (*Ramchritmanas*,  
p.1049)

The meaning of the metre is: As per the guidance of Lord Rama, Lakṣmaṇa immediately summoned the citizens and the Brahmanas in their presence Sugrīva crowned as the king and Angada become the Crown Prince of Kiskindha.

“कार्तिके समनुप्राप्ते त्वं रावणवधे यत ।

एष नः समयः सौम्य प्रविश त्वं स्वमालयम् ॥ १७ ॥<sup>7</sup>

(*Srimad-Valmiki-Ramayana*, (Part-i) p.1028)

Similar remarks is also found in Valmiki Ramayan and it is said that, "When the autumnal month of Kartika (roughly corresponding to October) has duly set in, make you an endeavour to get rid of Ravana: such is our understanding, O dear friend! For the present enter you your palace."

“ततः सुग्रीववचनाद्धत्वा वालिनमाहवे ।

सुग्रीवमेव तद्राज्ये राघवः प्रत्यपादयत् ॥ ७० ॥

“Having thus killed Vāli on the field of battle at the instance of Sugrīva, Śrī Rāma (a scion of Raghu) then installed Sugrīva himself on Vali's throne.”<sup>10</sup><sup>8</sup>(*Srimad-Valmiki-Ramayana*, (Part-i), p.65 )

<sup>6</sup> 1318\_Sri Ramchritmanas, Gorakhpur, India: Gita Press.Romanized ed p.1049

<sup>7</sup> 453\_Srimad-Valmiki-Ramayana, (Part-i) Gorakhpur, India: Gita Press.Romanized ed p.1028

<sup>8</sup> 452\_Srimad-Valmiki-Ramayana, (part-ii) Gorakhpur, India: Gita Press.Romanized ed p.65



## 1.7 Implication of Ramcharitamanas in International Relations (IR) of nation

### India since 1947

- i. India-Pakistan war (1965) - the conflict between two nations India and Pakistan resumed once again with the issue of border dispute in Jammu and Kashmir and Pakistan raised a boundary dispute in Rana and Kutch in Gujarat. A large number of Pakistan militant Mujahedeen forces try to take over Kashmir. In this context in 1965 Pakistan administered 'Operation Gibraltar' to infiltrate forces into Jammu and Kashmir for the insurgency against India and the conflict between India and Pakistan took turned into a violent form. On 6th September, 1965, India attacked Pakistan in west Pakistan near Lahore with a slogan of 'not at war with Pakistan but only to destroy Pakistani military bases from where the India was attacked and Pakistan jets crossed the international boundary and attack Amritsar air base. Indian force moved to Lahore and Sialkot and finally with ended in 23rd September 1965. The United States and the Soviet Union has played a diplomatic role to prevent the conflict between two nations by the agreement of 'Tashkent Declaration' by the Indian Prime Minister Lal Bahadur Shastri and Muhammad Ayub Khan, President of Pakistan, on the day of 10th January, 1966 with a commitment of withdrawal of military force in and between 25 February 1966 from occupied areas.
- ii. Indian support to Bangladesh national movement (1971) - in favour of independent movement of Bangladesh (East Pakistan, 1971) particularly after the general election results held in December 1970 and Sheik Mujibur Rahman won the election and became Prime Minister-designate. On 25 March 1971, Mahammad Ayub Khan, president of Pakistan and Commander, Yahya Khan administered 'Operation Searchlight' by their Pakistani military Junta against East Pakistan revolutionary -student, teacher, common people as well as MuktiYodha. Sheik Mujibur Rahman arrested by the Junta. Govt. of India headed by Indira Gandhi made an active interference due to almost ten millions refugees entered into India from East Pakistan (Bangladesh) in this situation and they were given shelter in different camps in India and it was expensive for the nation India and in humanitarian ground against mass assassinations, deportation and gang rape by the West Pakistan military personnel. India with the support of troops and supplies, weaponry and munitions, and finally and last of all covert help of the Indian army to support the Bengali liberation warriors were done. The conflict ended on 16th December 1971 in surrender of Pakistan military in Dacca in presence of Bangladesh-India allies as well as the end of East Pakistan. Bangladesh's People's Republic got independent and Indian soldiers left Bangladesh unconditionally.
- iii. Operation Pawan (1987-1990) in Sri Lanka- Indian's active engagement in counter-insurgency operations in Sri Lankan Civil War in October 1987-1990 to enforce the disarmament of the LTTE as a part of the Indo-Sri Lanka Accord, which was signed on the day of 29th July, 1987, in Colombo, by then Prime Minister Rajiv Gandhi and Sri Lankan President J. R. Jayewardene. The Indian Peace Keeping Force (IPKF) with total of 1, 00,000 soldiers entered Sri Lanka to take control of Jaffna from the liberation Tigers of Tamil Eelam (LTTE) under the leadership of Velupillai Prabhakaran. Operation Pawan formally ended on March 24, 1990



with the withdraw of IPKF troops officially from Sri Lanka on the orders of Indian Prime Minister V.P. Singh on March 24, 1990.

- iv. Maldives (1988) In the year 1988, Uz. Maumoon-Abdul-Gayoom -President of Maldives, wanted military support from Prime Minister of India Rajib Gandhi to save the Madivian people against a coup led by the businessman Abdullah Luthufi with help of armed mercenaries of LTTE of Srilanka. Govt. of India Administered 'Operation Cactus'-mission led by Indian armed forces in the Maldives and prevented that coup attempted successfully. Finally, Govt. of India unconditionally withdrawal military force from Maldives gradually.

### 1.8 Findings of the study

- i. The epic Ramcharitamamas is the written record of the principles of nonoccupying foreign policy of nation India.
- ii. Foreign policy of Kosal kingdom is non-occupying other's land
- iii. The psyche of international relation (IR) of nation India similar to policy Kosalkingdom
- iv. India is always against evil power demon in ages of Ramcharitamas and militant of independent India.

### 1.9 limitations of the study

- i. Lack of time and study
- ii. No primary data has been considered for the study.

### 1.9 Conclusion of the study

It can be concluded that the epic Ramcharitmanas is the guide line of the

Indian psyche of the international relation (IR) of nation India. Independent nation

India has maintained not to occupy land in case of Pakistan war-1965, Bangladesh independent movement-1971, 'Operation Pawan' -Srilankan civil war-1987-1990, and 'Operation Cactus'-Maldives, 1988.

### 1.10 Recommendation of the study

- i. Value based education should be introduced in curriculum
- ii. Life history of eminent personalities should be introduced in curriculum

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## Power Solidarity in Women Entrepreneurship: Case of KOSGEB

**Prof. Dr. Adnan CELİK**

Selcuk University, FEAS, Department of Business, Konya/Turkiye.

E-Mail: [adnancelik@selcuk.edu.tr](mailto:adnancelik@selcuk.edu.tr) ,

ORCID ID: 0000-0002-8538-9937

### Abstract

Entrepreneurship requires, above all else, dedication to venture. Every society desires to produce economic values that will contribute to socio-economic development. Entrepreneurs bring together production factors for this purpose. They also assume various risks. Obtaining useful and useful outputs is more important here than gender. So, it is not that important whether the entrepreneur is male or female. However, some balance must be achieved in the field, especially in areas where women's entrepreneurship is needed. Therefore, there is a need to increase economic, social and cultural support for women. Such supports may differ from country to country and culture to culture. For example, notable examples can be found in economically and socially developed countries. There are also promising situations for our country, which is gaining momentum towards development. Here, KOSGEB (The Small and Medium Enterprises Development Organization of Turkey) is one of the leading institutions in this regard. This study titled "Power Solidarity in Women Entrepreneurship: KOSGEB Example" is aimed at the mentioned issues. It was prepared to reveal the importance of the institution in terms of developing women's entrepreneurship. The study basically includes three separate headings. First, the literature review was shared. Then, information about the methodology is given. Under the heading Findings and discussion; Some selected supports for women entrepreneurship and KOSGEB supports for women entrepreneurs were evaluated. As a result of the study, various recommendations are listed for the relevant environment.

**Keywords:** Entrepreneur, Women Entrepreneurship, Power Solidarity in Entrepreneurship, KOSGEB

### INTRODUCTION

Entrepreneurs are people who attempt to do something and do not shy away from it. By bringing production factors together, they initiate the initiative necessary for the production of economic goods and services. They also find the financial resources necessary for production and the markets in which the production will be evaluated. After all, they create economic values. In this context, the concept of entrepreneur is used to mean a person or people who constantly innovate. The term "innovative" attributed to the entrepreneur is; It covers the issues of introducing new products to the market, benefiting from a new production technique, obtaining new markets, finding a new source of raw



materials or semi-finished products and finally realizing a new form of organization. It is easier for entrepreneurs who fully implement business functions to achieve economic efficiency. Thus, they provide great advantages to the business and the national economy. Successful entrepreneurs generate income by creating economic value. Some of the money earned is distributed within the business. In other words, it can be wage, premium, profit share or dividend sharing. Some of the earnings can be saved for the future of business activities. In other words, it is used for scale growth or capacity increase. In addition, taxes are paid to the state and various premiums are paid to social security institutions. There may also be distribution within the supply chain. Thus, employees, managers, entrepreneurs, supply chain elements and the entire country can benefit greatly (Gerber, 1996: 17; Celik, 2018: 12-15; Celik, 2021: 44).

Diversification and enrichment of the entrepreneurship dimension can strengthen the socio-economic foundations of society. Developing women's entrepreneurship is useful in this sense. In addition, it may have positive results for the individual, the organization and business peace. In other words, both socio-economic improvements and socio-psychological benefits can be achieved. Undoubtedly, this situation may vary from country to country and culture to culture. Women's entrepreneurship may differ in countries with full socio-economic development. There may be hopeful situations for developing countries, too. However, there may be various problems for underdeveloped or underdeveloped countries. There are hopeful developments for our country. Undoubtedly, there are some problems. However, government institutions, the private sector and third parties have significant positive contributions. In this study, KOSGEB supports were mostly highlighted. Because this institution provides very important support in terms of power solidarity in women's entrepreneurship.

This study consists of three parts. In the title of literature review; Entrepreneur concept and scope, women entrepreneurship and KOSGEB topics are explained. Under the title of Methodology; problem of the research, purpose and importance and research method and scope are introduced. Some selected supports for women entrepreneurship were first mentioned in the findings and discussion title. Then, KOSGEB supports for women entrepreneurs was evaluated. The study has been concluded with current recommendations that the relevant environment can benefit from concretely.

## 1. LITERATURE REVIEW

### 1.1. Entrepreneur Concept and Scope

The word entrepreneur is derived from the Latin word “entre”, which means to grasp or swim. Its association with work and workplace dates back to France in the 1700s. Entrepreneur; It means to enter, to start, to take a hand. Entrepreneur is used to mean entrepreneur or contractor. Richard Cantillon defined the entrepreneur in 1775, close to today. Jean-Baptiste Say used the concept of “adventurer” in the 1800s and saw the entrepreneur as someone who pursues risks and establishes his business. Joseph Alois Schumpeter, on the other hand, gave special importance to the concept of entrepreneur in 1934 among production, production factors, credit, interest, business and firm cycle. According to Schumpeter, the development of capitalist societies is the work of entrepreneurs. Entrepreneur or entrepreneurship cannot be defined as belonging to a clearly delimited social professional group. According to him, entrepreneurs are “people who change the existing economic order by offering new



products and services, establishing new organizations or using new raw materials” (Say, 2001: 1-5; Cantillon, 2001: 1-3; Schumpeter, 1998: 1-11; Celik, 2018: 11).

An entrepreneur is a person who attempts to do something and does not shy away from it. He is the person who initiates the necessary initiative for the production of economic goods and services by bringing together the production factors, and also finds the financial resources necessary for production and the markets in which the production will be evaluated. The combination of production factors required to create economic values is not a biological or mechanical event, but is carried out by humans. Human beings make a significant contribution to the creation of economic values with this function we call entrepreneurship (Muftuoglu, 1989: 73; Cetin, 1996: 29; Celik, 2018: 12).

Successful entrepreneurs act as locomotives in the development of their countries. They support economic development with their activities. In addition to production and marketing activities, they also make significant contributions to employment. They try to make income distribution more balanced along with the development of the country. Especially developed country entrepreneurs intensively perform the following types of functions; “to produce new goods and services or to improve the quality and qualities of known goods and services; the ability to develop and implement new production methods; establishing new organizations in industry; reaching new markets; “To find new sources from which raw materials and similar substances can be provided” (Celik, 2021: 44-45; Simsek and Celik, 2023: 24-25).

## **1.2. Women Entrepreneurship**

Entrepreneurship is of undeniable importance for every society. This issue should not be addressed on a sexist basis. In other words, whoever makes a significant production for humanity and living life should be celebrated. This may not be similarly accepted in some societies or cultures. In other words, differences can be seen in entrepreneurship between men and women. In this area, public and private company practices can provide balance. State institutions have various activities. There are also some large-scale companies that support women entrepreneurship. Additionally, other institutions or organizations may also provide support. These can generally be grouped under the subheadings “Corporate Social Responsibility Projects” and “NGOs (Non-Governmental Organizations) supports”.

Development should undoubtedly occur in every field. So just the economic dimension is not enough. Economic developments; It should also be supported by social, technical, financial, fiscal and legal improvements. In general, entrepreneurship facilitates these goals. More beneficial results can also be obtained through women's entrepreneurship. In other words, in socio-economic terms, higher added values can be achieved. So, improvements are needed in this sense. This situation can be seen more clearly in countries that are developed in every sense. Therefore, it is important to support women's entrepreneurship. Today's socio-technical developments require women to be active in the field. Every day, the number of women participating in business life increases. What needs to be done is to reach more female entrepreneurs by including policies that support female entrepreneurs. This can be a significant investment for anyone. Therefore, incentives in the relevant field should be increased. Comprehensive guidance should be provided on starting a business and running it effectively. However, there are some problems in practice. Social and economic problems that prevent women



from taking part in working life must be overcome (Gunduz & Karadeniz, 2022: 96). When the problems facing women's entrepreneurship are resolved, very beneficial results can occur. Women being more active in business and social life can bring significant benefits for every stakeholder.

When women's entrepreneurship is evaluated specifically in our country, we should be hopeful. Because our women play active roles in the field of entrepreneurship. It also makes various contributions to economic growth. Our country has gone through some development phases in socio-economic terms. Regulations for women entrepreneurship are one of them. In other words, in this sense, there are efforts to reach the levels of developed countries. However, the desired level has not been reached yet. It seems that men are slightly ahead in creating employment and improving the welfare of society. Women may be less effective than male entrepreneurs due to some obstacles. Although it is the duty of the state to create the necessary infrastructure to increase women's economic activities, the participation of the private sector is also required. In addition, it is important to implement a comprehensive and effective support mechanism for the development of women's entrepreneurship (Senel, 2022: 180). Although activity is observed, the opportunities for women entrepreneurship need to be further increased. Support and incentive programs can be made even more effective. It is also important to facilitate access to finance for women entrepreneurs who will start a business for the first time or who have already established their business.

Women's entrepreneurship also has an international dimension. Significant practices are seen especially in developing and developed countries. In fact, the world needs women entrepreneurs very much. Female entrepreneurship can revitalize the economy for everyone. It is becoming increasingly accepted that women are vital to economic growth around the world. Women entrepreneurs look at the world from a different perspective and can do things differently. It would be beneficial to increase the motivation of women in this direction. However, there is significant heterogeneity among female entrepreneurs. Internal and external environmental factors may be more dominant. Family support and sectoral collaborations are needed. Additionally, positive discrimination can be made in financial supports (Burch, 2013; Carranza, et al, 2018: 1-2).

### 1.3. KOSGEB

KOSGEB; It can be explained as “The Small and Medium Enterprises Development Organization of Turkey” or “The Small and Medium Enterprises Development and Support Administration”. It is a very important institution in terms of entrepreneurship. It has reached the present day through various stages throughout the historical process. It was developed on the projects of “Improvement of Small Industry Extension Services (KUSGET) and Industrial Training and Development Center (SEGEM)”. It was transformed into an institutional entity on April 20, 1990. In other words, KOSGEB law has been prepared. 5 May 2009 service and trade sectors are also included. By 2017, KOSGEB has prioritized supporting businesses operating in the industrial sector, especially in technological fields and domestic production. The aim is for SMEs to make technology-oriented production with local and national resources. The following definitions have been regulated on the basis of institutional legislation (KOSGEB, 2005; KOSGEB 2009, KOSGEB, 2015; KOSGEB, 2018; KOSGEB, 2024):



- KOSGEB is defined as “Small and Medium-Sized Enterprises Development and Support Administration”.
- An entrepreneur is a real person who wants to start his own business based on a business idea.
- SME means “Small and Medium-Sized Enterprise”. However, they must operate in sectors determined or identified by the institution.
- ISGEM was announced as “Business Development Centers”. Their establishment criteria and qualifications are determined by the presidency. In addition, the right to use this name must be recognized by the institution.
- Business Plan is a “strategic document in which the qualifications and objectives of the Enterprise and ISGEM, the path to be followed and the activities to be carried out to achieve these objectives are explained”.
- Incubator means “structures where office services, equipment support, management support, access to financial resources, critical business and technical support services are provided to entrepreneurs from a single source under one roof”.
- Professional Organization, “Chambers, stock exchanges, unions, confederations, federations, foundations, associations and cooperatives, small industrial sites and organized industrial zone managements operating for businesses and entrepreneurs”; Secondary Education Institution, “secondary education institutions defined by the Ministry of National Education”; Higher Education Institutions are “higher education institutions included in the Higher Education Law No. 2547”.

## 2. METHODOLOGY

### 2.1. Problem of the Research, Purpose and Importance

It is useful to answer the following questions: “Which are the main organizations that offer government support to women entrepreneurs? What is the importance of grant and/or loan support for women entrepreneurs? Do organizations that provide grant or loan support make plans and programs for the future? Are there success evaluations for women entrepreneurs? Women's entrepreneurship is one of the fundamental dynamics of social development. It is also important for business peace. Developments in this field may also facilitate the formation of democratic culture in workplaces. Additionally, there is a positive interaction between female entrepreneurship and female employment. It can be assumed that works of sufficient quantity and quality have been produced in this field in the past. However, in this study, we also focused on the current dimension. Thus, an effort was made to create an up-to-date basis for future studies.

### 2.2. Research Method and Scope

This study is generally about power solidarity in entrepreneurship. In particular, the focus is on women's entrepreneurship. The study includes conceptual and theoretical evaluation. For this reason, literature review was preferred. Information obtained from literature and popular sources has been



evaluated comprehensively. First of all, “entrepreneur concept and scope; women entrepreneurship; KOSGEB” literature information was shared. Then, the current dimension of “Some Selected Supports for Women Entrepreneurship” and “KOSGEB Supports for Women Entrepreneurs” was evaluated. At the end of the study, noteworthy suggestions are listed for those concerned.

### 3. FINDINGS AND DISCUSSION

#### 3.1. Some Selected Supports for Women Entrepreneurship

Some of the institutions and organizations that support women entrepreneurs are as follows:

- KOSGEB: It is one of the most important institutions in this field. This institution, which first comes to mind when it comes to power solidarity in women entrepreneurship, is included in the next heading.
- KGF (Credit Guarantee Fund): It was established to provide collateral (guarantee/surety) for the loans that SMEs will receive from banks. Women entrepreneurs can receive suitable loans within the scope of this fund. Repayment periods may be extended. Naturally, there is a risk premium calculation for loan amounts and durations (Celik, et al., 2013: 162). In 2020 and beyond, titles such as “value regulations, economic stability shield, reorganization of bank guarantees and breathing credit” have been updated (KGF, 2024).
- TKDK (ARDSI-Agriculture and Rural Development Support Institution) & IPARD (Instrument for Pre-Accession Assistance on Rural Development): TKDK prioritizes “enterprises that produce milk, red meat, poultry meat and eggs and those that trade in them”. In this context, between 60% and 80% grant support is provided to women entrepreneurs. Additionally, these investments also have tax exemptions (Uzun, 2024; TKDK, 2024).
- TOBB-KGK (The Union of Chambers and Commodity Exchanges of Turkey - Women Entrepreneurs Council): TOBB-KGK carries out various activities for women entrepreneurship. For example, career development opportunities are offered. Basic information is given to women entrepreneurs. There are also seminars, panels and various training events. The main aim is to increase awareness of women entrepreneurship. Women entrepreneurs are provided with internships with experienced entrepreneurs. A coaching system has been established (Uzun, 2024; TOBB, 2024).
- KAGIDER (The Women Entrepreneurs Association of Turkey): The institution has carried out programs and projects such as “female leaders of the future, young women with strong ideas, ocean passengers, girls are advancing, my dream partner portal”. There are also activities for young people such as; “To develop and increase awareness of gender equality among young people between the ages of 18 and 30; “to support productivity, develop entrepreneurial activities, create and increase young women's passion for being in business life” (Uzun, 2024; KAGIDER, 2024).
- Ministry of Family and Social Policies (General Directorate on the Status of Women): Interest-free loan support is offered to women entrepreneurs. It may take as long as 8 years for the loan to be repaid. Additionally, there is no refund for the first 2 years (Uzun, 2024). The following types of education, research and projects of the institution are noteworthy; “Current Situation of Women's



Cooperatives in Turkey, My Mother's Job is My Future Project, Women's Empowerment Strategy and Action Plan, Turkey's Engineer Girls Project” (KSGM, 2024).

- Local Governments (Municipalities): Various supports are available from local governments or municipalities. Women entrepreneurs' access to information is facilitated. The “Women of Commerce” online platform is important. There are also efforts to create free office spaces and shared workshops for them. Mentoring and consultancy support is also available (Uzun, 2024).

- Banks and Financial Institutions: The following types of support can be provided to women; “Entrepreneur loan support and packages; EBRD (European Bank for Reconstruction and Development) financing and consultancy facilities; KGF supports; Export support loans” (Uzun, 2024). Women entrepreneurs can benefit from some of these. Undoubtedly, collateral, maturity, loan amount and liabilities may vary from bank to bank.

### 3.2. KOSGEB Supports for Women Entrepreneurs

Within the scope of Applied Entrepreneurship Training, it is important for “entrepreneurs to have knowledge and skills in establishing and running a business, to be aware of their roles and responsibilities in this process, and to gain the knowledge and experience to prepare a business plan for their own business ideas”. In this context, the institution can organize trainings by its own units. There are also trainings organized by some institutions/organizations approved by the institution. There are also entrepreneurship courses given within the scope of formal education by Higher Education or Secondary Education Institutions and approved by KOSGEB. The target audience of Applied Entrepreneurship Training is generally real people who want to start their own business. However, training can also be provided for a specific target group such as female entrepreneurs, disabled entrepreneurs and students (KOSGEB, 2021: 11).

KOSGEB's “Entrepreneurship Support Program” is very common. This program aims to “support and disseminate entrepreneurship, which is the main factor in solving economic development and employment problems, and establish successful businesses” (KOSGEB, 2023). Advanced entrepreneurship, IT (information technology) assistance, TA (technical assistance) supports, qualified personnel employment incentives, marketing and e-commerce regulations are also noteworthy. This support and assistance; It can be valid for all entrepreneurs who apply in accordance with the legislation, especially women.

The world has become a global village as economic borders begin to disappear. Regardless of its scale, every business has started to open up to world markets with its own resources, industry support and the guidance of public institutions. Our large-scale enterprises have turned to strategic collaborations with global enterprises and started to exhibit production and marketing activities both in our own country and in various parts of the world. We have SMEs that have started to use the development of the Internet and communication very usefully. Legal regulations and public supports paved the way for women entrepreneurship (Celik, 2018: 23). In this sense, the following information shared by the president of the institution within the scope of the “Power Solidarity Meetings Within Us” is noteworthy (Kurt, 2022):



1. Entrepreneurship, Innovation and Development Support: A significant number of R&D personnel have been trained in Turkey. Approximately one third of them are women. He said that KOSGEB carries out activities under the main headings of entrepreneurship, innovation and development.

2. Online Education Support: KOSGEB moved entrepreneurship training to the online environment in 2019. Approximately 40.5% of those who received “Traditional Entrepreneur Training”; Approximately 36.6% of those who received “Advanced Entrepreneur Training” were women. As of June 23, 2022, “Advanced Entrepreneur Support” has been provided to 18 thousand businesses. The proportion of women in this support was approximately 25%. Within the scope of “Traditional Entrepreneur Support”, approximately 42 thousand businesses were supported. The proportion of women in this support was approximately 42%.

3. Loan Interest Support: Both traditional and advanced entrepreneur support programs continued in terms of loan interest. These supports target positive discrimination towards women.

4. R&D, P&D and Innovation Support: Significant support was provided to 788 entrepreneurs with the “R&D, P&D and Innovation Support Program”. In addition, high amounts of support were provided to 1,164 businesses within the scope of the “Foreign Market Support Program”.

The positive increases in the rates of support provided to women entrepreneurs by KOSGEB are noteworthy. For example, positive discrimination against women is targeted within the scope of “Project-Based Support Program Implementation Procedures and Principles for Professional Organizations”. In other words, if the entrepreneur is a woman, support rates can be increased by 20%. Based on this, the following expression can be developed; “The upper limits and rates of support to be provided within the scope of New Entrepreneur Support are encouraging for women entrepreneurs” (KOSGEB, 2018: 8; Celik, 2018: 138). Positive discrimination against women can be seen in many elements of business life. One of these is ensuring coordination with banks while providing grant and/or loan support. For example, the cooperation between KOSGEB and Halkbank is quite developed. With the agreement made, some supports are provided in the form of a loan with a 6-month principal payment grace period. Additionally, there are different support items for women entrepreneurs under the age of 30. For example, “interest-free loans” can be given. The amounts can be increased further for those working in workplaces operating in the line of business with a mastery certificate (Uzun, 2024).

## CONCLUSION AND EVALUATION

Entrepreneurship is very important for a sustainable life. Entrepreneurs facilitate these goals with the various functions they undertake. Within the scope of entrepreneurship, women's entrepreneurship is a very special issue. Women's entrepreneurship needs to be supported. The ecosystem in this area must be designed correctly. Various improvements are needed in economic, social, technical, financial and legal fields.

Many institutions and organizations provide significant support for the development of women's entrepreneurship. They provide assistance to women entrepreneurs in many socio-economic and socio-technical fields. However, KOSGEB has a special place and entrepreneurship supports have become



institutional. The institution has undertaken important duties in this sense. It has developed and grown over the years. In particular, it has further expanded its activities with the support of MOSIT (Ministry of Science, Industry and Technology). Today, it has become an indispensable institution for both general entrepreneurship and women's entrepreneurship. Undoubtedly, we should not be satisfied with what has been done. Even more effective improvements should always be targeted. Further development of female entrepreneurship can provide significant strength in this field. There is a need for some practices to be carried out at institutional and individual levels. The following findings and suggestions can be developed for the relevant environment:

- In order to increase women's representation in the business world, cooperation between public institutions, private sector, universities and NGOs (non-governmental organizations) should be ensured. EWWGs (Entrepreneurial Womens Working Groups) centers can be expanded. In order to remove all obstacles to women's entrepreneurship, SWOT analyzes should be carried out and brainstorming techniques should be internalized.
- The state may provide additional support to women's entrepreneurship from the unemployment insurance fund and/or wealth fund. KGF makes useful contributions. This can be enhanced by the WCGF (Women's Credit Guarantee Fund). Regional development agencies should allocate special quotas for women's entrepreneurship.
- KOSGEB carries out significant work to develop women's entrepreneurship. But this is not enough. Grants and/or loans given must be increased according to current conditions. Additionally, the scope of support and assistance should also be expanded. For example, many topics such as e-commerce training, internship opportunities in IT valleys, location finding support, management, mentoring, product training, fashion and trend following in products, store decoration can be enriched. Women's priority can be increased in Business Development Centers. Incentives within the scope of ISO (International Standard Organization), HACCP (Hazard Analysis of Critical Control Points) and CE marking can be expanded. Microcredit examples can be rewarded. Rural supports can be increased. Traditional arts can be supported more. Cooperative associations can be rearranged. Women's enterprise clusters may also be useful.
- Banks and financial institutions also have various duties. Collateral is an instrument method. This should not be made a primary goal. Bureaucracy in accessing credit should be reduced. Departments should be created for women entrepreneurship.

This study was created by general evaluation of the literature within the scope of “entrepreneur, women entrepreneurship, power solidarity in entrepreneurship and KOSGEB”. In order to overcome this limitation; A survey can be conducted to officials of relevant institutions, company managements and women entrepreneurs. Additionally, case study research can also be done.

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## **Relationship of Lymphovascular Space Invasion (LVSI) with Histological Grade of Tumors and Uterine Muscle Industrate in Endometrial Cancer**

**dr n. med. Olga ADAMCZYK-GRUSZKA**

**Katedra Ginekologii i Położnictwa, Collegium Medicum, Uniwersytet Jana Kochanowskiego w Kielcach, Polska**

**lek. Jakub GRUSZKA**

**Warszawski Szpital Południowy, Polska**

**lek Karolina KOMAR-GRUSZKA**

**Szpital Dziecięcy im. Prof. Dr med. Jana Bogdanowicza w Warszawie, Polska**

**lek. Anna ZWIERZYŃSKA – FURMANEK**

**Zakład Anatomii, Collegium Medicum, Uniwersytet Jana Kochanowskiego w Kielcach, Polska**

### **Abstract**

**Introduction:** Endometrial cancer (EC) is the most common cancer of the female genital tract. Its occurrence is a significant problem, especially in developed countries. In the context of this disease, an important clinical prognostic factor is lymphovascular space invasion (LVSI). The role of LVSI in relation to the risk of disease recurrence and the selection of appropriate treatment remains controversial and unclear.

**Objective:** The aim of the study was to compare lymphovascular space invasion (LVSI) in type 1 and type 2 endometrial cancer (EC).

**Material and methods:** The study included 306 Caucasian women diagnosed with confirmed endometrial cancer at the WSZZ in Kielce between 2005 and 2017. The patients were operated on in two facilities: WSZZ in Kielce and ŚCO. The patients underwent total hysterectomy with pelvic lymphadenectomy, computed tomography of the abdomen and chest, typical blood tests and endoscopic examinations. Each case was rediagnosed according to the eighth edition of the TNM classification.

**Results:** Tumor grade progression was closely correlated with LVSI ( $P = 0.0338$ ). Similar observations have been reported with progression to the TNM/FIGO stage.

**Conclusions.:**

1. Lymphovascular space invasion (LVSI) is a poor prognostic factor for EC.



2. Patients with endometrial cancer and LVSI are more susceptible to disease recurrence and lymph node metastases.

**Keywords:** endometrial cancer, LVSI, metastases

## INTRODUCTION

The increasing incidence of endometrial cancer worldwide and stagnant outcomes despite medical advancements in recent years have led to intensive research on this type of cancer. Since the early 21st century, the epidemiology of endometrial cancer in Poland has begun to resemble that observed globally (1,2). Research on this type of cancer underscores the pivotal role of diet and nutritional components in shaping the disease. Reports from recent years indicate that natural food products possess preventive or therapeutic potential in combating these diseases. The influence of environmental factors, lifestyle, and exposure to pollutants is not overlooked in this disease. Inappropriate dietary habits among reproductive-aged women contribute to the growing tendency towards obesity, metabolic diseases, diabetes, and polycystic ovary syndrome (PCOS), which may increase the risk of endometrial cancer in the longer term. Obesity, diabetes, and overweight are unfavorable factors for invasion and metastasis. In the context of this disease, lymphovascular invasion (LVSI) constitutes a significant prognostic factor. The role of LVSI in relation to the risk of disease recurrence and the selection of appropriate treatment remains controversial and unclear (3,4).

### Objective:

The aim of the study is to summarize current knowledge and scientific research on LVSI, or its absence, as the strongest independent prognostic factor in the case of regional recurrence in the lesser pelvis, distant metastases, and overall survival.

**Materials and Methods:** The study included 306 white women diagnosed with confirmed endometrial cancer at the WSZZ in Kielce between 2005 and 2017. Patients underwent surgery at two facilities: WSZZ in Kielce, 103 patients (Group 1), and 206 patients at ŚCO (Group 0). Patients underwent total hysterectomy with pelvic lymph node dissection, abdominal and chest computed tomography, standard blood tests, and endoscopic examination. Each case was re-diagnosed according to the eighth edition of the TNM classification. (5,6) All subjects underwent standard surgical treatment without prior radiochemotherapy. Data on demographic and pathological variables were collected. The data included patient age, coexisting diseases, body mass index (BMI), comorbidities such as diabetes, history of hypertension, thyroid disease, clinical stage (FIGO), pathological stage, lymphovascular invasion (LVSI), and levels of estrogen receptor (ER), progesterone receptor (PR), and Ki67 expression in endometrial cancer tissue (in patients operated on at WSZZ in Kielce). Tumor staging was classified according to the International Federation of Gynecology and Obstetrics (FIGO) 2009 classification. Tumor stage and histological classification were assigned based on the WHO 2003 classification. Endometrial cancer types were identified based on the Bokhman classification. A basic set of biochemical tests was performed (5,6,7)



## Results:

The study included 306 patients aged 41 to 93 years. Survival analysis was conducted considering the surgical variable. The results of the log-rank test indicate statistically significant differences in survival between patient groups. The test statistics values were  $WW = 38.419$ , Sum of ranks = 152.73, Rank variance = 33.939, Test statistic = 6.594758, and p-value = 0.00000. These values are significant as the p-value is 0.00000, well below the established significance level (usually 0.05). This indicates significant differences in survival between patient groups undergoing surgery and those who were not operated on. The positive value of the log-rank test statistic (6.594758) suggests that patients undergoing surgery tended to have better survival than those who did not undergo surgery. These values indicate significant differences between groups in terms of survival time, which may be relevant in assessing the effectiveness of surgical intervention regarding the studied problem. In the study, the survival time of patients in two different centers depended on the clinical stage of endometrial cancer. The survival time of patients from groups G1-G3 was analyzed. The log-rank test results indicate significant differences between groups. Negative log-rank test statistics suggest that patients in the first center tended to have longer survival times than those in the second center. The survival time of patients in both centers depended on the clinical stage of cancer. In the context of survival of patients with stage G2 endometrial cancer, log-rank test analysis did not show statistically significant differences between groups in terms of G2 patient survival. In the analysis of the survival time of patients with G3 endometrial cancer stage, the log-rank test showed significant differences in survival between the two centers at the same G3 cancer stage. In summary, the analysis results indicate that the stage of endometrial cancer in the G3 group influences the survival time of patients, which may be significant in terms of prognosis and treatment approach depending on the stage of the disease.

## Discussion:

The significance of tumor invasiveness resulting from lymphovascular invasion (LVSI) was more often observed in tumors with high-grade TP53 mutation, especially in EMT (4,5). Our results unequivocally confirm that EMT features are useful for prognosis, but only LVSI achieved predictive value in the Cox multivariate model. Exploring the mechanism of LVI led us to the TP53 pathway, but FGFR2 mutation in this area remains unclear. To thoroughly examine the clinical utility of lymphovascular invasion (LVSI) in endometrial cancer (EC), we analyzed patients with EC, differentiating them based on estrogen receptor (ER) expression levels. According to the Bokhman criteria, we identified EC patients with positive estrogen receptor expression (ER+), consistent with Type 1 EC. Our results indicated that LVSI had significant associations with positive progesterone receptor expression (PR) in Type 1 EC patients and Ki67, as well as positive PR expression in Type 2 EC patients, who were negative in estrogen receptor expression (ER-). Compared to Type 1 EC, LVSI was more frequent in Type 2 EC. LVSI in Type 1 EC was also associated with tumor markers such as CA125 and ROMA, with the primary effect appearing to be due to CA125. (7) Additionally, besides Ki67 assessment, LVSI in Type 2 EC was associated with tissue factor (TC). Our findings suggest that CA125, acting as a tumor marker in serum, may play a crucial role in LVSI identification in Type 1 EC. It is also significant that differences in metabolism may influence the occurrence of LVSI in different EC subtypes. The prognosis of patients with early-stage endometrial cancer (EC) is generally



favorable, but the situation significantly changes in the case of invasion and metastasis, where it becomes ominous. Attention should be paid to lymphovascular invasion (LVSI) as a clinicopathological feature closely associated with the presence of lymph node metastases, progression-free survival, and overall survival in EC. There are studies indicating that metabolic disorders may increase the risk of EC development and progression (9,10)

Estrogen receptor (ER), a significant prognostic factor in hormone-dependent tumors, exhibits a strong association with lymphovascular invasion (LVSI). Positive ER expression proved to be a favorable factor for LVSI in endometrial cancer (EC), prompting the division of EC based on ER expression. Our study found that the occurrence of LVSI in Type 2 EC was higher (17.60%) than in Type 1 EC (6.18%). Jaishankar et al. also noted that significant lymphovascular invasion often occurs in Type 2 EC, predicting the presence of lymph node metastases and poorer clinical outcomes (9,10)

An interesting finding of our study was that independent risk factors associated with LVSI differed between Type 1 and Type 2 EC. In Type 1 EC, fasting blood glucose (FBG) level and apolipoprotein B (Apo B) level were independent risk factors for LVSI, while total cholesterol (TC) was a significant risk factor for LVSI in Type 2 EC. These results suggest a significant role of glucose metabolism in LVSI in Type 1 EC, where endometrioid adenocarcinoma predominates. Dai et al. also observed that diabetes is more common in patients with endometrioid adenocarcinoma and positive LVSI. Furthermore, excess body weight was associated with both Type 1 and Type 2 EC, depending on body mass index, with a stronger association observed for Type 1 EC (9,10)

On the other hand, the significant role of lipid metabolism in the context of lymphovascular invasion (LVSI) should be emphasized in endometrial cancer (EC), mainly characterized by the presence of non-endometrioid adenocarcinoma. Studies have repeatedly confirmed a strong association between cholesterol levels and metastasis in hormone-dependent tumors such as prostate cancer, breast cancer, and EC. Moreover, the study by Kho et al. using Mendelian analysis indicated a relationship between the levels of three blood lipids and the risk of EC in a large population. The team suggests that increasing LDL levels in the blood may lower the risk of non-endometrioid adenocarcinoma, while increasing HDL levels may increase the risk. Importantly, LDL and HDL play a crucial role in the management of non-endometrioid adenocarcinoma (7,11)

### Conclusions:

1. Lymphovascular invasion (LVSI) is an adverse prognostic factor for EC.
2. Patients with endometrial cancer and LVSI are more susceptible to disease recurrence and lymph node metastasis.

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## Risk Factors Associated with the Incidence of Pregnancy Anemia as an Etiology of Under-Five Stunting in Indonesia

**Wuri Ratna HIDAYANI**

STIKes Respati, [wuri.ratnahidayani@gmail.com](mailto:wuri.ratnahidayani@gmail.com), Indonesia

**Dina Lusiana SETYOWATI**

Universitas Mulawarman, [dinalusiana@fkm.unmul.ac.id](mailto:dinalusiana@fkm.unmul.ac.id), Indonesia

**Ilham ALIFIAR**

Universitas Bhakti Tunas Husada, [ilhamalifiar@universitas-bth.ac.id](mailto:ilhamalifiar@universitas-bth.ac.id), Indonesia

### Abstract

Based on the 2018 Basic Health Research, the anemia rate among pregnant women reached 48.9 percent. Meanwhile, the global target for nutrition in 2025 was to reduce the rate of anemia in women of childbearing age (WUS) to reach 50 percent. The purpose of this study was to determine the factors associated with the incidence of pregnancy anemia as a cause of under-five stunting in Cikunir Village, Singaparna Subdistrict, Tasikmalaya Regency, West Java, Indonesia. This research design used cross-sectional. The population in this study were pregnant women in Singaparna sub-district with a sample of 90 pregnant women in Cikunir Village, Singaparna District. This study used a purposive sampling technique with research instruments in data collection in the form of questionnaires and interviews. This study used the Chi-Square test with an alpha of 0.05 using epi info. The results showed that age (RR = 1.4359; CI = 0.7797-2.644, *p-value* = 0.18); number of children (RR = 0.8438; CI = 0.5473-1.3010; *p-value* = 0.23075); Parity (RR = 0.6389; CI= 0.3350-1.2185; *p-value*= 0.07023), gestational age (RR=0.8182; CI=0.4694; *p-value*= 0.23619); occupation (RR=1.0411; CI=0.5537-1.9576; *p-value*= 0.4530); Iron consumption (RR=0.7688; CI=0.3058-1.9323, *p-value*=0.28); Iron side effects (RR=0.9453; CI=0.5728-1.5601; *p-value*= 0.41503) were not associated with the incidence of pregnancy anemia, while education (RR=1.9310; CI=1.3281-2.8076; *p-value*= 0.0025) and hemoglobin examination or Hb level (RR=4.5158; CI=2.5522-7.9900; *p-value*=0.0000) were associated with the incidence of pregnancy anemia. This study concluded that the most dominant risk factor associated with pregnancy anemia was hemoglobin examination.

**Keywords:** risk factors, anemia, pregnancy, stunting



## INTRODUCTION

Pregnancy is a period of growth and development of the fetus towards birth so nutritional disorders that occur during pregnancy will have a major impact on the health of the mother and fetus. Globally, regionally, and in almost all countries, progress on anemia in women aged 15-49 years is insufficient to meet the WHA global nutrition target of halving the prevalence of anemia by 2030, and the prevalence of anemia in children also remains high. A better understanding of the context-specific causes of anemia and the implementation of quality, effective multisectoral measures to address these causes are needed (Stevens et al., 2022).

The maternal mortality rate (MMR) in Indonesia is still high when compared to MMR in other Association of South East Asia Nations (ASEAN) countries. The causes of AKI can be divided into two causes, namely, direct and indirect causes. The direct causes are known as the Trias Classic, namely bleeding (28%), eclampsia (24%), and infection (11%). While the indirect cause is one of them is pregnant women suffering from anemia (Hb less than 11%) as much as 40%. The incidence of anemia in pregnant women will increase the risk of maternal death compared to mothers who are not anemic (Kemenkes RI, 2012).

Anemia can affect pregnancy because anemia can reduce endurance which results in fetal death in the womb, abortion, congenital defects, and low birth weight (LBW). In childbirth, anemia can cause uterine insertion, and the mother becomes weak, causing a long partus, while in the postpartum period, bleeding can occur and in this situation, the body cannot tolerate it like a healthy mother who does not suffer from anemia. This leads to significantly higher morbidity and mortality and perinatal mortality (Manuaba, 2001).

Anemia in pregnant women is generally caused by physiological changes due to pregnancy which is aggravated by a state of nutrient deficiency, vitamin B12, folic acid, and vitamin C. In addition to increased demand, risk factors that cause anemia during pregnancy are maternal age, maternal employment, education, family socioeconomics, gravidity, gestational age, pregnancy spacing, nutrition of pregnant women, food, and infection (Arisman, 2010).

Various factors cause anemia. The high level of anemia in pregnant women is supported by the low level of maternal compliance in taking blood supplement tablets, also mentioned the low consumption of iron supplements including young age, low education level, low economy, multiparity, inadequate antenatal care (ANC), lack of guidance on the use of supplements, lack of knowledge about the importance of iron intake and iron supplementation (Hatimah, 2022).

The prevalence of pregnancy anemia in West Java is 51.7% (West Java Provincial Health Office 2012). The prevalence in Tasikmalaya Regency was 3,137 people (6.3%) out of 43,367 pregnant women (Dinas Kesehatan Tasikmalaya, 2014). In Singaparna Health Center Working Area as much as 18.6% (2014). Based on a preliminary study of interviews with Cikunir village Posyandu cadres in September 2023 stated that there are still risk factors for pregnancy anemia, among others, age affects pregnancy anemia because the age of the mother is closely related to pregnancy anemia. Knowledge of the importance of maternal and child health, the younger the age mother will be at risk of pregnancy anemia because the age of pregnant women who are too young has the assumption of less importance in conducting pregnancy checks, especially hemoglobin checks. Employment factors affect pregnancy



anemia because it is related to family socioeconomics. besides that, the number of children, parity, gestational age, fe consumption, and side effects of Fe are closely related to pregnancy anemia which is one of the etiologies of stunting of toddlers in the future.

## OBJECTIVE

The purpose of this study was to determine the risk factors associated with the incidence of pregnancy anemia as a cause of stunting in toddlers in Cikunir Village, Singaparna Subdistrict, Tasikmalaya Regency, West Java, Indonesia. The risk factors of pregnancy anemia studied include age, number of children, parity, gestational age education, occupation, Fe consumption, hemoglobin examination, and side effects of Fe.

## METHOD

This study used analytic observational research with a cross-sectional research design. The population of this study was pregnant women in Cikunir Village, Singaparna District, Tasikmalaya Regency with the research sample being pregnant women who had stunted toddlers in Cikunir Village, Singaparna District, Tasikmalaya Regency totaling 90 pregnant women. The research sampling technique is purposive sampling. This research instrument uses questionnaires and interviews. This research data was analyzed using Chi-Square with 95% significance, alpha of 0.05 using epi info.

## RESULT AND DISCUSSION

The univariate analysis can be seen in Table 1. This study shows the characteristics of respondents based on age, the majority of respondents are 32-34 years old as many as 20 people (22.2%), the majority of respondents have 1 child as many as 58 people (64.4%), the majority of respondents have a party of 1 as many as 21 people (23.33%).

**Table 1.** The Univariate analysis

Variable	Freq.	%
<b>Age</b>		
17-19 years old	6	6.6
20-22 years old	7	7.7
23-25 years old	11	12.22
26-28 years old	15	16.66
29-31 years old	18	20
32- 34 years old	20	22.2
35-37 years old	9	10



<b>Variable</b>	<b>Freq.</b>	<b>%</b>
38-40 years old	3	3.33
41-43 years old	1	1.11
<b>Number of Children</b>		
1	58	64.4
2	20	22.22
3	11	12.2
4	1	1.1
<b>Parity</b>		
1	21	23.33
2	36	40
3	17	18.8
4	15	16.66
<b>Gestational Age</b>		
Trimester I (0-3 months)	22	24.44
Trimester II (3-6 months)	31	34.44
Trimester III (6-9 months)	37	41.11
<b>Occupation</b>		
Housewife	77	85.5
Self-employed	3	3.33
Private employee	6	6.66
Labor	2	2.22
Merchant	2	2.22
<b>Iron Consumption</b>		
Yes	82	91.11
No	8	8.8
<b>Iron Side Effect</b>		
Difficulty defecating	9	10
Black stools	15	16.66



Variable	Freq.	%
None	66	73.3
<b>Education</b>		
Elementary School	18	20
Junior High School	27	30
Senior High	32	35.5
University	13	14.4
<b>Hemoglobin Examination</b>		
Yes	52	57.7
No	38	42.2
<b>Status of The Respondent</b>		
Anemia	43	47.77
No Anemia	47	52.22

Respondents who had the third trimester of pregnancy (6-9 months) were 37 people (41.11%), in the characteristics of work the highest proportion was housewives as many as 77 people (85.5%), more respondents consumed Fe as many as 82 people (91.11%). Based on interviews and questionnaires, respondents stated that they drank Fe with no side effects as many as 66 people (73.3%), and respondents stated the side effects of black stools were 15 people (16.66%). Most respondents' education was high school as many as 32 people (35.5%), while more respondents who did hemoglobin checks were 52 people (57.7%). Respondents who were anemic were 43 people (47,77%) while those who were anemic were 47 people (52.22%). The bivariate analysis can be seen in Table 2.

**Table 2.** The bivariate analysis

Variable	Anemia		No Anemia		RR	95% CI	P-Value
	n	%	n	%			
<b>1. Age</b>							
17-19 years old	4	9.30	2	4.20	1.4359	0.7797-2.644	0.180
≥ 17-19 years old	39	90.70	45	95.80			
<b>2. Children of Number</b>							
1	26	60.50	32	68.10	0.8438	0.5473-1.301	0.230



Variable	Anemia		No Anemia		RR	95% CI	P-Value
	n	%	n	%			
>1	17	39.50	15	31.90			
<b>3. Parity</b>							
1	7	16.30	14	29.80	0.6389	0.3350-1.2185	0.076
>1	36	76.60	33	70.20			
<b>4. gestational age</b>							
High risk	9	20.90	13	27.66	0.8182	0.4694-1.4261	0.236
Low risk	34	79.10	34	72.34			
<b>5. Education</b>							
Low Education	14	32.56	4	8.5	1.9310	1.3281-2.8076	0.002*
Higher education	29	61.70	43	91.5			
<b>6 Occupation</b>							
Housewife	37	86.05	40	85.11	1.0411	0.5537-1.9576	0.450
Self Employed	6	13.95	7	14.89			
<b>7. Iron Consumption</b>							
No	3	6.98	5	10.64	0.7688	0.3058-1.9323	0.286
Yes	40	93.02	42	89.36			
<b>8. Hb Examination</b>							
No	33	76.74	5	10.64	4.5158	2.5522-7.9900	0.000*
Yes	10	23.26	42	89.36			
<b>9. Iron side effects</b>							
Yes	11	25.60	13	27.66	0.9453	0.5728-1.5601	0.415
No	32	74.40	34	72.34			

## DISCUSSION

### 1. Relationship between Age and the incidence of pregnancy anemia

The results of the bivariate analysis showed that the Relative Risk (RR) was 1.4359 with a CI of 0.7797-2.644, and a p-value of 0.18, meaning that it was not statistically significant because  $p > 0.05$ ,



RR>1 means that age is a risk factor for pregnancy anemia. RR of 1.4359 means that people aged 17-19 years have 1.4359 times the chance of developing pregnancy anemia compared to people aged over 17-19 years. There was no significant relationship between age and the incidence of anemia ( $p>0.05$ ). A pregnant woman when preparing for pregnancy must pay attention to age, in this study although age is not associated with pregnancy anemia in the calculation of Relative Risk (RR) is at risk in the incidence of pregnancy anemia. Age is closely related to pregnancy readiness in mothers because it is closely related to iron intake which is useful in the biological growth of the unborn child. The best age to get pregnant is at the age of 20-35 years. early degenerative. Therefore, pregnancy at the age of <20 years and >35 years is a risky pregnancy that can cause anemia and can also have an impact on miscarriage (abortion), babies born with low body weight (BBLR), and labor that is not smooth (complications). childbirth). Age is a factor that needs to be considered for a woman to become pregnant (Depkes RI 2005).

## **2. Relationship between the Number of Children and the incidence of pregnancy anemia**

The results of the bivariate analysis showed that the RR was 0.8438 with a CI of 0.5473-1.3010 and a p-value of 0.230, meaning that respondents who had 1 child were a protective factor for pregnancy anemia. There was no significant relationship between the number of children and the incidence of anemia ( $p>0.05$ ). This variable is not meaningful due to the small sample size that affects statistical calculations. Respondents who have more than 1 child correlate with the needs of daily life so that it is related to the nutritional needs of pregnant women. The more often a woman gives birth, the greater the risk of blood loss and the impact on lowering Hb levels. Every time a woman gives birth, the amount of iron lost is estimated at 250mg (Wikjosastro, 2007).

## **3. The relationship between parity and the incidence of pregnancy anemia**

The results of the bivariate analysis showed that the RR was 0.6389 with a CI of 0.3350-1.2185 and a p-value of 0.0762, meaning that respondents who had parity 1 were a protective factor for pregnancy anemia. There was no significant relationship between parity and pregnancy anemia ( $p>0.05$ ). The presence of bias factors can affect statistical calculations, thus affecting statistical significance. The tendency is that the higher the number of births (parity), the higher the incidence of anemia (Wahyudin, 2004).

## **4. Relationship between gestational age and the incidence of pregnancy anemia**

The results of bivariate analysis showed that the RR was 0.8182 with a CI of 0.4694-1.4261 and a p-value of 0.236, meaning that gestational age is not a protective factor for pregnancy anemia. There is no significant relationship between gestational age and pregnancy anemia ( $p>0.05$ ). During pregnancy, there are physiological changes that begin in the 6th week, namely the increase in plasma volume, and reach their peak in the 26th week resulting in a decrease in Hb levels. Therefore, during pregnancy, the amount of nutrients needed is much greater than that of non-pregnant mothers. The nutrients available in the mother's body will be transferred to the fetus according to the gestational age (Pibriyanti, 2023).



### **5. Relationship between Education and the incidence of pregnancy anemia**

The results of bivariate analysis showed that the RR was 1.9310 with CI 1.3281-2.8076 and p p-value of 0.0025, meaning that there was a significant relationship between education and the incidence of anemia ( $p < 0.05$ ). Looking at the calculation of RR, it can be seen that respondents with low education will be more likely to develop anemia than respondents with high education. Education is a very urgent factor in the nutrition of pregnant women. Education is closely correlated with the level of knowledge of pregnant women about nutrition and their competence in the creativity of consumption patterns in the family. In creativity, it does not have to be expensive but sufficient in balanced nutrition. The higher the education, the broader the knowledge of the nutritional needs of pregnant women during their pregnancy so that they are protected from pregnancy anemia (Paramitha, 2021).

### **6. Relationship between occupation and the incidence of pregnancy anemia**

The results of the bivariate analysis showed that the RR was 1.0411 with a CI of 0.5537-1.9576 and a p-value of 0.45. This means that respondents with low-income jobs have a 1.0411 times chance of developing pregnancy anemia compared to respondents with high income. Statistically, there was no significant relationship between employment and pregnancy anemia ( $p > 0.05$ ). The factor that caused the insignificance of employment with pregnancy anemia was respondent bias. In addition, based on interviews with respondents, even though respondents are housewives, they are always active in utilizing their yards to grow vegetables and fruits so that the nutritional adequacy of pregnant women is fulfilled. Some studies state that there is a correlation between work and pregnancy anemia. Socioeconomic status is a condition that can show the financial capacity and ability of a person to meet material needs in the form of education, income, and work at good and moderate rates (Ariani, 2023).

### **7. Relationship between Iron Consumption and the incidence of pregnancy anemia**

The results of the bivariate analysis showed that RR 0.7688 with CI 0.3058-1.9323 and a p-value of 0.286 means that respondents who consume iron are a protective factor for pregnancy anemia. Statistically, there is no relationship between Fe consumption and pregnancy anemia. ( $p > 0,05$ ). The meaninglessness of Fe consumption with pregnancy anemia is based on interviews with respondents stating the existence of side effects when consuming iron so some respondents do not consume Fe and choose alternatives to consume other multivitamins, besides that respondents increase the consumption of vegetables that contain iron. In addition, the respondent bias factor can also affect statistical calculations. It is recommended for future researchers to consider the sample size so that the results of statistical calculations do not experience bias. Fe tablets are very important to be consumed by pregnant women because the need for iron increases during pregnancy due to dilution of red blood cells during pregnancy where Fe tablets are needed to increase the number of red blood cells. The regularity of pregnant women taking iron tablets is very instrumental in increasing Hb levels.



Compliance with taking iron tablets provides benefits for pregnant women, so regular iron supplementation is needed to prevent unwanted things (Sukmawati. S, Widiasih. R 2021).

Anemia in pregnant women can also be caused by non-compliance of pregnant women taking Fe tablets which can be influenced by the role of midwives who are still lacking in providing counseling on the importance of taking iron tablets during pregnancy so this lack of understanding sometimes makes mothers prone to anemia. In addition to obediently taking iron tablets, pregnant women are also encouraged to consume foods such as liver, meat, nuts, vegetables, egg yolks, fruits, and fish to facilitate iron absorption (Miarti, 2020). Women's iron needs increase during pregnancy and childbirth. The mother must meet the iron needs of her fetus and herself while pregnant (Putri, 2023). The fetus maintains a relatively constant 75 mg of iron per kilogram of body iron during the last trimester. Fetal iron can be divided into three compartments; red blood cells, stored iron mostly in the liver, and non-heme, non-stored tissue iron. Red blood cells contain 55 mg of iron per kilogram of body weight as hemoglobin and this is the largest compartment. The amount of fetal iron in hemoglobin can be estimated by assuming 3.46 mg of iron per gram of hemoglobin and a blood volume of 85 ml per kilogram of body weight.<sup>7</sup> Normal values for hemoglobin concentration in term infants range from 133 to 184 g/L. The risks of fetal anemia include acute fetal-maternal or fetal-placental hemorrhage and severe maternal iron deficiency. Severe maternal iron deficiency is when the maternal hemoglobin concentration is less than 90 g/L (Michael, 2020).

#### **8. Relationship between Hemoglobin Examination and the incidence of pregnancy anemia**

Based on the bivariate results, it shows that the RR is 4.5158, CI is 2.5522-7.9900 and the p-value is 0.00, meaning that there is a relationship between hemoglobin examination and the incidence of pregnancy anemia ( $p < 0.05$ ). RR of 4.5158 (means that respondents who did not check hemoglobin had a 4.5158 times greater chance of developing pregnancy anemia than respondents who checked hemoglobin. This is by Lisna's research (2021) that pregnancy screening during pregnancy for early detection of high-risk pregnancies and births can also reduce maternal mortality and monitor the status of the fetus. The irregularity of mothers doing ANC, one of which is the hemoglobin examination, is because many pregnant women only check their pregnancy in the second and third trimesters. Based on the results of the relationship analysis that has been carried out, show that there is a significant relationship between the regularity of ANC visits. Pregnant women who perform complete ANC services will have a lower risk of anemia (Manuaba, 2010). Routine examinations are carried out on pregnant women in addition one of the examinations to detect anemia is the hemoglobin test. Hemoglobin examination is one of the examinations carried out to see if pregnant women experience anemia (Putri, 2011). One of the problems that often accompanies pregnancy and can be a complicating factor during childbirth is anemia. Pregnant women who experience anemia may experience premature parts, bleeding during childbirth, giving birth to low-weight babies, and can increase perinatal mortality (Allen 2000). By conducting regular check-ups, this can be recognized and resolved as early as possible.



## 9. Relationship between Iron side effects and the incidence of pregnancy anemia

Based on bivariate analysis, the RR was 0.9453, CI was 0.5728-1.5601 and the p-value was 0.415, meaning that respondents who did not have iron side effects were a protective factor for pregnancy anemia. Statistically, there is no relationship between iron side effects and pregnancy anemia ( $p > 0.05$ ). Based on the results of interviews with respondents stated that respondents were not compliant with consuming iron due to the side effects of iron. According to Baharini (2017) stated that the results showed the side effects of iron had a negative relationship with the compliance of pregnant women ( $p = 0.007$ ). The more side effects, the more non-compliant respondents tend to be. These results are from previous research on factors that can affect the compliance of pregnant women taking iron tablets (Galloway, 1994). Respondents' non-compliance can cause the government's goal of providing iron tablets to reduce maternal mortality and infant mortality to be unattainable (Namcar, 2016). According to Shand, et al (2020) stated that oral iron is more effective in overcoming pregnancy anemia. This is an alternative to avoid the side effects of iron tablets for pregnant women. So that pregnant women who experience side effects can be given iron orally. Traditionally, the first-line treatment for IDA is 100-200 mg of iron daily from supplements in a single daily dose. However, the recently revised Australian pregnancy guidelines recommend that low-dose iron supplementation of 60-100 mg daily can be just as effective as high-dose iron. 1 Most ingested iron is not absorbed, and this unabsorbed iron can cause gastrointestinal side effects. Iron absorption from supplements in patients with low iron stores ranges from 2-13% when taken with food to 5-28% when taken without food (Cook, 1995). Recent research by Moretti et al. has shown that in iron deficiency (240 mg) resulting in only three times that of young women with anemia treated with oral iron doses between 40 and 240 mg daily, fractional iron absorption decreased with increasing dose (Moretti, 2015).

## CONCLUSION

In conclusion, this study aimed to investigate the factors influencing the incidence of pregnancy anemia as a contributor to under-five stunting in Cikunir Village, Singaparna Subdistrict, Tasikmalaya Regency, West Java, Indonesia. The research, based on the 2018 Basic Health Research, revealed a concerning anemia rate of 48.9 percent among pregnant women, almost reaching the global target of 50 percent set for 2025. Utilizing a cross-sectional design with a sample of 90 pregnant women, the study employed various parameters and statistical analyses. The findings indicate that factors such as age, number of children, parity, gestational age, occupation, iron consumption, and iron side effects did not exhibit significant associations with the incidence of pregnancy anemia. However, education emerged as a significant factor, emphasizing its role in influencing anemia prevalence among pregnant women. Furthermore, hemoglobin examination or Hb level was identified as a crucial and dominant risk factor associated with pregnancy anemia. It is evident from this research that addressing and mitigating pregnancy anemia in the study area requires a focus on educational interventions and increased emphasis on regular hemoglobin examinations. These findings contribute valuable insights for public health strategies aimed at reducing the incidence of pregnancy anemia, ultimately impacting the well-being of both mothers and under-five children. As global health targets strive to combat anemia, understanding specific risk factors, as highlighted by this study, is essential for crafting effective interventions and policies to improve maternal and child health outcomes in the region.



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## Decision support elements used by medical dispatchers in the context of the Polish National Medical Rescue System

M.Sc. Michał BOROWCZYK

Powiślański University in Kwidzyn, Poland

### Abstract

In the face of society's evolution and dynamic progress in the field of information technology, emergency medical systems worldwide, particularly the Polish State Emergency Medical System (SEMS), face increasing challenges. A significant role in counteracting these challenges is played by decision-support tools for medical dispatchers, which become the subject of this analysis. The article begins by presenting the general context of SEMS functioning, then moves on to a detailed assessment of implemented command support systems and decision-making tools. Using survey methodology, the authors investigate dispatchers' direct feelings about the utility of these technologies, shedding light on their perceptions and delineating areas requiring further development.

The analysis also extends to important legal and ethical aspects, which are an integral part of using decision support in the medical environment. Examining the effectiveness of current tools, the article identifies key gaps and opportunities for improvements, suggesting that innovations could significantly contribute to optimizing decision-making processes. The authors emphasize the value of inspiration drawn from the experiences of international emergency systems and practices from other sectors, highlighting the potential for innovative technological solutions in SEMS.

In conclusion, the article anticipates that the introduction of new technologies and the improvement of existing decision-support tools can significantly enhance the efficiency and effectiveness of rescue actions in SEMS, directly impacting public safety and health in Poland. This study not only evaluates the current state but also paves the way for further discussions on future innovations. In this way, the article makes a significant contribution to understanding the role of technology in emergency medical services, paying particular attention to the needs and expectations of dispatchers, who are a key link in providing assistance in emergencies.



## Recycling in the Packaging Industry and Zero Waste

Ayşe ÇOBAN

Gaziantep University, Oğuzeli Vocational School, Gaziantep, Türkiye;  
[aysecoban@gantep.edu.tr](mailto:aysecoban@gantep.edu.tr) ; ORCID ID: 0000-0002-7844-7633.

Orhan ÇOBAN

Gaziantep University, Faculty of Economics and Administrative Sciences, Department of Logistic, Gaziantep, Türkiye; [ocoban@gantep.edu.tr](mailto:ocoban@gantep.edu.tr) ; ORCID ID: 0000-0001-6137-8937.

### Abstract

Today, societies have generally turned into a consumer society. Mass consumption brings with it many problems, especially the environment. Packaging materials are used to transport, protect, present, present and sell a manufactured product. In this context, there are almost no unpackaged products. Packaged products appear in a paper/cardboard box, sometimes in a plastic container, sometimes in a glass jar, sometimes in a tin can. The packaging materials remaining after using the product in the packaging quickly pollutes the environment as waste. The waste in question arises from homes, offices, cars, in short, in all living spaces. Recycling and zero waste practices are implemented to reduce environmental problems. Here, there are opportunities to reuse packaging waste as raw material. Used packaging waste can be turned into raw material and re-used by going through various operations and processes.

**Keywords:** Packaging Industry, Recycling, Zero Waste

### INTRODUCTION

Packaging is the materials that ensure the products or materials placed inside are kept and stored in a safe, clean and healthy way. The basic function of a packaging can be summarized as preserving, protecting, carrying and selling. Nowadays, packaging design is of vital importance in the retail industry. The design of the packaging, the information on the packaging, and graphic design elements play a role as the most important marketing tool of brands. The word packaging came to our language from the French word "emballage". The word packaging in the dictionary of the Turkish Language Association; It is defined as "material such as paper, wood and plastic used to wrap goods".



In the past, the most used type of packaging to store various materials was clay containers or glass. Another most commonly used form of packaging was baskets and chests made of reeds. The emergence of packaging and the development of the concept of commercial packaging occurred in the 1700s. In the studies carried out in this period, the practical function of packaging rather than its aesthetic function came to the fore.

It is not known where and how the aesthetic issue of packaging first emerged in commercial terms. However, it is known that in the mid-1600s, pharmacists in Southern England printed their own emblems on packaging papers. In the early 1800s, Jacob Schwepp started selling mineral water packaged in glass bottles in Bristol. In addition, towards the end of the 1800s, advertising on packaged products became very widespread, especially in the United States. B.C. In the 3000s, Turks, Iranians and Egyptians were able to make containers such as bottles, cubes and jars by blowing glass with techniques similar to the art of glass blowing used today, and they could use a material similar to thick paper made from the essence of a type of papyrus plant for packaging. Along with the rapid increase in consumption and production since the 12th century, the renewal and development movements in Europe in the 15th century were among the most important factors that accelerated the development of packaging. Generally speaking, the structure and scope of packaging has emerged as a result of technological developments and innovations over the last 200 years. When we look at the 17th century, paper bags, and in the 19th century, tin and corrugated cardboard boxes, glass bottles for milk and other liquid beverages, and many other packaging types were introduced to people's use one after another (Ambalaj, 2024).

“Zero Waste” is a goal defined as a waste prevention approach that includes preventing waste, using resources more efficiently, reducing the amount of waste generated, establishing an effective collection system, and recycling waste. Disposal of waste without being evaluated within the recycling and recovery process causes serious waste of resources, both material and energy. In recent years, zero waste implementation efforts have become widespread throughout the world, whether individually, institutionally or municipally.

The aim of this study is primarily to address the packaging sector, and then to focus on recycling, etc. The process of recycling packaging waste into the economy will be addressed through policies. In this context, zero waste projects implemented will also be mentioned as application examples.

### **Packaging Types and Packaging Industry in Turkey**

In the literature, the packaging sector generally consists of wood, paper-cardboard, glass, tin, aluminum and plastic. The packaging industry is a rapidly developing sector. The main factors in the rapid development of the sector are the rise in living standards with rapid urbanization and modernization, changes in people's consumption habits, increase in demand for consumer products, and increase in exports and imports. There are approximately 3000 companies producing in the packaging sector in Turkey. The majority of these companies are medium and small-sized companies. Companies in the packaging sector operate mostly in Istanbul, Izmir, Bursa, Ankara, Konya, Kocaeli, Gaziantep, Adana, Kayseri and Manisa (Çoban and Kılıç. 2009).

Turkish packaging industry products are exported to more than 200 countries, especially EU countries. The packaging industry in Turkey recorded an average growth of over 10 percent in 2020. Looking at



the January-June periods of 2021, the sector exported 3 billion 44 million dollars and had a foreign trade surplus of 1 billion 222 million dollars. When we look at the same period of the previous year, we see an increase of 6 percent in quantity and 26 percent in value. By October 2021, it was seen that the sector exported 2.5 million tons and 5 billion 300 million dollars and had a foreign trade surplus of 2.3 billion dollars. Within the scope of these figures, it is estimated that the market size will reach approximately 28 billion dollars by the end of 2022 and 6.5 billion dollars of export income will be obtained (Ambalaj, 2024).

Considering Turkey's imports of packaging materials, it decreased by 11.6% in 2019 compared to 2018, reaching approximately 2.9 billion dollars. Plastic packaging, the most important import items of the sector, constitute 53.6% of packaging imports, and paper, cardboard and corrugated cardboard packaging constitute 37.3% of packaging imports. The main countries we import packaging materials are Germany, China, Italy, USA, France, Poland, South Korea, Spain, Finland, England and Sweden. Germany's share in our packaging materials imports was 19%, China 12%, Italy 9%, and the USA, France and Poland's share was 5% (Ambalaj, 2024).

### **Zero Waste and Recycling**

Today, with the rapid increase in population and urbanization, it causes many problems for our future. People unconsciously consume natural resources in order to continue their lives. Therefore, in order to preserve the natural balance, waste must be recycled. By recycling waste, events that could affect the whole world, such as global warming, greenhouse gases and climate change, can be prevented. It is necessary to create a plan to determine where and in what quantity the waste is found. It is quite difficult to restore nature.

All kinds of substances that have expired and become harmful to the environment as a result of people's economic and social activities in contemporary life are called waste. Recycling means recycling the waste materials of a product into reusable raw materials by applying various physical and chemical processes and recycling them into manufacturing processes.

Statistically speaking, the advantages of recycling are as follows (Yücel, 2003):

- By recycling 1 ton of glass waste, 100 liters of oil are saved.
- If only half of the world's paper production were recycled, it is possible to protect 8 million hectares of forest every year.
- It is possible to save 95% energy by recycling 1 ton of tire waste.

These advantages of recycling are important economically, environmentally and in terms of development.

Businesses help meet people's needs by producing. These products then return to the environment as waste. When using natural resources consisting of scarce resources, the needs of future generations should be taken into consideration and it is important to transfer the resources to future generations rather than using surplus raw materials (Yücel, 2003: 107). When planning the production cycle of businesses, receiving the desired level of service and taking into account the consumption trends of goods can help keep the damage to the environment to a minimum. In addition, when putting waste into use through recycling, the cost-benefit analysis of businesses and the accuracy of recycling targets



and strategies can help reduce the damage that wastes can cause to the environment (Köse et al. 2015; Güneş, 2019).

Zero waste and recycling mechanism is summarized with the help of Figure-1.

The general method used in recycling plastic packaging waste is as follows. First, plastic packages collected in containers are subjected to a rough handling process in the collection sorting facility where they are brought. After this process, the plastic packages are separated according to their types, cut into small pieces, washed and dried, and then separated according to their density. A second washing and drying process is carried out with chemicals (PET, PE, PVC... etc.). After the metal control processes, the particles go to the extruder. Extruder is a type of machine that melts broken and cleaned plastic particles into granules. The recycled raw material coming out of the extruder can be used as primary raw material.



**Fig. 1: Zero Waste and Recycling Cycle**

**Source:** ÇŞB, 2017.

Used glass packaging is collected from garbage and recycling bins and brought to licensed recycling facilities in bulk. Glass packaging waste is subjected to a series of processes in these facilities. Waste glass packages brought to recycling facilities are separated according to their physical properties and colors, then crushed into smaller pieces and ground. After the grinding process, it becomes glass cullet



ready for kiln-firing. This resulting mixture is melted in high-temperature furnaces. This molten glass packaging raw material is poured into suitable molds of desired dimensions and shaped. These packages, which are ready for reuse and filling, are used as secondary packaging (Gül and Yaman, 2021).

Metal packaging waste collected from various places is first separated according to their physical properties in collection sorting facilities. The separated metal packaging wastes are separated into aluminum, steel, etc. in the pile by a large magnet system. Substances such as are separated from each other. Separated metal packaging waste is usually pressed or turned into bales. Thus, the volume decreases. As a result of this process, metal packages are brought to the facility where they will be processed. Metal packaging waste brought to recycling facilities is melted and purified in furnaces suitable for their type. Melted packaging waste is poured into molds to create metal blocks. These created metal blocks are brought to the desired thickness after a series of processes. They are then used as all kinds of packaging materials such as beverage cans and paint cans.

The collected paper and cardboard materials are turned into bales so that they take up less space and can be easily processed in recycling facilities. Paper and cardboard packaging materials are cut into smaller sizes. It is then subjected to a secondary handling process. After this process, the papers are put into the pulping process. After the pulping process, the paper is turned into corrugated cardboard. Each recycled paper packaging waste ensures that fewer trees are cut down (Gül and Yaman, 2021).

Composite packaging is a type of packaging produced by using materials such as paper, polymer and aluminum together. Examples of this type of packaging are milk and fruit juice boxes. It is a type of packaging that is difficult to recycle. The collected composite packaging waste is mixed with water from the pulp machine to be recycled. Then the paper is separated from polyethylene and aluminum. Paper separated from other materials is converted into corrugated cardboard or cardboard. The remaining aluminum polyethylene part is melted and converted into poly aluminum granules. Products such as pallet roofing materials are produced from these granules.

### **The Situation of Recyclable Packaging Waste in Turkey and the World**

Various studies have been carried out for many years on the recycling of packaging waste. When we look at the studies on environmental awareness in the world, many western countries, especially, have become aware of this issue. Although in Turkey, especially the source collection system has been brought to the agenda by local administrators and consumers have just started to become aware of it, many consumers in the world have been practicing the source separation of waste materials with the colored bags given to them for years. The recycling targets of businesses were determined by the Packaging Waste Control Regulation No. 26562, adopted in Turkey on 25.06.2007 (Çoban and Kılıç, 2009).

Recycling of packaging waste is carried out in western countries with the 'Blue Angel Project', and targets such as how to collect waste, where to separate it, how to evaluate recyclable products, and how to organize street collectors into the system are specified (Bilgili, 2021; Ambalaj, 2024).

Natural and legal persons who want to recycle packaging waste must obtain a license from the Ministry according to the regulation. The aim is to control the facilities that collect, separate and recycle packaging waste and ensure that they work under a certain discipline. The license is issued in



two ways: collection sorting facility license and recycling facility license. It is planned to evaluate this application in three separate ways: collection, separation and recycling in the coming years.

Waste Disposal and Recovery Facilities Survey; It was applied to all waste disposal and recovery facilities with a licensed or temporary operating certificate, as well as regular storage, incineration and compost facilities operated by or on behalf of municipalities, even if they do not have a license. According to the survey results, it was determined that a total of 2223 facilities, including 166 waste disposal facilities and 2057 recovery facilities, were operating in 2018. 56 million tons of waste, 17 million tons of which were hazardous, was disposed of in 159 regular storage facilities with a total capacity of 799 million m<sup>3</sup>. A total of 494 thousand tons of waste, 65 thousand tons of hazardous and 429 thousand tons of non-hazardous waste, were disposed of in 7 incineration plants with a total capacity of 757 thousand tons per year. 138 thousand tons of waste was processed and 35 thousand tons of compost was produced in 8 compost facilities with a total capacity of 483 thousand tons/year. Energy recovery was achieved by burning 1 million tons of waste in 40 co-incineration facilities with waste recovery licenses. In other 2 009 licensed waste recovery facilities, a total of 47 million tons of metal, plastic, paper, minerals, etc. are processed. waste was recycled (Ere and Erdoğan, 2018).

### **Zero Waste Project in Turkey**

Natural resources support the functioning of the global economy and quality of life. These resources include raw materials such as fuels, minerals and metals, as well as food, soil, water, air, biomass and ecosystems. A well-functioning economy depends on the uninterrupted flow of natural resources and raw materials.

We can say that the zero waste project is an approach that aims to prevent waste, use resources more efficiently, reduce the amount of waste and recycle the waste generated. In other words, with this understanding, it is aimed to give people a new awareness about reducing waste generation and utilizing waste.

The Ministry of Environment and Urbanization implemented the "Zero Waste" project in 2017 in order to control the waste generated within the framework of sustainable development principles and to leave a cleaner and livable world to future generations. The project, which was first started gradually in the main service building of the ministry, is becoming widespread individually, institutionally and throughout the municipality. Within the scope of the Zero Waste Project, institutions can use different scales according to the types of waste in their collection equipment and information posters.

### **Conclusion**

The first organization that comes to our mind regarding the Packaging Waste Control Regulation is the Ministry of Environment and Forestry. The first goal of the Ministry of Environment and Forestry is; minimizing the use of hazardous materials in packaging materials, batteries, scrap vehicles and electrical and electronic devices. The second goal is to produce packaging in a way that allows reuse or recycling and minimizes negative effects on environmental quality. Waste Management Department was established by the Ministry of Environment and Forestry. Necessary activities regarding the



management of packaging waste are carried out by the Waste Management Department. Another organization after the Ministry of Environment and Forestry is ÇEVKO (Environmental Protection and Packaging Waste Utilization Foundation). ÇEVKO provides various trainings and seminars to packaging manufacturers and packaging waste producers on minimum material use and marking in packaging production. Another duty is to guide and assist institutions and organizations that implement the Packaging Waste Management Plan.

In Turkey, in many municipalities, solid waste from residential and commercial areas is collected by garbage trucks on certain days of the week. In addition, street collectors wander the streets and collect valuable waste materials thrown into the trash bins of apartment buildings and sell them to scrap buyers or, if waste plastic, to plastic recycling facilities. Since the activities of street collectors are prohibited, they generally collect at night. In Turkey, modern collection, recycling and reuse technology is not yet developed enough. Only 1/3 of the valuable garbage collected throughout the country arrives at collection stations, and the rest is collected by collectors in advance.

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## Hybrid or Not? When IT projects start using hybrid project management approach?

Piotr FELCENLOBEN

Wroclaw University of Economics and Business, Wroclaw, Poland

ORCID: 0000-0002-3636-4995

### Abstract

This review delves into the evolving landscape of project management methodologies, emphasizing the necessity for updated definitions and criteria, particularly in the context of the hybrid approach. The focus is on large organizations engaged in software development projects and their quest to optimize value through agile project management within a hybrid framework. By integrating insights from project management fundamentals and literature review methodologies, this paper offers a comprehensive analysis of the hybrid approach's relevance in modern project environments. Through a systematic review of literature, utilizing SCOPUS and Web of Science databases, the abstract endeavors to unveil the current comprehension of hybrid project management. Findings elucidate the prevailing notion of hybrid management as a fusion of agile and waterfall methodologies. Recognizing inherent constraints, particularly in the coverage of analyzed research articles, the author maintains mostly a critical stance toward the current understanding of the matter. The author proposes a fresh framework aimed at refining the delineations and operational guidelines of hybrid project management and advocates for a nuanced understanding of hybridity, emphasizing the importance of methodology identity, which encompasses principles, values, processes, and practices. This new framework seeks to transcend the confines of existing literature reviews, offering a more comprehensive understanding of hybrid methodologies, including insights from scaled agile practices, product management, and quality management. Despite acknowledged limitations, the hybrid approach emerges as a potent tool for enhancing competitiveness within the context of large organizational structures. Findings suggest a growing inclination towards hybrid methodologies as a pragmatic response to the complexities of contemporary project environments. The delineation between project tailoring and hybrid methods is a key focal point, prompting the need for further research to establish clear distinctions and guidelines. The paper highlights the transformative potential of the hybrid approach in addressing the complexities and demands of contemporary markets, transcending industry boundaries beyond IT and software development. With the possibility that many organizations and project managers are inadvertently employing hybrid approaches, there arises a fundamental challenge to the traditional framework of individual project management methodologies. A future research avenue explores the widespread adoption of hybrid methodologies across organizations, posing intriguing questions about the future landscape of project management methodologies and their relevance.



## Preservice Preschool Teachers Design Science Activities to Develop Children's Scientific Process Skills: The Example of TÜBİTAK 2237-A Project <sup>1</sup>

**Prof. Dr. Hakan Şevki AYWACI**

Trabzon University, Türkiye. E-mail: [hsayvaci@gmail.com](mailto:hsayvaci@gmail.com), 0000-0002-3181-3923

**Dr. Gürhan BEBEK**

Trabzon University, Türkiye. E-mail: [gurhan.bebek@gmail.com](mailto:gurhan.bebek@gmail.com), 0000-0003-4862-5782

**PhD Student Selenay YAMAÇLI**

Trabzon University, Türkiye. E-mail: [selenay-3461@gmail.com](mailto:selenay-3461@gmail.com), 0000-0002-4424-2218

### Abstract

It is essential to teach science using appropriate methods and techniques in preschool institutions to develop children's thinking skills, which will affect their future learning and interest in science. Additionally, creating a conducive learning environment and supporting it with relevant activities will aid in gaining scientific process skills. Therefore, preschool teachers should be capable of designing activities that help children develop these skills. According to the literature, the development of a strong scientific foundation in children is dependent on the teaching techniques employed by teachers and their attitudes. Therefore, teachers' attitudes and the activities they prepare have a direct impact on the use of scientific processes and the development of thinking skills in children. Moreover, it is often recommended to provide training and workshops for pre-service teachers on the use of science activities based on scientific process skills in the literature. Concordantly, creating easily accessible resources that include examples of applications with rich content and developing rich learning environments can help them adopt these methods and use them when they become teachers. However, few studies focus on developing scientific process skills in early childhood for pre-service preschool teachers. Thereby, this project was initiated to enhance the competence of pre-service preschool teachers in designing activities that promote the development of children's scientific process skills. As part of the 2237-A program supported by TÜBİTAK, 30 preservice preschool teachers in the 3rd and 4th grades received training on designing science activities to develop children's scientific process skills. The training lasted for six days and was supervised by five experts in preschool education and five experts in science education. The trainers emphasized the significance of scientific process skills in preschool education on the first day. During the subsequent sessions, experts introduced innovative methods and techniques for developing activities and shared sample activities. In the second session, activities were designed each day under the guidance of field experts, utilizing innovative methods and techniques discussed in the session. These included WEB 2.0 tools, picture storybooks, experiments, games, and STEM. Daily, five groups were formed, each consisting of six individuals.

<sup>1</sup> This study is based on project code '1129B372300826', which was supported by TÜBİTAK



One preschool expert and one science expert were assigned to each group for counselling. The activity development process was then carried out. During the previous session, field experts interpreted and evaluated these activities using the rubrics developed by the project team.

**Keywords:** preschool, science activities, scientific process skills

## INTRODUCTION

Preschool children can learn about their environment through science education by observing and exploring concepts such as plants, animals, the human body, sound, weather, water, the sky, light, the environment, stones, magnets, and simple machines (Charlesworth and Lind, 2010). This can help develop children's cognitive abilities and support their scientific skills. Andersson and Gullberg (2012) found that when science teaching was the focus of activities, children did not learn the targeted concepts sufficiently and even developed misconceptions. In science activities aimed at developing scientific process skills, children's active participation resulted in a positive impact on their engagement with the activities and learning of the targeted concepts. This highlights the effectiveness of scientific process skills in facilitating effective science education. Scientific process skills are essential for children to learn how to access and understand scientific studies. They are also an important goal for science education (Saracho and Spodek, 2008).

Children who comprehend basic science process skills can build upon their knowledge at every level of education. This will enable them to better understand science, develop analytical skills, and evaluate events objectively. Aslan, Ertas-Kilic, and Kilic (2016) defined scientific process skills as basic skills, causal skills, and experimental skills. Basic skills include observation, prediction, inference, comparison, measurement and recording, classification, and communication. Causal skills include prediction, determining variables, and inference. Experimental skills include hypothesizing, modeling, experimenting, controlling variables, and inference. Basic process skills are the skills that are most appropriate for preschool and primary school children. They allow children to process new information through concrete experiences (Lind, 2000) and are presented as a prerequisite for the development of other emphasized skills. Observation, comparison, categorization, measurement, and communication skills are among the general skills used from early childhood and applied in daily life. For this reason, preschool and pre-service teachers must plan, implement, and evaluate activities based on scientific process skills (Harlen and Qualter, 2004). These activities should provide interesting, innovative, and stimulating opportunities for children to actively participate. Literature reviews have shown that both teachers and pre-service teachers face challenges when it comes to planning and implementing science activities that focus on basic science process skills. They struggle with using appropriate methods and techniques to acquire and develop these skills, providing necessary tools and equipment, and demonstrating competency in science activities (Ayvaci, 2010; Gezer, 2015; Irwanto, Rohaeti and Prodjosantoso, 2019; Molefe and Aubin, 2021; Valls-Bautista, Solé-LLussà and Casanoves, 2021; Yildirim, Kurt and Gunes, 2014).

Sigirtmac and Ozbek (2011) highlighted that many teachers believed their undergraduate science education did not adequately equip them to teach basic science process skills to children. Similarly,



Simsar and Dogan (2019) discovered that preschool teachers felt their undergraduate science education was inadequate for the teaching process. On the other hand, Alisinanoglu et al. (2012) found that while the pre-service teachers' science courses they took during their university years were theoretically sufficient, they lacked practical examples. In this regard, the literature often suggests organizing training and workshops for pre-service teachers on the use of science activities that are based on scientific process skills. Additionally, it is recommended to develop easily accessible resources that are rich in application examples (Kefi, Celikoz & Erisen, 2013) and to include applications that allow for the creation of rich learning environments. These measures will enable pre-service teachers to adopt these methods and use them effectively when they become teachers (Bartan & Basal, 2018). However, few studies have focused on developing scientific process skills in early childhood for pre-service preschool teachers, including innovative and original science activities. It is important to note that these studies should be objective and rich in this direction. Based on the findings, it was predicted that training pre-service preschool teachers to design original activities for developing children's science process skills would eliminate the deficiencies and defects found in the literature. Therefore, this study aims to enhance the competence of pre-service preschool teachers in designing activities that promote the acquisition and development of children's scientific process skills. The study planned within this framework is expected to make significant contributions to the literature.

## METHOD

### Research Design

The research followed a 'one group pretest-posttest simple experimental design' to evaluate all participants in the application group. The aim was not to provide a comparison between two different applications. This study tests the effect of the experimental procedure on a single group. The dependent variable measurements of the subjects are obtained as a pre-test before the application and a post-test after the application using the same measurement tools (Buyukozturk et al., 2008).

### Participants

The research was conducted with pre-service preschool teachers to design science activities that enhance the scientific process skills of preschool students. Prerequisites for participants:

- (i) Participants must be studying in the third or fourth year of the preschool teaching program at universities in Turkey.
- (ii) Participants must also register for the Researcher Information System (ARBIS) or declare their intention to register if accepted to the event.
- (iii) Participants must have access to a computer with a camera, microphone, and loudspeaker, as well as a reliable internet connection.
- (iv) Participants must consent to having their video and audio recordings made during the lesson.
- (v) To participate in the event process without interruption and fulfill the tasks given by the trainers.



The evaluation process for selecting participants among pre-service preschool teachers who meet the above criteria considered the following factors. Scoring criteria included:

- (i) Not having participated in a similar educational project before (10 points)
- (ii) Academic performance will be evaluated based on the average grades obtained in the relevant academic years. Points will be awarded based on the following scale: 2.00-2.50 (10 points), 2.51-3.00 (20 points), 3.01-3.50 (30 points), and 3.51-4.00 (40 points).
- (iii) To participate, a justification must be provided, which will be worth 10 points.

Each participant was scored based on the mentioned criteria. Participants were ranked from highest to lowest score, and the top 30. The process included the 30 participant candidates with the highest scores. Table 1 shows the demographic characteristics of the participants.

**Table 1.** Demographic information of the participants

Variables	Qualities	f
Gender	Female	25
	Male	5
University	Ankara University	1
	Aydın Adnan Menderes University	1
	Burdur Mehmet Akif Ersoy University	3
	Gazi University	9
	Giresun University	4
	İstanbul Medeniyet University	2
	Muğla Sıtkı Koçman University	5
	Kocaeli University	1
	Trabzon University	4
	Grade Level	Third Level
Fourth Level		15

### Data Collection Tools

A scoring key was developed by the project team. Opinions of 3 preschool and 3 science experts were received for the scoring key and the final version was given. Concordantly, the scoring was carried out under these themes:



- Tangibility and Purposefulness,
- Appropriateness to Develop BSB,
- Preschool Outcomes,
- Science Outcomes,
- Originality,
- Material Appropriateness,
- Method and Technique,
- Affordability and Measurability

### Implementation Process

Tablo 2 presents information on the applications carried out during the six-day implementation process and the expected participant behaviors.

**Table 2.** Implementation Process

<b>First Day</b>	During the first day of the event, the concept and types of scientific process skills were presented, along with expectations for participants within the project. Additionally, science activities that can be designed to enhance scientific process skills were discussed. The second session focused on the importance of scientific process skills during the preschool period, including the design, execution, evaluation, and considerations for science activities aimed at developing these skills.
<b>Second Day</b>	During the first session of the second day of the event, the presentation covered the role, importance, usability, and sample applications of Web 2.0 tools for science activities designed to improve the scientific process skills of preschool children. The second session of the day was led by a science education expert and a preschool education expert who guided the activity planning, execution, evaluation, and presentation process. During the third session of the day, participants presented the activity plans they had developed with the guidance of expert trainers in the lower rooms. Each trainer evaluated the other groups, except for the group they mentored.
<b>Third Day</b>	During the first session of the third day of the event, the presentation focused on the role, importance, usability, and sample application examples of picture storybooks for science activities designed to develop scientific process skills in preschool children. The second session of the day was led by a science education expert and a preschool education expert who guided the activity planning, execution, evaluation, and presentation process. During the third session of the day, participants presented the activity plans they had developed with the guidance of expert trainers in the lower rooms. Each trainer evaluated the other groups, except for the group they mentored.
<b>Fourth Day</b>	During the first session of the fourth day, the presentation covered the role, importance, usability, and sample application examples of experiments for science activities designed to improve the scientific process skills of preschool children. The second session of the day was led by a science education expert and a preschool education expert who guided the activity planning, execution, evaluation, and presentation process. During the third session of the day, participants presented the activity plans they had developed with the guidance of expert trainers in the lower rooms. Each trainer evaluated the other groups, except for the group they mentored.



<b>Fifth Day</b>	<p>During the first session of the fifth day of the event, examples of sample applications were presented to demonstrate the role, importance, and usability of games in science activities designed to improve the scientific process skills of preschool children. The second session of the day was led by a science education expert and a preschool education expert who guided the activity planning, execution, evaluation, and presentation process. During the third session of the day, participants presented the activity plans they had developed with the guidance of expert trainers in the lower rooms. Each trainer evaluated the other groups, except for the group they mentored.</p>
<b>Sixth Day</b>	<p>During the first session of the fifth day of the event, the presenters discussed the role, importance, and usability of STEM in designing science activities to improve the scientific process skills of preschool children. The second session of the day was led by a science education expert and a preschool education expert who guided the activity planning, execution, evaluation, and presentation process. During the third session of the day, participants presented the activity plans they had developed with the guidance of expert trainers in the lower rooms. Each trainer evaluated the other groups, except for the group they mentored.</p>

### Data Analysis

The expert trainers evaluated the activity plans developed in the sub-rooms using the rubric created by the project team. The scores given by the trainers were averaged to determine the activity plan score in each sub-room. To avoid bias, trainers did not evaluate the groups they mentored. In this context, the scores collected for evaluating the activity created in the sub-rooms were calculated by dividing the number of remaining experts by eight. Six different categories were created since the relevant measurement tool can take four different values (0-1-2-3). The mean value falls into one of the following categories:

- (i) Scores between 0.00 - 0.49 = Not Appropriate at All (Red)
- (ii) Scores between 0.50 - 0.99 = Inappropriate (Orange)
- (iii) Scores between 1.00 - 1.49 = Partially Inappropriate (Yellow)
- (iv) Scores between 1.50 - 1.99 = Partially Appropriate (Green)
- (v) Scores between 2.00 - 2.49 = Appropriate (Blue)
- (vi) Scores between 2.50 - 2.99 = Highly Appropriate (Purple)

The study identified nine sub-dimensions, including preschool education program outcome (PPO), science curriculum outcome (SCO), appropriateness of the preferred BSB (APB), originality and applicability of the preferred activity (OAA), grade level and goal appropriateness (GGA), and strategy-method and technique appropriateness (SMT), material preference and time appropriateness (MTA), measurement and evaluation and relevance of association (MEA), and lesson plan preparation and presentation (LPP) rubrics.



## FINDINGS

The activities designed by the preschool teachers during the six-day activity process were evaluated and analyzed daily by a science education expert and a preschool education expert. The analyses are presented below in the form of headings.

### Findings of the First Day

Table 3. Experts' Evaluation Scores for the Rooms (First Day)

	PPO	SCO	APB	OOA	GGA	SMT	MTA	MEA	LPP
Room 1	2,57	2,29	2,43	2,14	1,71	2,29	2,43	2,29	2,71
Room 2	1,75	2,13	1,75	2,00	1,50	2,00	1,50	2,25	2,13
Room 3	2,25	1,75	2,00	1,88	2,25	1,88	2,13	1,88	2,25
Room 4	2,25	2,00	2,00	1,88	2,13	2,13	2,00	2,25	2,25
Room 5	2,25	0,63	1,38	1,38	1,63	1,50	1,63	2,00	1,50

Analysing Table 3,

(i) The activity developed by the group coded as Room 1 was rated as highly appropriate in the dimensions PPO and PHS, appropriate in the dimensions SCO, APB, OOA, SMT, MTA, and MEA, and partially appropriate in the dimensions GGA. It can be said that the activity developed by Room 1 is an **appropriate** science activity for developing the scientific process skills of preschool children.

(ii) The activity developed by the group coded as Room 2 was rated as partially appropriate in the PPO, APB, GGA, and MTA dimensions and as appropriate in the SCO, OOA, SMT, MEA, and LPP dimensions. It can be said that the activity developed by Room 2 is a **partially appropriate** science activity for developing the scientific process skills of preschool children.

(iii) The activity developed by the group coded as Room 3 was rated as appropriate in the dimensions PPO, APB, GGA, MTA, and LPP and partially appropriate in the dimensions SCO, OOA, SMT, and MEA. It can be said that the activity developed by Room 3 is an **appropriate** science activity for developing the scientific process skills of preschool children.

(iv) The activity developed by the group coded as Room 4 was rated as appropriate in the dimensions PPO, SCO, APB, GGA, SMT, MTA, MEA, and LPP and partially appropriate in the dimension OOA. It can be said that the activity developed by Room 4 is an **appropriate** science activity for developing the scientific process skills of preschool children.

(v) The activity developed by the group coded as Room 5 was rated as appropriate in the PPO and MEA dimensions, inappropriate in the SCO dimension, partially inappropriate in the APB and OOA dimensions, and partially appropriate in the GGA, SMT, MTA, and LPP dimensions. It can be said



that the activity developed by Room 5 is a **partially appropriate** science activity for developing the scientific process skills of preschool children.

### Findings of the Second Day

**Table 4.** Experts' Evaluation Scores for the Rooms (Second Day)

	PPO	SCO	APB	OOA	GGA	SMT	MTA	MEA	LPP
Room 1	2,71	2,29	2,57	2,29	2,71	2,43	2,29	2,14	2,71
Room 2	2,25	1,75	2,13	1,75	2,13	2,25	1,88	2,00	2,25
Room 3	2,25	1,25	1,88	1,38	1,38	1,75	1,63	1,50	2,13
Room 4	2,29	2,00	1,88	1,75	2,13	1,38	2,00	2,00	2,13
Room 5	2,50	1,88	2,13	1,50	2,00	2,13	2,25	2,25	2,25

Analysing Table 4,

(i) The activity developed by the group coded as Room 1 was rated as highly appropriate in the dimensions PPO, GGA and LLP, and appropriate in the dimensions SCO, APB, OOA, SMT, MTA and MEA. It can be said that the activity developed by Room 1 is an **appropriate** science activity for developing the scientific process skills of preschool children.

(ii) The activity developed by the group coded as Room 2 was rated as partially appropriate in the PPO, APB, GGA, SMT, MEA and LPP dimensions and as partially appropriate in the SCO, OOA and MTA dimensions. It can be said that the activity developed by Room 2 is an **appropriate** science activity for developing the scientific process skills of preschool children.

(iii) The activity developed by the group coded as Room 3 was rated as appropriate in the dimensions PPO and LPP, partially appropriate in the dimensions APB, SMT, MTA and MEA and partially inappropriate in the dimensions SCO, OOA and GGA. It can be said that the activity developed by Room 3 is a **partially appropriate** science activity for developing the scientific process skills of preschool children.

(iv) The activity developed by the group coded as Room 4 was rated as appropriate in the dimensions PPO, SCO, GGA, MTA, MEA and LPP, partially appropriate in the dimensions APB and OOA and partially inappropriate in the dimension SMT. It can be said that the activity developed by Room 4 is a **partially appropriate** science activity for developing the scientific process skills of preschool children.

(v) The activity developed by the group coded as Room 5 was rated as highly appropriate in the PPO dimension, appropriate in the SCO dimension and partially appropriate in the APB, GGA, SMT, MTA, MEA and LPP dimensions. It can be said that the activity developed by Room 5 is a **partially appropriate** science activity for developing the scientific process skills of preschool children.



### Findings of the Third Day

**Table 5.** Experts' Evaluation Scores for the Rooms (Third Day)

	PPO	SCO	APB	OOA	GGA	SMT	MTA	MEA	LPP
<b>Room 1</b>	2,38	2,50	2,25	2,00	1,88	1,75	2,00	2,00	2,38
<b>Room 2</b>	2,63	2,13	2,63	2,50	2,75	2,50	2,63	2,25	2,63
<b>Room 3</b>	2,13	2,00	2,00	1,75	1,88	1,43	1,75	1,88	2,50
<b>Room 4</b>	2,38	2,00	2,13	2,25	2,25	2,13	2,25	2,25	2,38
<b>Room 5</b>	2,13	2,50	2,25	2,00	2,25	2,00	2,13	1,75	2,13

Analysing Table 5,

(i) The activity developed by the group coded as Room 1 was rated as highly appropriate in the dimensions PPO, APB, OOA, MTA, MEA and LPP, appropriate in the dimension SCO and partially appropriate in the dimensions GGA and SMT. It can be said that the activity developed by Room 1 is an **appropriate** science activity for developing the scientific process skills of preschool children.

(ii) The activity developed by the group coded as Room 2 was rated as highly appropriate in the PPO, APB, OOA, GGA, SMT, MTA and LPP dimensions and as appropriate in the SCO and MEA dimensions. It can be said that the activity developed by Room 2 is a **highly appropriate** science activity for developing the scientific process skills of preschool children.

(iii) The activity developed by the group coded as Room 3 was rated as appropriate in the dimensions PPO, SCO and APB, partially appropriate in the dimensions OOA, GGA, MTA and MEA, partially inappropriate in the dimension SMT and highly appropriate in the dimension LPP. It can be said that the activity developed by Room 3 is a **partially appropriate** science activity for developing the scientific process skills of preschool children.

(iv) The activity developed by the group coded as Room 4 was rated as appropriate in the dimensions PPO, SCO, GGA, MTA, MEA, LPP, APB, OOA and SMT. It can be said that the activity developed by Room 4 is an **appropriate** science activity for developing the scientific process skills of preschool children.

(v) The activity developed by the group coded as Room 5 was rated as highly appropriate in the SCO dimension, appropriate in the PPO, APB, OOA, GGA, SMT, MTA and LPP dimensions and partially appropriate in the MEA dimension. It can be said that the activity developed by Room 5 is an **appropriate** science activity for developing the scientific process skills of preschool children.

### Findings of the Fourth Day

**Table 6.** Experts' Evaluation Scores for the Rooms (Fourth Day)



	PPO	SCO	APB	OOA	GGA	SMT	MTA	MEA	LPP
Room 1	2,38	2,63	2,50	2,00	2,50	2,25	2,50	2,13	2,75
Room 2	2,75	2,50	2,63	2,88	2,63	2,38	2,63	2,38	2,75
Room 3	2,38	2,25	2,25	2,00	2,00	2,13	2,50	2,38	2,75
Room 4	2,00	2,50	2,38	2,13	2,25	2,25	2,38	2,25	2,25
Room 5	2,50	2,38	2,13	2,00	2,25	2,13	2,38	2,25	2,38

Analysing Table 6,

(i) The activity developed by the group coded as Room 1 was rated as highly appropriate in the dimensions SCO, APB, GGA, MTA and LPP, and appropriate in the dimensions PPO, OOA, SMT and MEA. It can be said that the activity developed by Room 1 is an **appropriate** science activity for developing the scientific process skills of preschool children.

(ii) The activity developed by the group coded as Room 2 was rated as highly appropriate in the dimensions PPO, SCO, APB, OOA, GGA, MTA and LPP, and appropriate in the dimensions SMT and MEA. It can be said that the activity developed by Room 2 is a **highly appropriate** science activity for developing the scientific process skills of preschool children.

(iii) The activity developed by the group coded as Room 3 was rated as appropriate in the dimensions PPO, SCO, APB, OOA, GGA, SMT and MEA and highly appropriate in the dimensions MTA and LPP. It can be said that the activity developed by Room 3 is an **appropriate** science activity for developing the scientific process skills of preschool children.

(iv) The activity developed by the group coded as Room 4 was rated as appropriate in the dimensions PPO, GGA, MTA, MEA, LPP, APB, OOA and SMT and highly appropriate in the dimension SCO. It can be said that the activity developed by Room 4 is an **appropriate** science activity for developing the scientific process skills of preschool children.

(v) The activity developed by the group coded as Room 5 was rated as highly appropriate in the PPO dimension, appropriate in the SCO, APB, OOA, GGA, SMT, MTA, MEA and LPP dimensions. It can be said that the activity developed by Room 5 is an **appropriate** science activity for developing the scientific process skills of preschool children.

### Findings of the Fifth Day

Table 7. Experts' Evaluation Scores for the Rooms (Fifth Day)

	PPO	SCO	APB	OOA	GGA	SMT	MTA	MEA	LPP
Room 1	2,38	2,88	2,88	2,88	2,38	2,75	2,88	2,75	2,75
Room 2	2,50	2,38	2,38	2,38	2,50	2,50	2,50	2,38	2,88



Room 3	2,63	2,75	2,75	2,50	2,75	2,88	2,88	2,75	2,88
Room 4	2,75	2,63	2,75	2,38	2,75	2,50	2,63	2,38	2,50
Room 5	2,63	2,38	2,50	2,25	2,25	2,00	2,25	2,25	2,50

Analysing Table 7,

(i) The activity developed by the group coded as Room 1 was rated as highly appropriate in the dimensions SCO, APB, OOA, SMT, MTA, MEA and LPP and appropriate in the dimensions PPO and GGA. It can be said that the activity developed by Room 1 is a **highly appropriate** science activity for developing the scientific process skills of preschool children.

(ii) The activity developed by the group coded as Room 2 was rated as highly appropriate in the dimensions PPO, SCO, APB, OOA, GGA, MTA, LPP, SMT and MEA. It can be said that the activity developed by Room 2 is a **highly appropriate** science activity for developing the scientific process skills of preschool children.

(iii) The activity developed by the group coded as Room 3 was rated as highly appropriate in the dimensions PPO, SCO, APB, OOA, GGA, MTA, LPP, SMT and MEA. It can be said that the activity developed by Room 3 is a **highly appropriate** science activity for developing the scientific process skills of preschool children.

(iv) The activity developed by the group coded as Room 4 was rated as highly appropriate in the dimensions PPO, SCO, APB, GGA, SMT, MTA and LPP and appropriate in the dimensions OOA and MEA. It can be said that the activity developed by Room 4 is a **highly appropriate** science activity for developing the scientific process skills of preschool children.

(v) The activity developed by the group coded as Room 5 was rated as highly appropriate in the PPO, APB and LPP dimensions and appropriate in the SCO, OOA, GGA, SMT, MTA and MEA dimensions. It can be said that the activity developed by Room 5 is an **appropriate** science activity for developing the scientific process skills of preschool children.

## DISCUSSION, CONCLUSION and RECOMMENDATIONS

Pre-service preschool teachers received training on how to prepare science activities that would help develop children's scientific process skills and the training included concrete examples presented by experts to help pre-service teachers understand the process. Considering that pre-service teachers will realize their teaching careers after graduation, supporting them to prepare activities to develop children's scientific process skills is very important in creating an effective educational environment. In the project, it is believed that preparing science activities aimed at developing scientific process skills will complement pre-service preschool teachers' awareness of the subject area and contribute to children's semantic and conceptual knowledge in science. To enhance children's scientific thinking and problem-solving abilities, it is valuable to improve the competence and skills of pre-service teachers in designing science activities that promote the acquisition of scientific process skills. Concordantly, the



project provided pre-service preschool teachers with Web 2.0 tools, illustrated storybooks, experiments, games, and STEM education. At the end of the day, expert trainers evaluated the pre-service teachers' activity presentations and confirmed their impact and contribution. This supports the achievement status of the project. At the conclusion of the project, it can be stated that pre-service preschool teachers have achieved the following benefits.

### **Knowledge Acquisition**

(i) Pre-service preschool teachers acquired knowledge about the concept of scientific process skills, types of scientific process skills, science activities that can be designed in the context of scientific process skills, materials that can be preferred in science activities to be designed to gain scientific process skills, and innovative approaches / methods and techniques that can be preferred in science activities to be designed to develop scientific process skills of preschool children.

(ii) Pre-service preschool teachers acquired knowledge about the role, importance, usability and sample application examples of Web 2.0 tools for science activities to be designed in order to develop children's scientific process skills.

(iii) Pre-service preschool teachers acquired knowledge about the role, importance, usability and sample application examples of illustrated storybooks for science activities to be designed in order to develop children's scientific process skills.

(iv) Pre-service preschool teachers acquired knowledge about the role, importance, usability and sample application examples of experiments for science activities to be designed in order to develop children's scientific process skills.

(v) Pre-service preschool teachers acquired knowledge about the role, importance, usability and sample application examples of games for science activities to be designed in order to develop children's scientific process skills.

(vi) Pre-service preschool teachers acquired knowledge about the role, importance, usability and sample application examples of STEM education for science activities to be designed in order to develop children's scientific process skills.

### **Gain Experience**

(i) Pre-service preschool teachers gained experience about the importance of scientific process skills in preschool education and design, execution, evaluation and points to be considered in science activities to be designed for the acquisition of scientific process skills.

(ii) Pre-service preschool teachers gained experience about the design, execution, evaluation and points to be considered in science activities based by WEB 2.0 to be designed for the acquisition of scientific process skills.

(iii) Pre-service preschool teachers gained experience about the design, execution, evaluation and points to be considered in science activities based by illustrated storybooks to be designed for the acquisition of scientific process skills.



(iv) Pre-service preschool teachers gained experience about the design, execution, evaluation and points to be considered in science activities based by experiments to be designed for the acquisition of scientific process skills.

(v) Pre-service preschool teachers gained experience about the design, execution, evaluation and points to be considered in science activities based by games to be designed for the acquisition of scientific process skills.

(vi) Pre-service preschool teachers gained experience about the design, execution, evaluation and points to be considered in science activities based by STEM education to be designed for the acquisition of scientific process skills.

### Recommendations

(i) The process followed in the online course programme can serve as a guiding model for other interdisciplinary online studies and this type of educational environment design can be effective in helping pre-service teachers acquire semantic and conceptual knowledge.

(ii) The ability of pre-service preschool teachers to prepare science activities, including innovative approaches, methods, and techniques, to develop children's scientific process skills during their undergraduate education is believed to be effective in achieving the aims of the preschool curriculum.

(iii) Organizing activities through various TUBITAK projects that allow face-to-face education can be valuable in achieving the goals of the education and training process.

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## Sınıf Öğretmeni Adaylarının Gözünden Okul Dışı Öğrenme Etkinliklerinin Değerlendirilmesi

### Evaluation of Out-Of-School Learning Activities from the Perspective of Prospective Primary School Teachers

Doç. Dr. Ayşegül ASLAN\*

Trabzon Üniversitesi, Türkiye

[aysegulaslan@trabzon.edu.tr](mailto:aysegulaslan@trabzon.edu.tr)

Yaren ÇELİK

Trabzon Üniversitesi, Türkiye

[yaren\\_celik21@trabzon.edu.tr](mailto:yaren_celik21@trabzon.edu.tr)

#### Öz

Bu araştırma, fiziksel ve sanal gezi olarak planlanan okul dışı öğrenme etkinlikleri hakkında sınıf öğretmeni adaylarının görüşlerinin incelenmesini amaçlamaktadır. Bu araştırmanın çalışma grubunu, Karadeniz bölgesinde yer alan bir eğitim fakültesinde öğrenim gören sınıf öğretmenliği son sınıf öğretmen adayları (44 kız, 16 erkek) oluşturmaktadır. Araştırma nitel desenlerden biri olan fenomenolojik desen ile yürütülmüştür. Araştırmanın veri toplama aracını, öğretmen adaylarının fiziksel ve sanal gezi olarak okul dışı öğrenme ortamlarında gerçekleştirdikleri etkinliklere ilişkin görüşlerini belirlemek üzere tasarlanan ve dokuz açık uçlu sorudan oluşan görüş formu oluşturmaktadır. Öğretmen adaylarının görüş formuna verdikleri yanıtlar içerik analiziyle analiz edilmiştir. Elde edilen verilerin analizinde, öğretmen adaylarının planladıkları uygulamaları gerçekleştirebildikleri, öğrencilerin uygulamalarla keyifli vakit geçirdikleri ve uygulanan etkinliklerin hedeflenen kazanımlara uygun olduğu vurgulanmıştır. Öğretmen adayları yapmış oldukları uygulamalarda sanal gezi aracı olarak Thinglink uygulamasının kullanılmasının öğretim sürecinde önemli etkileri olduğunu belirtmiştir. Bununla beraber fiziksel okul dışı öğrenme faaliyetleri gerçekleştiren öğretmen adayları ise sürecin kendileri için de keyifli ve öğretici olduğunu ifade etmiştir. Bu bulgulardan hareketle sanal gezi ve fiziksel okul dışı öğrenme etkinliği olarak tasarlanan faaliyetlerin öğrencilerin öğrenmelerine ve öğretmen adaylarının hedefledikleri kazanımların gerçekleşmesine yönelik olumlu katkılar sağladığı söylenebilir. Okul dışı öğrenme ortamı olarak tercih edilen sanal geziler ile okul bahçesi, müze ziyaretleri gibi planlanan fiziksel okul dışı öğrenme etkinliklerinin, öğrencilerin ön öğrenmelerini belirlemek ve dersin kazanımlarını kazandırması açısından öğretmen adayları tarafından tekrar deneyimlenmek istendiği görülmüştür. İleride yürütülecek olan diğer araştırmalar için araştırmacılara farklı öğrenme ortamlarında farklı öğrenme seviyeleri ve disiplinler dikkate alınarak yürütmeleri önerilmektedir. Ayrıca çalışmanın farklı öğretmenlik lisans programlarında gerçekleştirilerek sonuçların karşılaştırılması da önerilmektedir.

**Anahtar kelimeler:** Okul dışı öğrenme, öğretmen adayları, Thinglink uygulaması



## Abstract

This study aims to examine the opinions of pre-service classroom teachers about out-of-school learning activities planned as physical and virtual excursions. The study group of this research consists of senior pre-service classroom teachers (44 female, 16 male) studying at a faculty of education in the Black Sea region. The research was conducted with a phenomenological design, which is one of the qualitative designs. The data collection tool of the study consisted of an opinion form consisting of nine open-ended questions designed to determine the opinions of pre-service teachers about the activities they carried out in out-of-school learning environments as physical and virtual excursions. The responses of pre-service teachers to the opinion form were analyzed by content analysis. In the analysis of the data obtained, it was emphasized that the pre-service teachers were able to realize the applications they planned, that the students had a pleasant time with the applications and that the activities implemented were appropriate for the targeted outcomes. The pre-service teachers stated that the use of Thinglink application as a virtual trip tool in their applications had significant effects on the teaching process. However, pre-service teachers who carried out physical out-of-school learning activities stated that the process was enjoyable and instructive for them as well. Based on these findings, it can be concluded that the activities designed as virtual excursions and physical out-of-school learning activities have a significant impact on students' learning and teaching.

**Keywords:** Out-of-School Learning, prospective teachers, Thinglink application

## GİRİŞ

Yapılandırmacı kurama göre, bilginin yapılandırılmasını etkileyen önemli bir faktör, sürecin içinde gerçekleştiği sosyo-kültürel yapıdır. Öğretmenin rolü, bilgiyi aktarmak yerine öğrenme sürecini öğrencilerin daha iyi anlamalarını sağlayacak şekilde düzenlemektir. Bu süreçte öğretmen, her bir öğrenci için öğrenmeyi anlamlı kılacak en uygun materyalleri ve öğrenme durumlarını sunmalıdır (Peters ve Stout, 2006). Bireyin belirli bilgileri alıp depoladığı bir öğrenme ortamı, öğrencilerin eleştirel düşünme, yansıtıcı düşünme, analiz yapma ve sentez oluşturma gibi süreçleri gerçekleştirmesi için uygun değildir. Bu nedenle, öğrencilerin kendilerini rahat hissedebilecekleri, derinlemesine sorgulama yapabilecekleri öğrenme ortamlarının oluşturulması, öğrenmenin istenilen düzeyde gerçekleşebilmesi için önemlidir. Eğitimde en etkili stratejilerden biri, öğrencilerin öğrenme süreçlerine aktif olarak katıldığı, deneyimleyerek öğrenme fırsatı bulduğu, öğrendiklerini çevreleriyle ilişkilendirebildiği ve sosyal yaşantı ile bağlantılar kurabildiği bir eğitim anlayışı ile mümkün olacaktır. Bu bağlamda, öğrenmelerin dış dünya ile etkileşim içinde olduğu okul dışı öğrenme ortamları da önemli bir rol oynamaktadır (Saraç, 2017).

Okul dışı öğrenme, literatürde çevre eğitimi, sınıf dışı eğitim, nonformal öğrenme, informal öğrenme, ders dışı öğrenme, otantik öğrenme gibi çeşitli terimlerle tanımlanmaktadır (Ayotte-Beaudet, Potvin, Lapierre ve Glackin, 2017; Higgins ve Nicol, 2002; Saraç, 2017). Öğrenme, yoğun çalışma ve aktivite gerektirir. Bu nedenle öğrenme süreci, sınıf içi etkinliklerle birlikte okul dışı öğrenme ortamlarında gerçekleştirilen etkinliklerle desteklenmelidir. Okul dışı öğrenme ortamları, öğrencilerin öğrenme süreçlerine aktif katılımlarını sağlayarak, yaparak yaşayarak öğrenme fırsatı sunar.



Ulusal ve uluslararası literatür incelendiğinde, okul dışı öğrenme ortamlarının katılımcıların öğrenme düzeylerine (Ballantyne & Packer, 2009; Bowker & Tearle, 2007; Bozdoğan & Yalçın, 2006; Orion & Hofstein, 1994), tutumlarına (Demir, 2007; Güler, 2011), motivasyonlarına (Salmi, 1993; Kisiel, 2005), yeterlik algılarına (Carrier, 2009; Sontay & Karamustafaoglu, 2017), eleştirel ve mantıksal düşünme becerilerine (Gerber, Cavallo & Marek, 2001) ve konuları günlük yaşamla ilişkilendirebilme düzeylerine (Ertaş, vd. 2011) olumlu etkileri olduğu görülmektedir. Ayrıca, yapılan çalışmalarda okul dışı öğrenme etkinliklerinin öğrenmeyi daha verimli hale getirdiği (Ramey-Gassert, 1997; Atmaca, 2012), sınıf ortamının sağlayamadığı uygulama olanakları sayesinde öğrencilerin öğrenme isteğini arttırdığı, her öğrencinin kendi öğrenme hızına göre çalışmasına yardımcı olduğu (Melber & Abraham, 1999) ve okul ortamında sunulan formal eğitimi desteklediği ortaya konulmuştur (Berberoğlu & Uygun, 2013; Gerber, vd. 2001). Bununla birlikte, gelişen öğrenme teknolojileri ile birlikte okul dışı öğrenme ortamları etkinlikleri Web 2.0. araçları ile desteklenerek öğrenme ortamlarına entegre edilebilmektedir.

İlköğretim kademesi için okul dışı öğrenme ortamlarında, dijital araçların entegrasyonu öğrencilerin öğrenme deneyimlerini geliştirmede önemli bir rol oynamaktadır. Öğrenme ortamlarında dijital medyanın kullanımı, ilköğretim öğretmenlerinin öğrenciler arasında eleştirel düşünmeyi teşvik eden yaratıcı ve yenilikçi öğrenme süreçleri tasarlamalarına yardımcı olabilir (Hutagalung ve Purbani, 2021). Öğretmenlerin dijital okuryazarlık becerilerini geliştiren eğitimciler, teknolojiyi öğretim yöntemlerine etkili bir şekilde dahil ederek öğrenme deneyimini öğrenciler için daha dinamik ve ilgi çekici hale getirebilir. Ayrıca, dijital platformların kullanımı, özellikle Covid-19 salgını gibi kriz zamanlarında, acil uzaktan eğitim sırasında ilköğretim eğitimcileri için bir alternatif olarak araştırılmıştır (Wahyuningsih & Baidi, 2021). Bu tür platformlar, geleneksel sınıf ortamının dışında etkileşimli ve işbirliğine dayalı öğrenme deneyimleri için fırsatlar sunarak öğrenciler ve öğretmenler arasındaki iletişimi ve katılımı teşvik etmektedir.

Bu çalışmada, okul dışı öğrenme ortamlarının özellikle ilköğretim düzeyindeki öğrencilerin öğrenmelerini desteklemek amacıyla gerek fiziksel gerekse de sanal gezi şeklinde kullanımının sınıf öğretmeni adayları tarafından nasıl deneyimlendiğinin belirlenmesi amaçlanmıştır.

## Yöntem

Okul dışı öğrenme ortamları kullanılarak gerçekleştirilen öğrenme etkinliklerine yönelik öğretmen adaylarının görüşlerinin incelendiği bu çalışmada nitel araştırma desenlerinden fenomenolojik desen kullanılmıştır. Fenomenolojik araştırma, bireylerin tecrübelerine ve bu tecrübeleri nasıl yaşadıklarının detaylı bir şekilde açıklanmasına yönelik bir çalışmadır. Bu tür bir çalışmanın temel amacı, bir kişinin zihnindekileri, yani yaşamış oldukları deneyimlerle ilgili algılarının temelini aydınlatmaktır (Creswell, 2002; Patton, 1990). Çalışmanın araştırma grubunu sınıf öğretmenliği son sınıf 60 öğretmen adayı (44 kız, 16 erkek) oluşturmaktadır.

Araştırmanın veri toplama aracı, dersi yürüten ve aynı zamanda çalışmanın yazarlarından olan araştırmacı tarafından oluşturulan ve dokuz açık uçlu sorunun yer aldığı görüş formudur. Bu form, güz döneminde yürütülen “Okul Dışı Öğrenme Ortamları” dersi kapsamında 14. haftada öğretmen



adaylarına uygulanmıştır. Öğretmen adaylarının cevapları tema ve kodlar oluşturularak analiz edilmiştir.

## Bulgular

Bu çalışmada sınıf öğretmenliği son sınıf öğretmen adaylarının gerçekleştirmiş oldukları okul dışı öğrenme etkinliklerine ilişkin görüşleri içerik analizi kullanılarak analiz edilmiştir. Öğretmen adaylarına yöneltilen dokuz açık uçlu soruya verilen yanıtlar incelenmiş, bu yanıtlardan tema ve kodlar oluşturulmuştur. Öğretmen adaylarının tercih ettikleri okul dışı öğrenme ortamlarına ilişkin yanıtlardan elde edilen tema ve kodlar aşağıda Tablo 1 üzerinde gösterilmiştir.

**Tablo 1.** Gerçekleştirilen okul dışı öğrenme etkinliklerinin içerikleri

Tema	Kod	f
Fiziksel yapılan geziler	Okulun çeşitli bölümleri	29
	Tarihi yapılar	3
	Müze	2
Sanal şekilde yapılan geziler	Thinglink uygulaması	26

Tablo 1'e göre, öğretmen adaylarının ders işleyişinde çoğunlukla okulun çeşitli bölümlerini kullandıkları, fiziksel gezi gerçekleştirilmeyen öğretmen adaylarının ise Web 2.0. araçlarından biri olan Thinglink uygulamasını kullanarak ders işlediği görülmektedir. Okul dışı öğrenme etkinliklerinde tercih edilen ortamlarla birlikte bu ortamlarda hangi sınıf düzeylerinin, disiplin ya da disiplinlerin tercih edildiği de öğretmen adaylarına sorulmuştur. Bu soruya verilen yanıtlardan elde edilen veriler aşağıda Tablo 2 üzerinde sunulmuştur.

**Tablo 2.** Okul dışı öğrenme etkinliklerinde tercih edilen sınıf düzeyleri ve disiplinler

Sınıf düzeyi	Dersler					
	Hayat Bilgisi (f)	Türkçe (f)	Matematik (f)	Fen Bilimleri (f)	Sosyal Bilgiler (f)	Görsel Sanatlar (f)
2.Sınıf	9	2	-	-	-	-
3.Sınıf	4	-	-	13	-	-
4.Sınıf	2	3	7	4	13	1

Öğretmen adaylarının gerçekleştirdikleri okul dışı öğrenme etkinliklerinde çoğunlukla fen bilimleri derslerine özgü kazanımlara yönelik uygulamalar tercih ettikleri, görsel sanatlar dersine yönelik



uygulamaların diğer derslere göre pek fazla tercih edilmediği görülmektedir. Öğretmen adaylarına ikinci olarak Thinglink uygulamasını ya da okul bahçesi ortamını kullanarak öğrenme deneyimini nasıl zenginleştirdiniz sorusu yöneltilmiştir. Öğretmen adaylarının vermiş olduğu cevaplar Tablo 3 üzerinde gösterilmiştir.

**Tablo 3.** Öğretme sürecinin zenginleştirilmesine yönelik görüşler

Tema	Kod	f	f <sub>Toplam</sub>
Öğrenme etkinliklerinin arttırılması	Materyal ile zenginleştirme	4	40
	Oyun ile zenginleştirme	18	
	Etkinlik yaptırma	18	
Herhangi bir şey yapmama			20

Öğretmen adayları öğrenme sürecini zenginleştirirken çoğunlukla oyun ve etkinlik yaptırma (çalışma yapraklarından yararlanma) gibi faaliyetlerden yararlanmayı tercih ettiklerini belirtmektedir. 4 öğretmen adayı ise çeşitli materyaller (büyüteç, broşür gibi) kullanarak yapmış oldukları uygulamaları zenginleştirebileceklerini ifade etmektedir. Bununla beraber 20 öğretmen adayı yapmış oldukları uygulama ve etkinliklerin yeterli geldiğini, başka herhangi bir etkinliğe gerek duymadıklarını belirtmektedir. Öğretmen adaylarına etkinliğin planlanması ve uygulanması sırasında karşılaştığınız zorluklar neler olduğu ve bu zorlukları nasıl aştıkları sorusu yöneltilmiştir. Öğretmen adaylarının vermiş oldukları cevaplar Tablo 4 üzerinde gösterilmiştir.

**Tablo 4.** Öğretmen adaylarının karşılaştığı zorluklar

Tema	Kod	f	f <sub>Toplam</sub>
Karşılaşılan zorluklar	Öğrenciden kaynaklı	16	42
	Süreçten kaynaklı	13	
	Uygulamadan kaynaklı	13	
Sorun yaşanmaması			18

Tablo 4'te belirtildiği üzere öğretmen adaylarının çoğunluğu süreçten, sınıftaki öğrencilerden ve yapmış oldukları uygulamalardan kaynaklı sorunlar yaşadıklarını belirtmişlerdir. Bununla beraber 18 öğretmen adayı süreçte herhangi bir zorlukla karşılaşmadıklarını belirtmiştir. Öğretmen adaylarına, öğrencilerin etkinliklere katılımı ve etkinliklerle etkileşimi nasıl olduğu sorulmuştur. Öğretmen adaylarının cevapları Tablo 5 üzerinde sunulmuştur.

**Tablo 5.** Öğrencilerin etkinliklere katılımı ve etkinliklerle etkileşimi



Tema	Kod	f	f <sub>Toplam</sub>
Olumlu görüş	Heyecanlı	28	51
	Eğlenceli	6	
	Aktif katılım	17	
Nötr etki			7
Olumsuz görüş	İsteksiz	2	2

Öğretmen adaylarının büyük çoğunluğu gerçekleştirmiş oldukları okul dışı öğrenme etkinliklerine yönelik öğrencilerden olumlu görüşler aldıklarını belirtmiştir. Öğrencilerin etkinliklere karşı heyecanlı oldukları, etkinlikleri eğlenceli buldukları ve aktif katılım sağladığı belirtilmiştir. Bununla beraber yedi öğretmen adayı bazı öğrencilerin derse karşı normalde farklı bir tepki göstermediğini, iki öğretmen adayı ise bazı öğrencilerin isteksiz olduklarını belirtmiştir. Öğretmen adaylarına yapılan etkinliklerle hangi anahtar kavramları veya becerileri kazandırmaya çalıştıkları sorulmuş ve cevaplar Tablo 6'da verilmiştir.

**Tablo 6.** Öğretilen anahtar kavram veya beceriler

Tema	Kod	f	f <sub>Toplam</sub>
Kavram öğretimi	Yöresel kavramlar	19	56
	Kazanımlara özgü kavramlar	37	
Beceriler	Bilimsel süreç becerileri	17	35
	İşbirlikli öğrenme becerileri	18	
Yetersiz cevap		2	2

Öğretmen adaylarının cevapları incelendiğinde, öğrencilerin yapılan uygulama ve etkinliklerden sonra yöresel kavramları ve kazanımlara özgü kavramları öğrendikleri belirtilmiştir. Bununla beraber öğrencilerin bilimsel süreç becerilerini kazandıkları ve grup çalışması yaptıkları ifade edilmiştir. Bu sorunun ardından öğretmen adaylarına öğrencilerin öğrenme deneyimini nasıl değerlendirdikleri sorusu sorulmuştur. Öğretmen adaylarının cevapları Tablo 7 üzerinde gösterilmiştir.

**Tablo 7.** Öğrencilerin değerlendirmelerine ilişkin görüşler

Tema	Kod	f	f <sub>Toplam</sub>
Olumlu görüş	Eğlenceli	20	56
	Öğretici	23	
	Merak uyandırıcı	13	
Olumsuz görüş	Çevresel koşullar	7	7
Yetersiz cevap			1



Öğretmen adaylarının büyük bir kısmı öğrenci deneyimlerinin olumlu yönde olduğunu belirtmiştir. Öğrencilerin etkinlikler ve uygulamalar boyunca eğlendiklerini, öğretici ve merak uyandırıcı bir süreç geçirdiklerini ifade etmişlerdir. Yedi öğretmen adayı ise hava şartlarından ve okulun yapısı gereği etkinliklerinin tam olarak planladıkları gibi geçmediğini belirtmiştir. Öğretmen adaylarına okul dışı öğrenme etkinliği düzenlerken bu etkinliklerden neler öğrendiklerine ilişkin soru yöneltilmiş ve cevaplar Tablo 8 üzerinde gösterilmiştir.

**Tablo 8.** Okul dışı öğrenme etkinliklerinden kazanılanlar

Tema	Kod	f	f <sub>Toplam</sub>
Uygulama ile ilgili görüş	Thinglink uygulaması	20	41
	Okul dışı deneyim	17	
	Zaman yönetimi	4	
Öğrenme kazanımları ile ilgili görüş	Öğrenme kalıcılığı	19	19

Öğretmen adaylarının verdikleri cevaplar incelendiğinde 20 öğretmen adayı Thinglink uygulamasının kullanımını öğrendiğini belirtmiştir. 17 öğretmen adayı ilk kez okul dışı öğrenme etkinliği düzenleme deneyimi yaşadığını ve dört öğretmen adayı ise zaman yönetimi becerisi kazanılması açısından yapılan etkinliklerin önemli olduğunu belirtmiştir. Öğretmen adaylarına yapmış oldukları okul dışı öğrenme etkinliklerini gelecekte nasıl iyileştirebilirsiniz sorusu yöneltilmiş ve cevaplar Tablo 9 üzerinde gösterilmiştir.

**Tablo 9.** Etkinliğin gelecekteki uygulamasına yönelik görüşler

Tema	Kod	f	f <sub>Toplam</sub>
Ekonomik olması	Zaman yönetimi	15	42
	Malzeme temini	17	
	Öğrenci ilgisini çekme	10	
Ortam boyutu	Farklı ortamlar kullanma	18	18

18 öğretmen adayı bu soruya farklı ortamlar kullanarak etkinliği zenginleştirebileceği şeklinde cevap vermiştir. 17 öğretmen adayı ise daha farklı malzemeler kullanarak okul dışı öğrenme etkinliklerini zenginleştirebileceğini belirtmiştir. 15 öğretmen adayı zamanı daha verimli kullanarak öğrenme ortamını zenginleştirebileceğini, 10 öğretmen adayı da öğrencilerin soyut konuları anlayabilmesi için somut hale getirerek daha çok ilgisini çekmeye çalışabilirim şeklinde cevaplar vermiştir. Öğretmen adaylarına son olarak geleceğin öğretmeni olarak bu deneyimden hangi önemli dersleri çıkardıkları sorusu yöneltilmiştir. Bu soruya verilen cevaplar Tablo 10 üzerinde gösterilmiştir.



**Tablo 10.** Okul dışı öğrenme etkinliği deneyiminden çıkarılan dersler

Tema	Kod	f	f <sub>Toplam</sub>
Uygulamaya dayalı öğrenme ortamı	Öğrencileri motive etme	22	42
	Okul dışı deneyimleri arttırma	20	
Teknolojiden daha fazla yararlanma	Web 2.0 araçlarını kullanma	19	19

42 öğretmen adayı uygulamaya dayalı etkinliklerin öğrencileri motive ettiğini, ilgilerini çektiğini ayrıca okul dışı öğrenme deneyimlerinin arttırılması gerektiğini belirtmiştir. 19 öğretmen adayı ise deneyimlemiş oldukları bu süreçten dolayı teknolojiden daha fazla yararlanmaları gerektiğinin farkına vardıklarını belirtmiştir.

### Tartışma ve Sonuç

Bu çalışmanın bulgularını değerlendirirken, öğretmen adaylarının okul dışı öğrenme etkinliklerine ilişkin pozitif tutumlarının ve bu etkinliklerin öğrenci öğrenmesi üzerindeki olumlu etkilerinin dikkat çekmek önemlidir. Öğretmen adayları, özellikle Thinglink uygulaması kullanılarak yapılan sanal gezilerin ve fiziksel ortamlarda gerçekleştirilen etkinliklerin, öğrenme süreçlerini zenginleştirdiğini ve öğrencilerin katılımını arttırdığını belirtmişlerdir. Bu bulgular, literatürde okul dışı öğrenme ortamlarının öğrencilerin motivasyonunu (Salmi, 1993; Kisiel, 2005), tutumlarını (Güler, 2011), eleştirel düşünme becerilerini (Gerber, Cavallo, & Marek, 2001) ve ders materyalini günlük yaşamla ilişkilendirme yeteneklerini (Ertuş vd., 2011) geliştirebileceği yönündeki önceki çalışmalarla uyumlu sonuçlar sunmaktadır.

Araştırma sonuçları, okul dışı öğrenme etkinliklerinin sadece öğrenciler için değil, aynı zamanda öğretmen adayları için de önemli öğrenme fırsatları sunduğunu göstermektedir. Öğretmen adayları, bu etkinlikler sayesinde ders işleyiş, sınıf yönetimi ve öğrenci motivasyonu gibi konularda önemli deneyimler kazanmış ve bu deneyimlerin gelecekteki öğretmenlik pratiklerine pozitif yönde katkı sağlayacağını belirtmiştir. Bu durum, öğretmen eğitimi programlarında okul dışı öğrenme etkinliklerine daha fazla yer verilmesi gerektiğinin altını çizmektedir.

Sonuç olarak, bu araştırma, okul dışı öğrenme etkinliklerinin hem öğrencilerin hem de öğretmen adaylarının öğrenme deneyimlerini zenginleştirme potansiyeline sahip olduğunu ortaya koymaktadır. Bu etkinlikler, öğrencilerin ders konularını gerçek dünya bağlamlarında keşfetmelerine olanak tanıyarak, öğrenilen bilgilerin daha anlamlı ve kalıcı hale gelmesine yardımcı olmaktadır. Aynı zamanda, öğretmen adayları için de pratik öğretim deneyimleri sağlayarak, onları gelecekteki mesleklerine daha iyi hazırlamaktadır. Bu nedenle, eğitim programlarındaki okul dışı öğrenme etkinliklerinin artırılması, teknolojik araçların entegrasyonu ve çeşitli öğrenme ortamlarının kullanımı önerilmektedir. Bu yaklaşım, öğrencilerin ve öğretmen adaylarının öğrenme deneyimlerini iyileştirecek ve eğitimde daha geniş bir etki yaratacak potansiyele sahiptir. Öğretmen adayları gerçekleştirmiş oldukları okul dışı öğrenme faaliyetleri kapsamında seçtikleri veri toplama araçları ve mekanlar özelinde öğrencilerde gözlemledikleri etkilerin çoğunlukla heyecanlı olma, istekli olma,



eğlenceli bulma ve nötr etki şeklinde olduğunu belirtmişlerdir. Öğretmen adayları sürecin sonunda okul dışı öğrenme ortamları ve Thinglink uygulaması ile ilgili daha fazla araştırmalar yapacaklarını ve bu uygulamaları ileride kullanmak istediklerini belirtmişlerdir. Öğretmen adaylarının mesleki gelişimlerinde, okul dışı öğrenme ortamları dersi kapsamında dijital destekli materyallerin kullanılması son derece önemli bir yer tutmaktadır. Bu bağlamda, dijital teknolojilerin entegrasyonu, öğretmen adaylarının bilgi ve becerilerini geliştirmelerine, öğretim metodolojilerine yeni perspektifler kazandırmalarına ve günümüzün eğitim ihtiyaçlarına uyum sağlamalarına olanak tanımaktadır (Kerawalla & Crook, 2012; Godwin-Jones, 2014; Richardson, 2013). Bu bağlamda, öğretmen adaylarının okul dışı öğrenme ortamları dersi kapsamında dijital destekli materyallerden yararlanmaları, onların mesleki gelişimlerini artırıcı önemli bir faktördür. Bu yaklaşım, adayların bilgi ve becerilerini geliştirmelerine, öğretim metodolojilerine yenilikçi yaklaşımlar getirmelerine ve eğitim alanındaki hızlı değişimlere uyum sağlamalarına katkıda bulunur.

### Öneriler

Çalışma kapsamında elde edilen bulgular ışığında, uygulamaların öğretmen adaylarına ders işleyiş ve sınıf yönetimi gibi açılardan önemli katkılar sunduğu düşünülerek bu gibi uygulamaların “Okul Dışı Öğrenme Ortamları” dersi başta olmak üzere diğer derslerde de daha sık yapılması önerilmektedir. İleride yürütülecek olan diğer araştırmalar için araştırmacılara farklı öğrenme ortamlarında farklı öğrenme seviyeleri ve disiplinler dikkate alınarak yürütmeleri önerilmektedir. Ayrıca çalışmanın farklı öğretmenlik lisans programlarında gerçekleştirilerek sonuçların karşılaştırılması da önerilmektedir.

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## Cognitive Activity Problems in Modern Educational Conditions

Ass. professor Sevinj Karimova

Department of pedagogy and psychology

Sumgait State University

[kerimova\\_sevinc1967@mail.ru](mailto:kerimova_sevinc1967@mail.ru)

### Abstract

Cognitive activity largely depends on the interest of students and students in learning, and interest depends on the conditions in which educational activity is established. Developmental factors that participate in this process and provide cognitive activation can only show their effects under appropriate training conditions. In educational activity, this occurs through the interaction of mental processes, on the one hand, and the environment in which these processes take place, on the other hand. Therefore, in modern education, activation of the cognition of students and students (students) is possible as a result of the interaction of their internal (mental) and external (social) relations.

In pedagogy, the activity of the personality is considered as individual activity directed towards the environment, leading to growth and development, towards the growth of oneself and the environment, and based on social experience. Therefore, in pedagogy, the concepts of activity and effectiveness are often used synonymously.

Many studies have been carried out in the field of development of cognitive activity in students (L.V. Zankov, M.N. Akimova, G.I. Sukina, M.N. Kazimov, A.A. Alizade, A.N. Abbasov, A. S. Bayramov), significant results have been obtained. These studies have shown that activism gives the personality the opportunity to act constructively, develop life strategies and tactics, and organize communication and relationships. Considering this fact, the family and the school have important tasks to solve. In order to fulfill these tasks, it is necessary to first determine the characteristics of cognitive activity in adolescents.

Modern researchers (A.A.Rean, A.Arlin, D.Hamilton, L.Dotta, etc.) state that empirical thinking is mainly developed in students in the traditional education system. In fact, it has been proven that cognitive activity takes place on the basis of special modeling and that it is a lawful process. According to these considerations, each stage of cognition has its own function in processing information. Therefore, in pedagogical conditions, it is necessary to take into account the regulation of cognitive activity through the connected, legally established interaction of separate processes. Weakness of cognitive activity, or high activity, is understood as the fact that individual cognitive processes working in this process have natural capabilities superior to others. Taking these into



account, the characteristics of the processes that determine cognitive activity during training should be studied. Taking into account the above, the conditions of cognitive activation in modern education are considered in the context of learning mental operations. In this direction, they put forward ideas on the types of generalization in training (V.V. Davydov), visibility and student activation (L.V. Zankov), intelligence and creativity (T.V. Ivanova).

The essence of cognitive activity accompanied by complex processes is that every idea that enters the mind must be consolidated in the mind and also a new, creative product must be formed. Because cognitive activity is not just about actively responding to what is learned and mastered. This process requires creative learners to make new additions to the knowledge they have acquired. These are possible based on the experience gained due to the consistent, systematic performance of cognitive operations in training conditions. We can also call this cognitive ability, thinking ability, and problem-solving ability as a whole. In modern education, these issues are widely explained in classification theory.

Cognitive activity is based on motivation. Cognitive motivation determines the productivity of activity results. Therefore, the activation of students, orientation according to their abilities, activities from small successes to big successes requires a systematic approach. For this, it is necessary to determine the conditions for the activation of cognition in each age period. The sources provide an extensive explanation of cognition and related concepts. In the Azerbaijan Encyclopedia of Life, cognition is "an active social-practical process consisting of reflecting the objective reality in the human brain and gaining correct knowledge about it. People understand the world around them based on the truths obtained in the cognitive process and change it in accordance with their needs.

**Key words:** learners, activity, cognitive activity, personal effectiveness, learning activity, cognitive ability, cognitive motivation, taxonomy, learning goal.



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## **Disciplinary liability of state officials in the Polish People's Republic**

**Ph.D. Bartosz NIEŚCIOR**

**Cardinal Stefan Wyszyński University in Warsaw, Poland**

### **Abstract**

In the times of the Polish People's Republic (PRL), the disciplinary liability of state bodies was controlled by the party apparatus, and decisions on this matter were binding within the party and subordinate structures. This principle is applied to people considered unfaithful to the party's ideology or inconsistent with the imposed norms. This procedure was often eliminated by eliminating consequences, which led to ensuring real effectiveness and fairness in disciplinary processes.



## Life Crisis as the Main Problem of Modern Psychology

Ass. professor Kamala Salamova

Department of pedagogy and psychology, Sumgait State University, Azerbaijan

[Salamovak11@gmail.com](mailto:Salamovak11@gmail.com)

ORCID iD: <https://orcid.org/0000-0002-0014-0287>

### Abstract

One of the interesting issues of psychological science is the problem of psychological crisis. Since the end of the 19th century, the problem of psychological crisis has attracted the attention of psychologists and specialists in related fields; a number of theories related to the problem of psychological crisis have been put forward. At the same time, despite the widespread use of the concept of psychological crisis in literature and practice, issues related to the development of the personality of this concept are not sufficiently developed from a theoretical point of view. From this point of view, in the modern era, psychological crisis cases of personality development depend on age, gender, etc. Research related to its characteristics continues. As we know, personality development continues gradually until the end of a person's life, and each age stage has its own unique problems, which manifest them as a personality crisis. A crisis situation is an integral part of the personal development of every person; this period has the maximum impact on the development of the individual and provides the further direction of personal development. One of the most important cases is that the development of the psyche, becoming richer and more complex, is not a stable and continuous process. This is an intermittent process, and crises cannot be avoided. 1.0.7 of the law on psychological assistance. The article states that a crisis situation is a situation that a person cannot eliminate on his own and which causes psychological problems [155]. "Crisis" from the ancient Greek word "crisis" means a decision, a turning point, a result, and in Latin it means a turning point, a turning point, a decisive period of a transitional state. In Ojegov's dictionary, crisis is interpreted as a sharp difficult situation, a harsh, sharp change in something. To the meaning of the word crisis are added features associated with negative emotional colors: difficulty, difficult situation. Researchers addressing the problem of psychological crisis use different concepts: "internal crisis", "existential crisis", "life crisis", "spiritual crisis", "life meaning crisis", "identity crisis", "age crisis", "professional development crisis", "personal crisis", "crisis of meaning", "crisis of meaninglessness", etc. "Crisis" from the ancient Greek word "crisis" means a decision, a turning point, a result, and in Latin it means a turning point, a turning point, a decisive period of transition. In Ozhegov's dictionary, a crisis is interpreted as a sharp



difficult situation, a sharp, drastic change in something. To the meaning of the word crisis are added features associated with a negative emotional connotation: difficulty, difficult situation. Researchers considering the problem of psychological crisis use different concepts: "internal crisis", "existential crisis", "life crisis", "spiritual crisis", "crisis of the meaning of life", "identity crisis", "age crisis", "professional development" " crisis.", "personal crisis", "crisis of meaning", "crisis of meaninglessness". In addition, there are concepts that express phenomena inextricably linked to the problem of identity crisis: "internal conflict", "interpersonal conflict", "existential vacuum", "excitement", "crisis situation", etc. However,

L. G. As Jedunova noted, when the term "crisis" is used in psychology, it implies a personal crisis. Indeed, researchers commenting on different types of crises note a number of points that are the same and put all diversity in an almost synonymous order [23, p.151]. To confirm these words; let us turn to the analysis of ideas related to understanding the essence of an identity crisis. When studying a psychological crisis, the following questions should be considered. Firstly, this is the source of the identity crisis, secondly, the significance of external changes in the emergence of an interpersonal crisis, thirdly, the significance of the crisis for the process of development and personality formation.

A crisis is a long-term mental state of a person arising from dissatisfaction with his inner world and environment, and it affects the sphere of values and needs that are most fundamental, important for life, is accompanied by strong emotional excitement and dominates the inner life of a person. Three types of theories about the crisis are distinguished: Material crises; social crises; mental crises. All experienced crisis situations lead to a change in the structure of personality, and each of them has its own internal content [23, p.151]. An internal crisis may be accompanied by external conflicts, but the elimination of nonfactual development involves acquiring new tools, mastering new spheres of life, and expanding opportunities. If the new demand is drowned out by external social demands, then the crisis may become acute and prolonged. It is necessary to analyze the crisis situation in order to determine how the exit from the crisis will be constructive or deconstructive. At this time, it is necessary to pay attention to the content of the psychological crisis, the person's attitude to the crisis, the length and development period of the crisis. The crisis situation ensures the further development of self-awareness in the intellectual and emotional spheres, and the resolution of the conflict acts as an indicator of personality development. But, on the other hand, the crisis can cause nervous disorders. Thus, a difficulty arises, a problem leads to a disruption of previous ways of functioning, tension arises, old ways of solving the problem are checked, if they are not adaptive, tension intensifies. At the next stage, the involvement of external and internal resources for the understanding of the problem takes place, which results in the following: reconsideration of the problem and exit from the situation; the impossibility of solving the situation in possible ways and the next violation of the system, moving away from solving the problem or destructive output.

The problem is the realization that it is impossible to solve existing difficulties and contradictions by using the knowledge and experience that a person has gathered for that moment in specific conditions. Therefore, there is a need for outside knowledge and experience to find the cause of the crisis, the fulcrum and to accept the situation as it is. The life path of each person, his development as a personality is accompanied by the substitution of potentials and forms of self-manifestation. A crisis situation is always stressful, contains stress and uncertainty. A crisis means the loss of any existing



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form of life to which a person is accustomed and creates a person is accustomed and creates an opportunity for him to move to a new form of life that is not yet known. A crisis situation becomes dangerous when a person cannot get out of this situation, he is not able to accept the crisis situation and fight with it.



## Artificial intelligence (IA) in education

**Ma.sc. Mentor RRUSTEMAJ**

**Teacher of the subject of Technology with ICT, in the lower secondary school**

**e-mail: mentor\_rrustemaj@hotmail.com**

**Municipality of Gjakova, Kosovë**

### Abstract

The rapid development of Artificial Intelligence is playing a major impact on education. (Giannini, 2023)

Starting with this statement from the Assistant Director General at UNESCO, we will see some data in the world about the use of AI technology in the Education system in general.

Various international data have been included for this paper - including, various websites, International Journals on Education, EU and US reports, and even the World Organization for the Conservation of Cultural Heritage (UNESCO).

In this paper, first, it is about the history of AI, then the inclusion of AI in education – in the teaching and learning process, not overlooking the versions of CHATGPT (versions 3.0, 3.5 and 4.0). For the transformation of education in the framework of AI technology, then for applications and platforms (20 already), which, using AI, are used in the education system - emphasizing their importance in general.

As important, and where it is included in this paper, is the challenge of using AI in the educational process as well as the ethical aspect, regarding the use of AI in the educational process.

At the very end, this paper ends with some recommendations, always based on the findings from the aforementioned documentation, and with the conviction that the work done will provide important data in this direction!

**Keywords:** Artificial Intelligence, ChatGpt, teaching, learning, recommendations



## Drone Flights in the Airspace

*PhD. Jacek KRAWCZYK*

Helena Chodkowska University of Technology and Economics in Warsaw, Poland

[jacek.krawczyk@uth.edu.pl](mailto:jacek.krawczyk@uth.edu.pl)

*ORCID: 0000-0001-6116-7099*

### Abstract

UAVs are a promising source of innovative services for society designed to enhance transport and mobility, among other things. Drones also provide an opportunity for green aviation and optimised delivery. The aim of the European aviation authorities is to promote a transport system that is accessible, affordable, efficient, safe and environmentally friendly, and to create the conditions for a competitive industry generating economic growth, jobs and the development of new technologies and procedures.

The U-space concept is a set of new services based on a high level of digitisation and automation of functions and specific procedures, supported by artificial intelligence, designed to provide safe, efficient and protected access to airspace for a large number of unmanned aircraft, operating autonomously, automatically or controlled within line-of-sight.

Drone flight operations will steadily increase. Therefore, it is necessary to design new digital solutions that will have an impact on the safety of air navigation, minimise the burden on ATS, increase the efficiency of airspace use with a particular focus on urban airspace, have no negative impact on the environment and contribute to the development of new technologies.

**Keywords:** UAV, U-space, drone

### INTRODUCTION

UAV (Unmanned Aerial Vehicle), also referred to as a drone, means any aircraft operated or intended to be operated without a pilot on board, which can operate autonomously or be piloted remotely<sup>1</sup>. UAVs are a promising source of innovative services for society, ranging from safer infrastructure inspections to more efficient transport and mobility solutions. Drones also provide an opportunity for green aviation and optimised delivery. The aim of the European aviation authorities is to promote a transport system that is accessible, affordable,

<sup>1</sup> <https://eur-lex.europa.eu/legal-content/PL/TXT/PDF/?uri=CELEX:02019R0945-20200809&from=PL>



efficient, safe and environmentally friendly, and to create the conditions for a competitive industry that generates growth and jobs. Therefore, in view of the anticipated growth of drone traffic in Europe, the European Commission's Directorate-General for Mobility and Transport is addressing the safe operation and management of drone traffic in the broader context of aviation safety.<sup>1</sup>

U-space is a set of new services based on a high level of digitalisation and automation of functions and specific procedures, supported by artificial intelligence, designed to provide safe, efficient and protected access to airspace for a large number of unmanned aircraft, operating autonomously, automatically or controlled within line-of-sight.

Digitalisation processes are becoming increasingly important in the operation of air transport. Aviation is moving away from a human-centred system - in which safety ultimately depends on pilots and air traffic controllers - towards an information-centred system, in which highly automated aircraft can fly safely based on information flowing through mobile telecommunications networks. It is anticipated that the role of ATC ( Air Traffic Control) and pilots will diminish over the coming years, while process automation will play an increasingly important role in air transport.

Demand for standards ICT (Information and Communication Technology) in aviation will steadily increase with the development of air transport and mobile telecommunications. This is particularly evident in the area of drone traffic management solutions, and whose digital solutions are constantly being improved.

U-Space is a drone traffic management solution that will enable increased complex drone operations in challenging environments. The solution includes the use of drones in transport and urban mobility often near airports.

In 2017 r. SESAR (Joint Undertaking Single European Sky ATM Research) prepared a draft U-space plan, a vision of how to make U-space operationally possible, and launched a series of projects to test and demonstrate initial U-space services. Initial results were made available in April 2020, and more demonstration projects are planned for the coming years to further validate advanced U-space services.

EASA published its Opinion No. 01/2020 on the high-level regulatory framework proposed by the Commission for U-space in March 2020. The Commission is currently drafting an implementing regulation on this basis and discussing it with Member States. This U-space framework would harmonise the provision of an initial set of U-space services across the Union to ensure the safe and scalable operation of unmanned aerial systems.

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<sup>1</sup> <https://joinup.ec.europa.eu/collection/rolling-plan-ict-standardisation/u-space>



On standardisation, the European Commission has established the European UAS Standardisation Coordination Group (EUSCG), a joint coordination and advisory group to coordinate drone-related standardisation activities, including U-space, across Europe and essentially derive regulatory initiatives from EU and EASA regulations. The EUSCG supports the work of the AW-Drones Horizon 2020 project, which is developing an open repository of unmanned aircraft standards and checking the suitability of technical standards for compliance with existing regulations on unmanned operations.

### **Summary of unmanned aircraft traffic FIR EPWW in 2023.**

The Centre for Unmanned Aerial Vehicles presents statistics on UAV operations served by PANSA in 2023.

According to data from the PansaUTM system (PansaUTM is a digital concept for the coordination of BSP flights and the digital management of requests and approvals in airspace, consisting of PANSA's proprietary operational solutions and the system part, integrated with a mobile application), in 2023, the number of active, unique users of the system was approximately 47,700. They reported a total of 668,786 BSP operations through the creation of the so-called Check-In. This is more than twice as many as the number of manned VFR operations handled by FIS (Flight Information Service) informants, which amounted to more than 275,000 in the same period.



Figure 1: Drone flight in urban airspace.

Source: <https://www.pansa.pl/podsumowanie-ruchu-bezzalogowych-statkow-powietrznych-w-2023-r/>

Despite the technical hurdles, PANSA saw an increase in Check-Ins relative to 2022, shaping up to be 12.7 per cent, with an increase of 24 per cent relative to 2021, translating into an approximate 12 per cent annual increase in Check-Ins.

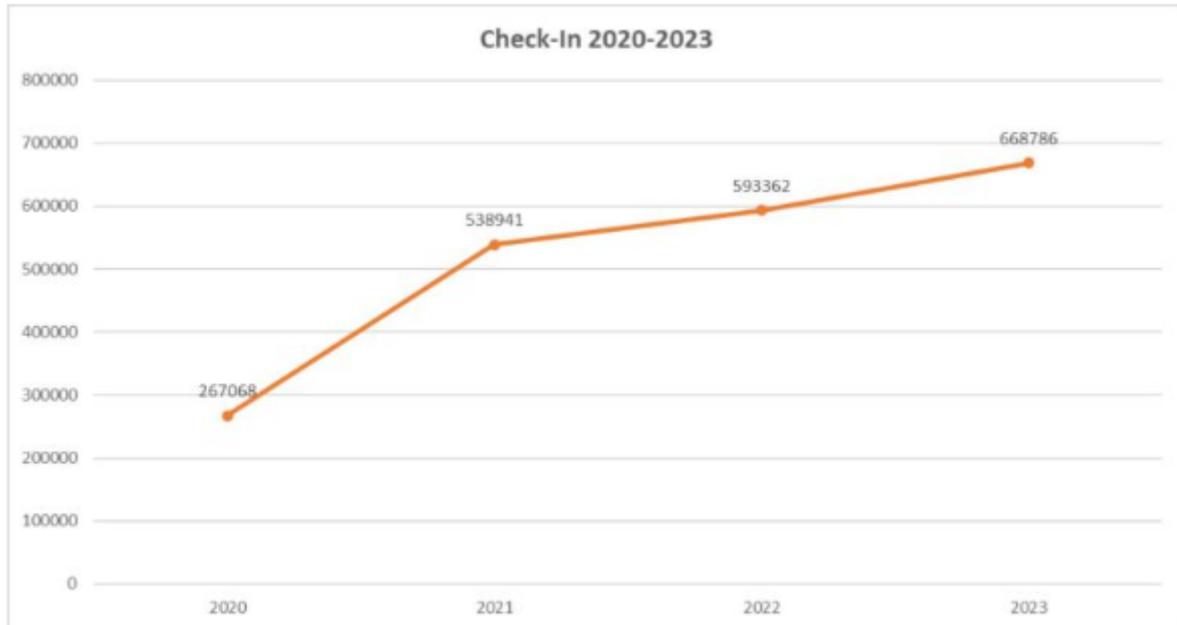


Figure 2: Number of check-ins between 2020 and 2023

Source: <https://www.pansa.pl/podsumowanie-ruchu-bezzalogowych-statkow-powietrznych-w-2023-r/>

The PansaUTM system is a tool that reduces the burden on ATS (air traffic services) while preparing for the expected increase in UAV operations in the future.

Analysing the graph above, it is important to conclude that drone operations will increase steadily. Therefore, it is necessary to design new digital solutions that will have an impact on the safety of air navigation, minimise the burden on ATS, increase the efficiency of airspace use with a particular focus on urban airspace, have no negative impact on the environment and contribute to the development of new technologies.



## Care for seniors - a challenge for scientific research

**Ewa WODZIKOWSKA**

**Powislanian Higher School Kwidzyn**

**Faculty of Health Sciences, Poland**

### **Abstract**

Nowadays, more and more people are living to old age. Estimated data shows that by 2025 the number of older people will increase to 30%, with the current rate in Poland being over 10%. According to the Central Statistical Office data, in 2005 the share of seniors in the population of our country was 17.2%, while in 2021 it was 25.7%. The age of a senior is defined in various ways. Some indicate 55 as the age defining a senior, others 60 or 70.

In Poland, every person over 60 years of age has the opportunity to obtain a National Senior Card. Each elderly person adapts to the passage of time differently. Older people struggle with problems such as depression and loneliness. This mainly applies to people living alone in single-person households without support from relatives. Often people from rural areas do not demonstrate social activity and integration with other people. Older people have needs that should be diagnosed and then met. It is important to conduct scientific research in this area. It is necessary to create the best possible care, support and quality of life for seniors.

To sum up, it should be stated that:

- there is a need to conduct scientific research among older people,
- it is advisable to conduct research in order to take effective preventive and therapeutic measures,
- it is important to undertake educational activities to raise awareness of older people, caregivers and medical workers in the researched areas relating to seniors.



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## Social Responsibility Vision for SMEs

**Adnan CELİK**

Prof. Dr., Selcuk University, FEAS, Department of Business, Konya/Turkiye.

E-Mail: [adnancelik@selcuk.edu.tr](mailto:adnancelik@selcuk.edu.tr), ORCID ID: 0000-0002-8538-9937

**Fatih CANBULAT**

PhD. Candidate, Institute of Social Sciences, Selcuk University, Konya/Turkiye.

E-Mail: [fcanbulat@ymail.com](mailto:fcanbulat@ymail.com), ORCID ID: 0009-0006-1425-7861

### Abstract

Organizations contribute to the sustainability of living life. Businesses are also a type of business organizations. Business literature has generally classified two types of businesses. These are SMEs (Small and Medium-Sized Enterprises) and large enterprises. These are also divided into various scales. For example, “micro, small and medium” size enterprise definitions have been developed for SMEs. For quality of life and sustainability, only “large” or “global” scale businesses are not enough. There is also a need for micro, small and medium-sized businesses. In addition, they are very dense in terms of number, quality and ability to create added value. While socio-economic situations are appropriate, they provide services at their own scale. They undertake tasks in depression or crisis environments. Despite limited capital and marketing opportunities, they try to survive. They contribute to the revival of the market and the sustainability of employment. This study focuses on the interaction of SMEs and corporate social responsibility. Social responsibility is a topic that is talked about more and more every day. Sensitivity to ecology, sustainable environment and humane life expectancies have increased. People have come to expect businesses to take more social responsibility. The concept of Corporate Social Responsibility (CSR) has come to the fore for the improvement of the physical and social environment. CSR can be accepted as an element of organizational culture in many large and/or global businesses. This issue has also started to become an agenda for businesses at the SMEs level. Social responsibility expectations from them have also increased. In this study, which targets these issues, three different dimensions are included. First, SMEs and social responsibility literature was evaluated. Secondly, the methodology is discussed. Then, findings and discussion were shared. The study ended with results and future evaluation.

**Keywords:** Small and Medium-Sized Enterprises (SMEs), Corporate Social Responsibility (CSR), Social Responsibility Vision in SMEs



## INTRODUCTION

Businesses provide convenience to sustain life. In this sense, large enterprises may come to mind first. However, not every business may be large-scale. In other words, there are also “micro, small and medium” sized enterprises. Those at this scale are grouped under the title SMEs (Small and Medium-Sized Enterprises). Many criteria can be used when determining business scales. Among these, “number of personnel” and “annual net sales revenue or financial balance sheet” are the prominent criteria (Cetin, 1996: 35; Celik and Akgemci, 2010: 120-124). Undoubtedly, the socio-economic development levels of countries are also a factor. Regardless of their size, every business has a specific founding purpose. Some of these are general, some are specific. Among the general objectives, “profit, service to society, social responsibility, survival and growth” are important. Among the specific objectives, “quality products to customers, good wages to employees, improving work environments, employee training, career management, continuity in employment” may stand out. Undoubtedly, global structure, society, sector, firm scale, entrepreneurial style and management levels may require changes in these objectives. There are generally accepted performance criteria in businesses. In other words, “efficiency, productivity, effectiveness, adequacy and profitability” issues are vital for every business (Simsek & Celik, 2014: 44-46, 131-136).

This study focuses on the “social responsibility” dimension, which is listed among the general objectives. Regardless of the scale, this dimension becomes more important day by day. Because businesses have to feel responsible for the environment they operate in while producing goods and services. In order to maintain their existence, they must demonstrate sensitivity towards society. In other words, they are expected to operate in a socially responsible manner. In this sense, one of the best ways to gain the trust and support of stakeholders is the Corporate Social Responsibility (CSR) approach. With globalization, this issue has become more widespread. There are also rapid technological developments, legal regulations and public awareness. Consumers are acting more organized day by day. Their impact on businesses is also increasing. Many large-scale businesses can make CSR a corporate culture and act accordingly. There are also people who use this situation as an advertising tool. Nowadays, social responsibility is expected from every business, regardless of its scale. It is believed that this will make their adaptation to the environment easier.

This study started with an evaluation of the general literature on the subject. First “What is SMEs?” the question has been answered. Then, the concept of social responsibility and its basic dimensions are explained. The methodology section consists of two subheadings. Here, the problem of the research, purpose and importance and research method and scope are shared. In the findings and discussion section, first, social responsibility and businesses were evaluated. Then, the issue of “social responsibility vision for SMEs” was clarified. As a result of the study, a future evaluation was made.

## 1. LITERATURE REVIEW

### 1.1. What is SMEs?

SMEs have been defined in different ways around the world. Undoubtedly, many factors have been effective in this throughout the historical process. There have been efforts to make a common definition. But this has not been easy. The socio-economic development levels of countries are



different. There are also differences in terms of company, sector, country and globally. When we want to make a general evaluation of business sizes, many issues arise. Among these, “the number of employees, the production technique used, the technology used, the amount of energy used, the characteristics of the goods produced, the time dimension, the economic level, the level of industrialization, the structure and size of the market, the branch of activity, the establishment and research” have an important place. When defining SMEs, different criteria and some factors are needed. In this sense, “time, economic level, industrialization level, technology used, size of the market, branch of activity, production technique used, characteristics of the goods produced, number of employees, establishments and research” come to the fore. Nowadays, criteria such as “number of employed personnel, annual sales turnover and annual balance sheet value” and “working dependently or independently” have become more preferred as the basic criteria in choosing the size of the business (Cetin, 1996: 35; Celik and Akgemci, 2010: 120). -124).

When SMEs are mentioned, “Small and Medium-Sized Enterprises” come to mind. The legal legislation on this subject is regulated by the “Regulation on SMEs Definition, Qualifications and Classification”. Enterprises within the scope of this regulation are defined as “micro”, “small” and “medium” sized economic units or enterprises. There are the following subdivisions for these (KOBİ, 2005, Article 4; KOBİ, 2012, Article 5; KOBİ, 2018, Article 5; KOSGEB, 2023):

- a) Micro enterprise: Enterprises that employ less than 10 people annually and whose annual net sales revenue or financial balance sheet does not exceed 5 million Turkish Liras.
- b) Small business: Businesses that employ less than 50 people annually and whose annual net sales revenue or financial balance sheet does not exceed 50 million Turkish Liras.
- c) Medium-sized enterprise: Enterprises that employ less than 250 people annually and whose annual net sales revenue or financial balance sheet does not exceed 250 million Turkish Liras.

“Employee numbers or financial information” and “capital or voting rights relationships with other businesses” are also important for determining the types of SMEs. The following criteria are important for an independent SMEs (KOBİ, 2012, Article 7-8):

- a) Not owning 25% or more of another business.
- b) No legal entity or public institution or organization or several affiliated businesses, alone or jointly, owns 25% or more of the shares of this business.
- c) It does not maintain consolidated accounts and is not included in the accounts of another entity that maintains consolidated accounts and is therefore not a subsidiary entity.

## 1.2. Social Responsibility and Basic Dimensions

Responsibility is “taking responsibility for one's own actions or the consequences of any event within one's jurisdiction”. It is a kind of responsibility situation. In other words, responsibility is the set of “rules that a person who is obliged to do that job must comply with in order to fulfill a determined task” (Demir, 2013: 225; TDK, 2024).

The concept of Corporate Social Responsibility (CSR), on which no consensus has been established regarding its quality and scope, began to be discussed more intensively in both the business world and



the academic environment in the 1990s. With the phenomenon of globalization, the concept of social responsibility has gained a universal dimension and the boundaries of the concept of social responsibility have expanded beyond the society in which we live and include the whole world (Baser & Kilinc, 2015: 2). On the other hand, protectionist approaches towards human rights, the environment, and the workforce under the leadership of some international organizations (United Nations, OECD, ILO, European Union) and the standards developed in this regard have revealed the need for businesses to be more cautious about corporate social responsibility (Aktan & Boru, 2017: 11).

The scope of CSR, which in the past was first carried out as making monetary donations under the name of philanthropy for the sole purpose of improving public relations without any connection with the mission and objectives of the enterprises, is developing day by day. Today, almost all businesses, regardless of their size and sector, use CSR as a new and effective tool to get one step ahead in the harsh competitive conditions in the market. In addition, CSR is an important part of the corporate culture of businesses not only as a competitive tool but also as a requirement to gain the trust and support of the society and all other stakeholders (Karatas & Günsel, 2016: 140).

Businesses must consider the interests of society while carrying out their activities. In other words, what makes a business valuable is not only the quality of the product it produces, but also its contribution to society and what it brings (Ozgen, 2007: 1).

Although technological opportunities in the rapidly developing world have facilitated production conditions and increased the number of businesses operating in the market, they have also brought environmental problems. With developing opportunities, consumers; While they encounter many options to meet their wishes and needs, they also have to live with many problems such as excessive environmental pollution, decrease in natural resources, global warming and the threat of climate change. The inadequacy of many state practices due to problems in education and health services that emerged in parallel with the increase in population, as well as environmental problems, caused the social responsibility areas of businesses to expand (Akkoyunlu & Kalyoncuoglu, 2014: 126).

Archie B. Carroll has made noteworthy works on social responsibility. The author has developed a remarkable pyramid. In this study, also called “Pyramid of Corporate Social Responsibility”, the following dimensions are emphasized (Carroll, 1991: 39-48):

1. Economic Responsibilities: Pursuing profit. Economy is the basis for other responsibilities.
2. Legal Responsibilities: To act in accordance with the law, statute and regulations (not to violate the generally accepted rules in the industry).
3. Ethical Responsibilities: Being true, honest and fair and avoiding harming the environment (Compliance with ethical principles).
4. Discretionary (Philanthropic) Responsibilities: Carrying out voluntary activities and improving the quality of life (Charity).

## 2. METHODOLOGY



## 2.1. Problem of the Research, Purpose and Importance

The subject of Corporate Social Responsibility (CSR) is becoming more important day by day. Individuals, organizations and societies continue to dream of a more livable world. Businesses that produce goods and/or services for human needs cannot stay away from this. Particularly noteworthy practices of large-scale enterprises are encountered. So, does this situation concern only large companies or global companies? Are Small and Medium-Sized Enterprises (SMEs) type organizations exempt from CSR activities? Or do businesses of all sizes have to comply with these obligations? What are the main problems? How can possible solutions be developed? This study was prepared to answer these questions. Generally, all companies were evaluated. Specifically, in terms of SMEs, the CSR vision was discussed. CSR is a subject that is widely studied. However, there is a need to prepare works of sufficient quantity and quality specifically for SMEs. When this issue is fully internalized by the parties, beneficial results can be expected for everyone.

## 2.2. Research Method and Scope

This study aims to create a CSR vision for SMEs. Primarily, the focus is on Small and Medium-Sized Enterprises (SMEs) and Corporate Social Responsibility (CSR). Therefore, a literature review was conducted. The study includes conceptual and theoretical evaluations. Additionally, information obtained from popular sources and current developments were also evaluated. It was intended to contribute to future studies on the interaction of CSR and SMEs. Additionally, efforts have been made to create a CSR vision for SMEs organizations.

## 3. FINDINGS AND DISCUSSION

### 3.1. Social Responsibility and Businesses

The dimensions of the “Pyramid of Corporate Social Responsibility” developed by Carroll can be analyzed primarily within the scope of general business administration. Of these, voluntary responsibility is more related to freedom of participation and individual choice. So there is no legal obligation. Within the scope of social responsibility, first of all; The dimensions of “social responsibilities towards business life, consumers and the ecological environment” can be emphasized. In particular, this scope; It may vary from “country to country, society to society, business to business”. The generally accepted basic criteria here are as follows (Sahin, 1984: 55-61; Cepel 1992: 141-142; Simsek & Celik, 1995: 30-33): “1.Protecting the consumer, 2.Increasing employment opportunities. 3.Improving working conditions, 4.Protecting the rights of partners, 5.Complying with business ethics and ethical principles, 6.Exhibiting sensitivity to the ecological structure, 7.Preventing environmental pollution. 8.The goal of total recovery”.

Businesses can act in different ways in CSR activities. Here, factors such as company capacity, management style, organizational culture, internal and external environmental impact are involved. Some may be very active, while others may be passive. Some may act as a savior of the day. Behaviors in this direction are collected in two separate dimensions in the literature. These are named as “traditional social responsibility” and “contemporary social responsibility” understanding and behaviors.



Traditional CSR involves traditional behavioral patterns. It attaches importance to the achievement of general and specific objectives of companies. So much so that a company reaching maximum profit is seen as a kind of “social responsibility success”. Profitability is considered as “a mechanism that will distribute benefits to the environment inside and outside the business”. If businesses invest their current or expected income in some social projects (such as installing filters on factory chimneys) for social responsibility purposes, there will be decreases in projects that create employment and increases in consumer prices. Such activities significantly reduce the income of businesses and negatively affect their contribution to the economy. As a result, consumers, and therefore society, suffer. The leading advocate of the classical understanding of social responsibility, which views organizational social responsibility from a rather narrow perspective, has been economist Milton Friedman. According to him, the business has no social responsibility other than “maximizing its profits”. It has also been argued that this is the best form of service for society within the current legal and ethical order (Friedman, 1970: 122-126; Simsek, et al., 2020: 134). Friedman, as an economist, made a comment in terms of macroeconomic indicators. However, ethical responsibilities are another phenomenon. It requires being proactive in activities or assuming responsibilities beyond the law. In addition, there are interactions with standardization, specialization, institutionalization, changeability, organizational agility and continuity (Sahin, 1996, 48; Ay, 2003: 23-25; Diken & Celik, 2023: 39-42).

However, post-modern or contemporary management approaches have significantly changed this understanding. In the last century, the concept of Contemporary CSR has become much talked about. In this understanding, a number of different social purposes are attributed to businesses, “far beyond organizational purposes”. The classical or narrow understanding of social responsibility, which prioritizes financial gains, came under criticism in the 1980s due to the environmental problems caused by industrialization. As non-governmental organizations spread the event to large audiences, it has been observed that some large-scale enterprises, in particular, have turned to the concept of corporate social responsibility (Tastan, 2019: 183-186). According to the modern and corporate social responsibility approach, any business should not release toxic waste into underground or surface waters, be sensitive to the ecological structure in production processes, raise awareness of its stakeholders in terms of social responsibility, develop training opportunities and be prone to solve the problems of employees. According to the modern approach, also called Socio-Economic Understanding, “business can increase the living standard and welfare level of the society while also making profits” (Sahin, 1996: 48-56). Contemporary CSR has become more and more popular with the public day by day. It seems that it will be talked about even more in the future. Because the activities of businesses have increased and diversified a lot. The economic, social, cultural and political consequences of the activities are gaining momentum day by day (Torlak, 2003: 32).

### 3.2. Social Responsibility Vision for SMEs

The contributions of SMEs to the socio-economic structure are very important. TUIK (Turkish Statistical Institute) carries out various studies in this field. Among these, the following stand out (TUIK, 2023): “Number of SMEs initiatives; number of employees; endorsement; use of technology; annual industrial and service statistics; foreign trade statistics; entrepreneurship and business demographics statistics; research on R&D activities; Patent application and registration statistics of



Turkish Patent and Trademark Office (TURKPATENT)”. According to TUIK's, SME statistics for 2022, there are approximately 3.784 million enterprises in Turkey. Of these, approximately 3.773 million are within the scope of SMEs (approximately 99.70%). Companies with SME features can also be classified among themselves. Approximately 92.3% of these are micro; 6.4% are minor; 1.1% are medium-sized enterprises. When SMEs are examined according to size groups; While 57.5% of micro-scale enterprises produced in the low technology class, 31.8% produced in the medium-low technology, 10.1% in the medium-high technology and 0.6% in the high technology class. On the other hand, in small-scale enterprises, these rates are 51%, 30.6%, 17.4% and 1%, respectively; in medium-sized enterprises it was 51%, 28.7%, 18.8% and 1.5%. According to the statistical classification of economic activities (NACE Rev.2), 2022 SMEs sectoral activity areas are as follows; “36.1% wholesale and retail trade, repair of motor vehicles and motorcycles; 15.2% is transportation and storage, and 12.2% is manufacturing industry”. SMEs; “about 70.6% in employment; 42.5% in turnover; 36.4% in value added at factor cost; 47.5% in personnel costs; 36.3% in production value; 31.6% in total exports; 15.4% in imports; 28.8% in R&D expenditures; They have a total share of 44.9% in R&D personnel employment in terms of Full Time Equivalent” (KOSGEB, 2023; TUIK, 2023).

CSR is important for every company, regardless of its size. Primarily, they produce goods and services to meet human needs. They interact with the internal and external environment. So scale should not be an excuse for social responsibility. Undoubtedly, large-scale businesses can allocate budgets for these activities. They can also employ experts. They can also open private offices. However, everyone can show social responsibility according to their own scale. Every business should be aware of its social responsibilities towards all its social stakeholders. Just as the list, meaning and importance of stakeholders for the business changes over time, the expectations and demands of the stakeholders from the business may also vary. As internal stakeholders, there are responsibilities towards “shareholders” and “employees”. They are closely affected by company activities. They also have the power to influence. Shareholders want both profitability rates to increase. They also expect transparent information to be delivered to them. Employees are also important stakeholders. They want a suitable work environment. They expect fair and equitable wages as well as social rights. Therefore, they aim to increase the quality of work and life. These should be given due attention. Undoubtedly, the external environment is also important. These, in turn, are affected by the activities of the business. They also affect themselves. Consumers, industry, competitors, financial institutions, media, state, society and other physical and social environment elements should also be taken into consideration. The limits of corporate social responsibility should also be well known. In other words, elements such as “legal structure, cost, efficiency, productivity, effectiveness, field of activity, complexity, company scale, measurement and ownership structure” should be diagnosed correctly (Demir, 2013: 226-227; Simsek & Celik, 2023: 37).

Size scale should not be a problem when businesses turn to CSR. Undoubtedly, this may bring some limitations for SMEs types. Public relations activity may not be available in every business. Image management may not be demonstrated either. No matter what, sustainable living is as important as sustainable business. CSR should not be thought of as developed only for large-scale companies and global companies. There are also noteworthy studies in this direction. The Global Reporting Initiative



states that “sustainable development goals will only be achieved with the participation of SMEs” (Yahsi, 2022: 40).

It is a known fact that organizations such as SMEs suffer from institutionalization problems. The advantages of large-scale businesses can also be disadvantages for them. For example, they may be ineffective in image display and reputation management. Large businesses have significant funds allocated for CSR. There may even be employment of personnel specialized in these matters and office layouts. Thus, it can be easier for them to appear more sympathetic in the eyes of the consumer. SMEs have to spend their financial resources mostly on production and marketing. It is not easy for senior management to receive training on this subject. Therefore, there are learning and implementation difficulties for subordinates as well. Environmental awareness formation has not been partially completed. Therefore, their work is not easy. Because the supply chain may be affected. Parent companies can push them for some improvements and regulations. Various standards have been expected on issues such as environment and quality (Adin, 2008; 119, 127; Guner & Coskun, 2013: 151-168).

Regardless of its scale, every business must know the concept of social responsibility. Small businesses may one day become medium-sized. Medium-sized companies can grow even further. Moreover, social responsibility is a living phenomenon in life. For this, integrated thinking is important. In other words, harmony should be sought between internal and external environmental elements. Technological developments should also be used beneficially in line with scale and capacity. Organizations that digitalize through information systems can achieve significant results in this field as well. Broadband, cloud computing, smart production, cyber physical and robotics type systems can be evaluated in integrated thinking (Tekin & Celik, 2023: 6-9).

Today, it is an imperative need to develop relationships based on mutual trust between companies and different segments of society. Today, company managements aiming for success can gain a lot by being sensitive to CSR. There may be partial financial expenses. However, various benefits can be obtained at the socio-economic level. Although taking corporate social responsibility initiatives is seen as a cost-increasing factor for companies in the short term, it makes it possible to achieve a sustainable organization goal by creating a responsible and reliable company image in the long term. It is a fact that strategies in this direction are designed mostly for large-scale companies (Celik, 2007: 81). No matter what, this view must be abandoned. SMEs type companies should not give up on their dream of developing and growing.

## CONCLUSION AND FUTURE EVALUATION

A livable physical environment and a sustainable social environment are necessary for everyone. Therefore, Corporate Social Responsibility (CSR) is gaining momentum day by day. It is a known fact that the world is becoming more difficult to live in day by day. Earth is now an old and tired planet. Undoubtedly, there are a variety of reasons for this. The ecological structure is about to deteriorate. Climate changes cause various problems. There is a loss of biodiversity. Water scarcity is on the horizon. There are energy crises. Pandemic illnesses have increased. There is concern about being dragged towards global wars. The digital age has not been able to eliminate inter-societal inequality,



on the contrary, it has deepened it further. The extent of intense technology and global competition has developed. There are also geoeconomic conflicts between states and business organizations. On the other hand, production and consumption continue as much as possible. This can increase the environmental damage caused by people and businesses. As fossil fuels such as oil, natural gas and coal are used, their side effects increase. The use of sources that produce high amounts of carbon increases carbon emissions. So, how will these problems be resolved? What are the main duties of the parties? Rather than answering all of these questions, this study includes the “Social Responsibility Vision for SMEs” feature.

CSR includes the goal of a more livable world. He especially emphasizes that businesses should be sensitive to these areas. Generally, large-scale companies or global businesses can be considered CSR sensitive. However, every business, regardless of its size, must be sensitive to this issue. Because, regardless of their scale, it is generally referred to as business organizations that produce goods and/or services. Some global and national sanctions force especially large businesses to operate in this direction. Some remarkable practices are also witnessed. However, there are more activities to do. Global collaborations should be increased. Internationally valid standards should be applied seriously. There are also many regulations to be made at national levels. In particular, CSR should be internalized in all social structures. It should be included in the scope of Small and Medium-Sized Enterprises (SMEs) type organizations. Because they are also active members of business life. So, from the perspective of SMEs, CSR vision should be developed.

SMEs type organizations may seem to be at a disadvantage when it comes to CSR compared to larger ones. This view may be true for capacity, professionalization and institutionalization. Large-scale businesses or global companies can do great things with their financial power. Internal order and departmentalization may be fully achieved. However, the world is not just about these. There is a very important fact about SMEs. SMEs have penetrated every aspect of life. They can be both suppliers and customers of large-scale enterprises. They carry out a wide range of production and marketing activities. They can even create their own supply chains. They are spread over very large areas, both physically and socially. They are also important stakeholders of the business world. Company owners and senior management must internalize the reality of CSR. The ecological structure also concerns them closely. Environmental awareness should also be their lifestyle. Sustainability and green production have become a concern for everyone. Human rights and quality of life should also be improved in these businesses. Additionally, public relations activities and image display are also valid for these businesses. Cooperation of government institutions, universities, sectors and other relevant environmental elements should also be ensured.

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## **Homework as A Part of Curriculum: The Perceptions of Arab Schools Students in Israel Concerning the Importance of Homework**

**Yousef Methkal ABD ALGANI**

**Department of Mathematics , The Arab Academic college for education in Israel.**

**[yosefabdalgani@gmail.com](mailto:yosefabdalgani@gmail.com)**

**<https://orcid.org/0000-0003-2801-5880>**

**Wafiq HIBI**

***Department of Mathematics, Sakhnin College, Israel.***

**[wafiq.hibi@gmail.com](mailto:wafiq.hibi@gmail.com)**

**Yasir Zyad ABO RASS**

**Department of Graduate Studies - Sakhnin College**

**[abo.rass@gmail.com](mailto:abo.rass@gmail.com)**

### **Abstract**

Homework is a part of school life for any student. The importance of homework in today's world is well-expressed when analyzed within the context of the educational system. Doing homework is influenced by various factors, including parents and teachers at school. In this study, the researcher examined the motivation behind doing homework and the student's beliefs about the importance of doing homework in Arab junior-high and high schools in Israel. It also examined the improvement of students' motivation to do homework while moving from one grade to another and the existence of gender differences regarding the motivation for doing homework. The study is based on a quantitative method using two questionnaires with 26 items. The sample consists of 501 students (seventh to tenth graders) from Arabs Israeli schools. The study findings show the crucial role of teachers and parents in motivating the students to do homework. Also, changes occur in the intensity of the internal and external motivating factors such as students' age, gender differences, the decrease in the perception of school achievement, and the importance of studying accompanying the maturation process. This study



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raised teachers, parents, and the educational system toward the significance of motivation and beliefs of doing homework in the students' learning process.

**Keywords:** *Mathematics, Motivation, Gender, Homework, Study, Education, Teachers, Parents, Age, Beliefs.*



## The Psychology of Characters in Ernest Koliqi's "Hija e Maleve"

Dr. Rovena MIKELI (VATA)

Academy of Sciences of Albania,

The Institute of Language and Literature

The Department of Literature Studies, Albania

E-mail: [rovena\\_vata@hotmail.com](mailto:rovena_vata@hotmail.com)

### Abstract

Albanian prose, with a special emphasis on Albanian stories, takes its modern form with the creations of Ernest Koliqi. His narration, theme, and discourse make Koliqi one of the most important personalities of modernism in Albanian literature.

This artistically prosaic creation is a combination of tradition and modernity. The author reveals the spiritual state of man by treating his psychic and emotional elements. Through this approach, these creations are unique compared to those of their contemporaries. The power of the narrative penetrates deeply into the reader's feelings.

Koliqi puts the theme on the individual level, making the narrator the bearer of the processes and concepts of a society that obviously has an identity crisis. The problem of such a society begins and is elaborated by returning to tradition, evoking memories and consequently moving this picture to the modern and contemporary plane.

The life of the Albanian, unbroken by the canon of a tradition with pagan outbursts, has been put under the author's lens and handled neatly. The transition of a society from complete darkness to a habitat where light should prevail has not been easy. Therefore, this transition created a situation in which the author identified social problems that became part of his writing. The influence of European literature, especially Italian literature, can be easily seen in these creations, but they have a unique character, not being separated from the national trunk.

**Keywords:** Koliqi, prose, Albanian society, psychic element, modern literature, etc.

### INTRODUCTION

"*Hija e Maleve*" (translation: **Shadow of the Mountains**) is a book written by Ernest Koliqi, where the author appears to be "slowly drawn into the plane of (ethno) thematic codes." (Shala, 2006, f. 45). This work is a collection of novels published in Zara in 1929. "The Shadow of the Mountains," as the



title itself suggests, reflects more of the mountain and its shadow in the life of the city” elaborates Dhurata Shehri (Shehri, 2006, 94).

Koliqi’s work can be considered the most complicated, as it combines phenomena that have accompanied Albanians throughout the centuries. First, it should be noted that “*great names, such as Gjergj Fishta, Ernest Koliqi, Faik Konica, Zef Skiroi, etc., remained outside the history of literature throughout the communist period.*” (Prifti, 2021, f. 66), so how should we understand that “*as in any small culture, big ideologies do more powerful damage?*”. (Mark, 2002, p. 230–240).

To return to the analysis of our work, where the fate of the characters of these stories is closely intertwined with the family, the tribe, and the Canon of the Mountains. In regards to the latter, Franz Nopcsa wrote: “*Kanuni i Lekë Dukagjinit*” (*The Canon of Lekë Dukagjini*), as it is called in Malësia, bears mediaeval signs” (Franz, 2023, p. 15); therefore, the customary code in northern Albania has been the essential axis around which Albanians rely in their everyday lives.

These codes, which were once unwritten, were collected among the mountains and put on paper by the intellectuals Fr. Gjergj Fishta and Fr. Shtjefen Gjeçovi, under the title “The Canon of Lekë Dukagjini”. These canonical codes have directly influenced not only the lifestyle but also the psychology of the Albanian people, influencing the construction of the individual personality. The shadow of the Albanian customary codes will be reflected by Koliqi in his work “The Shadow of the Mountains,” where “*the relationship between the customary and the civil code fits well with this popular expression: ‘Are you speaking like a man of custom or a man of government?’*”. (Vata, 2013, p. 134).

“The Shadow of the Mountains” has a total of twelve short stories, each of which has special content. “*Ernest Koliqi, the emblematic voice of Albanian prose, will always write according to the concept of saving and creating.*” (Krasniqi, 2023, p. 22).

The stories “*Gjaku*” (Blood), “*Se qofsh, pleqnofsh*” (*The longer you live, the more you judge*), “*Miku*” (Friend), “*Ke tre lisat*” (*To the Three Oaks*) and “*Diloca*” are creations of Koliqi, which bring the lifestyle of the highlanders under the rules of the canonical codes, which built the psychology of characters that we will encounter in the above-mentioned stories, but the other fact should also be added that “*Ernest Koliqi in ‘The Shadow of the Mountains’ built a way of speaking, whose figures and motifs resemble those of oral literature*”. (Olluri, 2022, p. 10).

Each of these stories comes to the reader so beautifully constructed that they stand out for their exceptional aesthetic taste, language, and rich folk lexicon. As Jani Thomai writes, “*The popular lexicon and the dialectal and regional lexicon are great sources of linguistic and stylistic tools.*” (Thomai, 2022, p. 134), a source from which Ernest Koliqi also enriched the artistic language.

“*Blood*” is one of the most complicated and emotional stories that Koliqi wrote in this work. Planon said that “*we must supervise the creators of the stories...*” (Plato, 1991, p. 55), where in these stories, we find not only the talent of Koliqi but also the ideas and his personal views through which he builds the psychology of the main character, Doda.

Doda has a clear and well-developed program for the education of younger generations in his homeland.



*“The teacher Doda in the novel Gjaku also asks in this way that through education and culture, the brain of the Albanian child is cultivated, developed, and removed from the darkness of ignorance, because together with him, the society that will be created with these children will progress when they are not younger but citizens of this country.”* (Prendi, 2011, f. 20).

The story opens with a self-testing rhetorical question posed by Doda to himself and Nusha (his fiancée), and Koliqi poses to all readers: *“Is there anything more wonderful in this world than bringing a nation immersed in 'the darkness of ignorance?'”* (Koliqi, 2011, p. 13). Doda has pure and personal goals for changing a vengeful mentality that has long been rooted, but the shadow of the mountains is rooted in the psychology of this character: *“In this view, the work is also a deep psychological study of Doda.”* (Hamiti, 2009, p. 345).

Doda himself came from Malesia, was educated (among the few in his country), and had seen the outside world. He returned to Albania and was employed as a teacher in Shkoder. During his life there, he also got to know Nusha, to whom he got engaged, and they planned the future together.

Nusha lived alone with her mother (her father had died), so Doda, who was a diligent and educated boy, took his place as the man of that house. *“He thinks that society changes through learning, and learning is done through books, culture, and knowledge”* (Hamiti, 2003, p. 447), while Nusha in his eyes was the reflection of innocence and spiritual calmness.

He even started writing books for his students so that they could be educated according to Western culture and eliminate the inherited vices that led to revenge and blood feuds. *“The tendency to blood feud must disappear from young souls, more than those of faith, husbandry, hospitality, etc. They need to be strengthened by giving them a good direction, because the Albanian often uses these good qualities to serve an evil purpose”* (Koliqi, 2011, p. 18).

Doda is the typical Albanian intellectual of the beginning of the 20th century who returned to Albania with a single goal: the education of the new generation. Doda is a dual character in Koliqi's work. Doda receives the news that seventeen-year-old Zeka, the brother who dreamed of bringing him down to Shkodra and educating him, has been killed in the mountains of Malësia.

Doda's lights of hope in his life are extinguished, as he knows what the murder of his brother means for the continuation of his life. *“Zeka, dead, lay in the middle of the room in a new shirt, tied his forehead with a red scarf that covered his bullet hole, the muzzle of the cartridges was compressed, and the shotgun was in his arm. In the pale face, the brother, even in the immobility of the death, preserved the traces of his masculine energy.”* (Koliqi, 2011, p. 23), and this description is made by Koliqi to reflect the strong manly features that the mountaineers had, even dead ones.

The tragedy of the character Doda is a collective tragedy. We see a character who is gentle, reasonable in thought and action, in love, and complete as a personality being transformed by those qualities. This is where his “battle” with himself and others begins. Being under the psychological and customary pressure of the family, relatives, and the whole society, where the lost blood is not forgiven, they urge him to take his brother's blood himself or to pay someone else to take his brother's blood. Therefore, the shadow of the mountains has burdened the mental, emotional, and spiritual state of Doda.



Doda tries at all costs to remind himself that *“it’s braver to fight the bad triggers of the blood and to face the erroneous judgements of the environment to listen to the pure voices of my conscience, rather than kill someone.”* (Koliqi, 2011, p. 33).

However, all these ideas that he once defended very strongly and showed to others conflict with those of the mountaineer, who was educated according to customary codes. The researcher Sabri Hamiti expresses this as follows: *“Doda, the teacher protagonist, has acquired new knowledge and ideas, but in the depth and darkness of his soul there is a living culture of the environment that sleeps but can be awakened if it is touched at its foundations”* (Hamit, 2002, p. 587).

The end of the story depicts Doda at school, to whom a family friend comes and informs him that the *bloodsucker* (the one who killed his brother) had come to Shkoder and was wandering freely in the city's large market. Hurt in spirit by the words he heard from his friend, touched in the heart by the action of the blood, and, above all, spiritually obliged to his late brother, Doda, this teacher who was expected to educate generations as long as he lived, takes the revolver, heads towards Nike Feta (that is the name of Zeka's killer), calls him by name according to canon custom, and shoots him six times in the body. Nika falls lifeless to the ground, while Doda heads towards a lieutenant to be handed over to the justice authorities.

In conclusion, a shadow of liberation passed through his soul, which speaks volumes about the psychology of the eternal mountaineer, and according to Sabri Hamiti, this, within Doda, is a victory of the old stratification: *“...the old stratification wins, and now it can be seen that it is not only a canonical obligation but also a fact that it has become a psychological structure.”* (Hamit, 2002, p. 587).

*“The longer you live, the more you judge”* is based on the solution of a canonical problem, the court, and the lawyer of that time. *“Canonical law has been transmitted as a culture from mothers to children, who, along with language, also taught them the rules of behaviour according to customary customs”* (Çikopano, 2020, p. 17). In this novel, the father kills his daughter, who was unmarried and became pregnant. Her father beats her and tortures her to reveal the father of the unborn baby, but Mina (the daughter) does not reveal him for many reasons. This, according to the highlanders, is unacceptable and shameful, and Sufa (the father) kills Mina with his own hand.

There, neither the plight of the mother, who sees her daughter being killed, nor her powerlessness to stop this event, nor the condition of the father, who is on top of her, nor even the murdered daughter, is questioned. As a lifelong mountaineer, in regards to murder of his daughter Sufa declared: *“I had a red apple that pleased me with its good smell... Its beauty was the comfort of my eyes... However, the worm got into it and rotted it. I plucked it and killed”* (Koliqi, 2011, p. 67). It is clearly understood that among the highlanders, the canonical codes of the mountains are above ethnic feelings. This novella best reflects the unwritten canonical right to kill the girl who brings shame to that house. Additionally, it shows how the highlanders regulated their lifestyle, differentiating and balancing what is considered shameful and what is considered honest.

The story goes on. The girl's boyfriend, Hajdar Liti, claims blood from her father because he killed the unborn child. Here, Koliqi emphasises the *elders’ council*, which for centuries served as a kind of folk



court. Summoned to a meeting with elders, Sufa goes bound by Xhep Neli, a smart old man, and on the other side by another old man. The old man of Hajdar Liti asked Xhep Nel in indirect words, which characterise the odes of the Highlands: “Why did you pour me that flour?” (Koliqi, 2011, p. 71), while Xhep Neli, speaking on behalf of Sufa, answered, “What did your flour look for in my bag?” (Koliqi, 2011, p. 71). With this answer, Sufa’s side wins, and the old man of the losing parties addresses Xhep Neli with the words that this story has as its title, “Se qofsh, pleqnofsh”, thus wishing him a long life in making and setting it. This is how the murder committed is justified, and the life of the mountaineers, who base their actions on the unwritten mediaeval code, is put at the epicentre.

“*Why did you pour that flour on me?*” This expression, used as a question by the elder (lawyer) of Hajdar Liti, means the unborn baby. Flour, as a substance used for bread, which is the main food for living, refers to the biological procedure of conceiving a new life, which means that the child in Mina’s womb is from the blood of Hajdar Liti, and he or she seeks his or her own blood from Sufa.

“*What did your flour look for in my bag?*” - the expression in the form of the counter-rhetorical sentence of Xhep Neli, which implies that the child (flour) in Mina's womb (sack) was conceived without a crown between the couple, thus against the canon of Malesia. Sufa, being Mina's biological father, had absolute power over her body and soul, and thus, the highlanders’ trial justifies the double murder.

The novel “*Friend*” reflects the loyalty of a mountaineer who adheres to the customary code in opposition to the civil code, which is a legal code. This novel “*is built on the contrast between official duty and customary obligations.*” (Smaqi, 2009, p. 46). Lieutenant Uc Lleshi is asked by the state to apprehend a journalist who was talking badly about the government, had escaped from them, and brought him to justice.

However, what happens is dilemmatic for Uc Lleshi, as the journalist goes to his house together with Gjokë Vata, the murderer of Uci’s brother. Koliqi never questions the loyalty of this mountaineer. Uc Lleshi welcomes them at home, according to the canonical code, and feeds them with bread and water, with conversation and kindness, as the custom requires. However, the custom requires that the guests escort them down the street, and this is the real drama of Uc Lleshi.

Uc Lleshi knows that with the departure of the journalist, under his guidance, he would also lose the title of lieutenant, referring to the state and legal code. Koliqi puts his character in major life dilemmas, such as waiting for blood at home and escorting the enemy of the state outside the borders of the country, but the author never puts his character in life situations that make it possible to break the promise and the code of the mountains.

For Koliqi, trust is the highest virtue that an Albanian has, and this, in no way, should be broken. He even asks that these virtues be strengthened and remain so forever. “*Without faith and friends, we do not even need life in these mountains of ours*” (Koliqi, 2011, p. 89).

The novella “*To the Three Oaks*” reflects the drama of two young people in love whose families are loggerheads. Mrika and Gaci love each other, but their love takes a backseat when Gaci's brother kills Mrika's cousin. Mrika's brother, who had realised that these two were meeting, concocts a lie, calling Gac in Mrika's name to meet “to the three oaks” and thus kill Gac and at the same time take his



cousin's blood. However, Mrika hears the plan and runs away through the mountains to stop this tragedy.

She stops Gaci and tells him that everything is over between them since now *“we have blood between us.”* (Koliqi, 2011, p. 124). Mrika's feelings are reflected in the story, from the burning desire to see her lover and the joy that characterizes Mrika as a character to the spiritual death she experiences after being separated from the deserted Gaci. *“She left without looking at him; she left with the walking of one who goes backward into some abyss”* (Koliqi, 2011, p. 125).

After *“Blood”*, *“Diloca”* is another novella that is equally complicated and masterfully written by Koliqi. *“His writing skills have been poured into it, just as the basic views on the Albanian world have been expressed, building the personality of the main character of the work”*. (Hamit, 2003, p. 446).

It addresses the psychological side of the narrator (*Leci* or the author himself) and *Diloca*, the mysterious mountaineer who puts the narrator at the epicentre of countless sensations. The story is written in diary form and has a total of fifteen chapters; it starts on the 17th of January and ends on the 10th of April. The diary starts with *Leci*, which describes how the young mountain girl *Diloca* was found in the middle of the cold January in the backyard of his house in Shkoder. Running away from someone or something, the mysterious *Diloca* is accepted into *Leci*'s house, and she starts working as a maid for *Leci* and his mother.

She clouded *Leci*'s mind, leading him to different thoughts. He begins to look at the girl from the erotic side; this is seen in the description of the details of her physique, seen from the eyes of *Leci* in love. Now he finds himself in the dilemma that comes to him as a result of the prejudices of the classes: take the maid as his wife and become the ridicule of the world?! However, *Diloca* in and of itself was a reflection of innocence.

*“In the story Diloca, Koliqi again lays down the powerlessness of the individual to change something in collective life. Diloca, who surrenders to the love of the soul, denying the canon for her sake, truly only articulates his own gesture and ultimately sacrifices his own love. Diloca is a character who has finally lost love, so he has also lost his desire for life.”* (Hamit, 2003, p. 449).

*Leci* thought how good it would be if he took a clean girl such as *Diloca* as his wife, in whom he would build a woman according to his desire: *“Her soul would be like a world to be created. I would have virgin dough in my hand to vault it according to my desire”* (Koliqi, 2011, p. 135).

*Leci* understands that *Diloca* was hiding something from him and that he definitely wants to know her secret. Trapped by a mountaineer who comes to her house and causes problems for *Leci*, *Diloca* tells him her true story, the reason for running away from her home in the Highlands: she was engaged in the cradle to *Vuksan Gjeli*, but when she grows up, she falls in love with *Mark Lulashi*. When the wedding date arrives, *Diloca* runs away with *Mark* to make their love come alive. However, such love and flight mean death in the highlanders' mindset.

Fleeing through the mountains and pursuing from all four sides, they find themselves hopelessly close to each other. *Mark Lulashi* is injured, and so the real tragedy begins. With the wounding of *Mark*, *Diloca* grabs his rifle and shoots in the direction of the pursuers to keep them away from the lover who is giving his soul, and thus, the author reveals another main and special feature of the highlanders, that



is, their manly side: “*Then, I fired my shotgun so that my followers would not let me get close; I shot until I ran out of cartridges*” (Koliqi, 2011, p. 141).

Due to an extreme cold and loss of blood, Mark died in her arms. Diloca turns the dead body to face the sky, puts the rifle on its side as required by custom, and runs away from the scene to crash into Leci's house, where he is now.

With her narration, Koliqi tries to create a character with a difficult psychological state who is stripped of any inner feelings or emotions. Thus, Diloca speaks with fire and passion when she confesses her efforts to save Mark, but she covers her face with her hands every time she mentions her name. It is warm and cold at the same time, just like her outer beauty. Leci, now powerless to protect Diloca, sends her to the orphanage, and the story ends there.

The drama of this story lies in Leci's deep feelings for Diloca before she learned her true story and her tragedy, which involved several people being killed. He loves the look of a girl he does not know, whose soul he only guesses. When her soul unfolds, heavy truths emerge that compel Leci to send her to the orphanage—that is, to her loss. Diloca would rather die alone than marry someone other than Mark Lulashi. Thus, the story ends with the solitude of Diloca in the orphanage, whose eyes, for Leci's eyes, are lifeless and no longer convey anything.

## CONCLUSIONS

The study of the “Shadow of the Mountains” in the psychology of the characters of Ernest Koliqi comes from the writer's own formation. Koliqi, known as the writer between the mountain and the sea, also brings his own characters to his artistic creations. The shadow of the mountains has appeared in the psychology and lives of his characters and is about the curse of the customary code.

Doda, as a typical character in Koliqi's work, is torn between the lives of his mountaineers and the European education he received at university. Ernest Koliqi's characters in their genes appear within customary codes; in their formation, they are European and citizens, but their formation “betrays” them when life confronts them with customary codes.

Through his characters, Ernest Koliqi appears to us both in the customary code, i.e., under the shadow of the mountains, and under the influence of the civil and legal code, where through these codes, he managed to connect tradition with modernity.

Koliqi, in the substance of these novellas, preserves exactly what the novella at the time had as an element: oral narration. Almost all the stories in “The Shadow of the Mountains” have elements of oral narration, adapted to the time and space that the author has set with his own skill. They narrate the events or feelings of individuals, or even the collective in general, and suspend the reader at the end of the text. The narratives end with a clear message, but they end as if torn in half, leaving room for the reader's imagination to take the story in the direction it wants.

The story “Diloca” is structurally written in the form of a diary and reflects both the psychological side and the external actions of the characters. This story breaks the structural rule that the others have, enlarging even more the idea of Koliqi in compiling such a collection of stories. He combined and



arranged the stories according to ideas and feelings, making the reader change the spiritual and psychological sensations from story to story.

Koliqi conveys the shadow of the mountains in the actions of his characters, who at the end of the stories remain canonical characters who are also psychologically included within the customary code, such as Doda, Uc Leshi, Mina, Sufa, Hajdar Liti, Mrika, Gaci, Diloca, and Leci.

The shadow of the mountains weighs on the characters of Ernest Koliqi, as at the end of each story, it is seen that the code, the custom, and the canon win, where the author intentionally uses words that mostly cover canonical codes, such as blood, friend, habit, leadership, roots, honour, death, tribe, etc.

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## The Problem of Self-Actualization of Young People in the Modern Period and its Social-Psychological Bases

Sever Sarvat qızı Mirzayeva

Ass. of professor, Sumgait State University, Azerbaijan

[severmirzayeva@gmail.com](mailto:severmirzayeva@gmail.com)

### Abstract

The problem of self-realization is one of the most urgent problems in modern psychology. Representatives of many leading psychological schools of psychology have dealt with this problem. Since self-realization is considered one of the important conditions of psychological health, it is necessary to study its essence more thoroughly. A person has the potential for positive and constructive development genetically from the day of birth, and this potential can be realized if there are suitable conditions and environment.

If people want to realize themselves, they must overcome the limitations of society and satisfy their deficit needs. Man is naturally good and capable of self-improvement. If a person is not hindered by the environment, circumstances, in essence, he always goes towards personal development, shows a tendency to creativity and self-discovery. The theory of self-actualization states that a person is unique and has much potential. Most of the people, maybe even all of them, need inner improvement and are looking for it. The conducted studies have led to the conclusion that the realization of the potentials we have is natural and important (must).

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Fear and shame in man, everything that strengthens the soul, also strengthens his tendency to return to the search for security and protection. It is true that most people tend to maintain specific habits, more precisely; they tend to behave in old ways. In order to realize the need for self-realization, we need to be open to new ideas and experiments. Children brought up in a safe, friendly, caring environment have healthier ideas about the development process. In short, in healthy conditions, i.e., when nothing prevents the satisfaction of a person's basic needs, the development process of a person gives him a sense of satisfaction, and a person tries to be as good as possible. Self-realization is being able to be the person we can be, reaching the peak of our potential.



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## Kümeler Konusunun Öğretiminde Okul Dışı Öğrenme Ortamlarının Etkisi

### The Effect of Out-Of-School Learning Environments on the Teaching of Sets

Doç. Dr. Ayşegül ASLAN\*

Trabzon Üniversitesi, Türkiye

[aysegulaslan@trabzon.edu.tr](mailto:aysegulaslan@trabzon.edu.tr)

Büşra ALPHAYTA

Bafra Bilim ve Sanat Merkezi, Türkiye

[busralphayta@hotmail.com](mailto:busralphayta@hotmail.com)

#### Öz

Bu araştırma, okul dışı öğrenme ortamında tasarlanan kümeler konusuyula ilgili bir etkinliğin kümeler konusunun öğrenimi üzerindeki etkisinin incelenmesidir. Bu amaç doğrultusunda ‘Samsun Bafra Yakup Durmuş Müze Evi’ ne gidilmiş olup orada yer alan eserler, öğrenciler tarafından kazanımla ilgili olarak incelenmiştir. Bu araştırmanın çalışma grubunu, bilim ve sanat merkezi byf grubu öğrencileri (13, 5. sınıf öğrencisi) oluşturmaktadır. Araştırma tek gruplu ön test- son test yarı deneysel yöntem ile yürütülmüştür. Araştırmanın veri toplama araçlarını, okul dışı öğrenme ortamında tasarlanan etkinlikte verilmesi planlanan kazanım doğrultusunda araştırmacılar tarafından hazırlanan eş değer *ön test ve son test*, ayrıca öğrencilerin planlanan müze evinde gezisi esnasında gözlemlediklerini not alabilecekleri, araştırmacılar tarafından oluşturulmuş *müze evi inceleme formu* oluşturmaktadır. Ön test ve son testlerde ilgili kazanım doğrultusunda 10 soru yer almaktadır. Elde edilen verilerin analizde öğrencilerin cevapları; doğru (1 puan) ve yanlış veya işaretlenmeyen soru (0 puan) olarak iki kategoride değerlendirilmiştir. Öğrencilerin müze evi inceleme formuna aldıkları notlar incelendiğinde, müze evindeki eserleri ilgili kazanım doğrultusunda değerlendiren öğrencilerin çoğunlukta olduğu, burada yer alan eserlerin küme oluşturacak şekilde tasnif edebildikleri gözlemlenmiştir. Dolayısıyla küme kavramını anlamlandırdıkları, bir topluluğun küme olması için gereken şartın ne olduğu ile ilgili bilgi sahibi oldukları görülmüştür. Öğrencilerin okul dışı öğrenme ortamı olan Yakup Durmuş Müze Evi gezisi öncesi ve sonrası yapılan test ortalama puanlarının karşılaştırıldığında son test lehine anlamlı farklılık olduğu belirlenmiştir ( $t=2,624$ ;  $p<.05$ ). Okul dışı öğrenme ortamı olarak belirlenen müze evinin kümeler konusunun öğretimine etkisini incelemek amacıyla yürütülen bu araştırmada; etkinlik öncesi uygulanan ön test ve etkinlik sonrası uygulanan son test puanları arasında istatistiksel olarak son test lehine anlamlı fark olduğu görülmüştür. Dolayısıyla, okul dışı öğrenme ortamı olarak belirlenen müze evinde tasarlanan kümeler etkinliğinin, konunun öğretimine olumlu katkı sağladığı düşünülmektedir. Ulusal ve uluslararası literatür incelendiğinde okul dışı öğrenme ortamlarında tasarlanan matematik eğitimi ile ilgili yürütülen araştırmaların sınırlı sayıda olması, literatürdeki bu boşluğun yapılacak olan okul dışı öğrenme faaliyetleriyle ilgili yürütülecek araştırmalarla doldurulabilir. Bu araştırmada müze evi, okul dışı öğrenme ortamı olarak belirlenmiştir. Yapılacak olan diğer araştırmalar için araştırmacılar



farklı öğrenme ortamlarında farklı matematik etkinlikleri yürütmeleri önerilmektedir. Ayrıca çalışmanın farklı okul türlerinin de dahil olduğu daha büyük örneklem grupları ile yürütülmesi de ileride yapılacak çalışmalar için önerilmektedir.

**Anahtar kelimeler:** Matematik eğitimi, okul dışı öğrenme ortamları, müze evi, kümeler

### Abstract

The aim of this research is to examine the effect of an activity designed in an out-of-school learning environment on the learning of the subject of sets. For this purpose, 'Samsun Bafra Yakup Durmuş Museum House' was visited and the artefacts there were examined by the students in relation to the acquisition. The study group of this research consists of science and art centre byf group students (13 5th grade students). The research was conducted with a one-group pretest-posttest quasi-experimental method. The data collection tools of the study consisted of the equivalent pre-test and post-test prepared by the researchers in line with the acquisition planned to be given in the activity designed in the out-of-school learning environment, as well as the museum house inspection form created by the researchers, in which the students could take notes of what they observed during their visit to the planned museum house. There are 10 questions in the pre-test and post-test in line with the related learning outcome. In the analysis of the data obtained, the answers of the students were evaluated in two categories as correct (1 point) and incorrect or unmarked question (0 points). When the notes taken by the students on the museum house examination form were examined, it was observed that the students who evaluated the artefacts in the museum house in line with the relevant outcome were in the majority and that they were able to classify the artefacts in the museum house in a way to form a cluster. Therefore, it was observed that they made sense of the concept of cluster and had knowledge about the conditions required for a community to be a cluster. When the mean test scores of the students before and after the Yakup Durmuş Museum House trip, which is an out-of-school learning environment, were compared, it was determined that there was a significant difference in favour of the post-test ( $t=-2,624$ ;  $p<.05$ ). Based on this finding, it can be said that the out-of-school learning environment designed as a museum trip activity contributed positively to students' learning. In this study, which was conducted to examine the effect of the museum house, which was determined as an out-of-school learning environment, on the teaching of the subject of clusters, it was seen that there was a statistically significant difference between the pre-test scores applied before the activity and the post-test scores applied after the activity in favour of the post-test. Therefore, it is thought that the clusters activity designed in the museum house, which is determined as an out-of-school learning environment, contributed positively to the teaching of the subject. When the national and international literature is examined, the limited number of studies on mathematics education designed in out-of-school learning environments, this gap in the literature can be filled with studies to be conducted on out-of-school learning activities. In this study, the museum house was determined as an out-of-school learning environment. For further research, researchers are recommended to conduct different mathematics activities in different learning environments. In addition, it is recommended that the study be conducted with larger sample groups including different school types for future studies.

**Keywords:** Mathematics education, out-of-school learning environments, museum house, sets

### Giriş

Okulda belli bir plan programa bağlı olarak gerçekleşen öğrenmelere formal öğrenme, belli bir ortama bağlı kalmaksızın ailede, sokakta arkadaş çevresinde gerçekleşen öğrenmelere ise informal öğrenme denir. Formal ve informal öğrenmeyi birbirine bağlayıp köprü görevi gören öğrenme ise okul dışı



ortamlarda öğrenmelerdir (Bozdoğan, 2007). En etkili eğitim stratejisi; öğrencilerin öğrenmede aktif oldukları, yaparak ve yaşayarak öğrendikleri, konuları çevreleri ile ilişkilendirdikleri ve sosyal yaşamla bağlantılar kurdukları bir öğrenme yöntemi olarak kabul edilmektedir. Bu öğrenme yönteminin en etkin kullanılabileceği ortamlar ise “okul dışı öğrenme” şeklinde tanımlanmaktadır (Taşın Yalçın, 2023). Alan yazın incelendiğinde okul dışında gerçekleştirilen öğrenme için non-formal öğrenme, dışarıda öğrenme (outdoors learning), sınıf dışı öğrenme (out-of-class learning), okul dışı deneyimler (out-of school experiences) gibi birçok farklı terim kullanılmaktadır (Şen, 2019). Bu çerçevede okul dışı öğrenmeyle ilgili birçok tanım yapmak mümkündür. Bilginin dış dünyaya temas etmesi yoluyla öğrenildiğini savunan okul dışı öğrenme yöntemleridir (Eshach, 2007). Okul/sınıf/ders dışı uygulama ve öğretme-öğrenme süreçlerindeki etkinlikler; gezigözlem ve arazi çalışmaları, sosyal, kültürel, endüstriyel ve bilimsel amaçlı yerlere gezi ve ziyaretler (müzeler, bilim müzeleri, doğa tarihi müzeleri, planetarium (gökevi), hayvanat bahçesi, botanik bahçesi, sanayi işletmeleri vb.), çevre kulüpleri etkinlik, doğa eğitimi, sanal gerçeklik uygulamaları, mekanla doğrudan ilgili ödevler, bilimsel programlar (sempozyumlar, kongreler, konferanslar, toplantılar, sergiler, paneller) ve yaşam boyu öğrenmenin mekânsal uygulamaları gibi alanları kapsamaktadır (Fidan, 2012). Okul dışı öğrenme, okul sınırları dışında gerçekleşen ve disiplinler arası etkileşim sağlayan bir etkinliktir. Etkinlik düzenlenecek okul dışı öğrenme ortamı öğrencinin yaparak yaşayarak öğrenmesine olanak sağlamalıdır (Ünal, 2018). Moss (2009) okul dışı ortamlarda matematik öğrenme ve öğretmeyi "okul dışı matematik eğitimi" olarak adlandırmıştır. Moss (2009) açık alan matematik etkinliklerini, öğrencilerin dışarıdaki dünyayı deneyimlemelerine ve keşfetmelerine, okul ortamlarında sağlanmayan daha geniş bir alanda matematik uygulama deneyimi yaşamalarına ve okul ortamından farklı bir ortamda matematiği eğlenceli bir şekilde dışarıda yapmalarına yardımcı olan etkinlikler olarak tanımlamıştır. Moss, doğadaki geometrik şekilleri, kaldırımlardaki matematiksel örüntüleri keşfetmek, oryantiring maceralarına atılmak gibi ilgi çekici etkinlikler önermiştir. Açık havada matematik eğitimi kapsamında değerlendirilebilecek çalışmalar yapılmıştır (örneğin, Cahyono ve Ludwig, 2018; Haas vd. , 2021; Watson vd., 2011). Watson ve arkadaşları (2011) tarafından önerilen ve bir klinometre kullanarak bir ağacın yüksekliğini ölçmeyi ve istatistiksel analiz yapmayı içeren etkinlik, açık havada matematik eğitime bir örnek olarak düşünülebilir. Cahyono ve Ludwig (2018) dijital teknolojiyi kullanarak sınıf dışında uygulanabilecek bir başka etkinlik önermiştir. Öğrencilerden bir mobil uygulama ve harita kullanarak şehrin dört bir yanına dağılmış matematik parkuru görevlerini çözmeleri istenmiştir. Örneğin, görevlerden birinde öğrencilerden tarihi bir binanın taban alanını tahmin etmeleri istenmiş, bu da öğrencilerin geometrik şekli tanımlamalarını gerektirmiştir.

Yapısı gereği soyut olan küme kavramı matematikte birçok konunun temelini oluşturur. Soyut kavramların öğrenciler tarafından anlaşılması oldukça güçtür. Bu yüzden küme kavramı, öğrenciler için gerçek hayat durumlarıyla karşılaştığı bir süreçle anlamlı hale gelebilir (İnce, 2019). Dolayısıyla bu araştırmada okul dışı öğrenme ortamlarında küme kavramının ve ilgili temel kavramlar ele alınmıştır.

Okul dışı öğrenme ortamlarına yönelik alan yazın incelendiğinde, yapılan çalışmaların fen bilgisi eğitiminde yoğunlaştığı görülmektedir (Armağan, 2015; Aydın, 2019; Bakioğlu, 2017; Katircioğlu, 2019; Küçük ve Yıldırım, 2022). Matematik alanında okul dışı öğrenme ortamlarına yönelik ulusal alanyazında oldukça az sayıda çalışmaya rastlanmaktadır (Avan, Gülgün, Yılmaz ve Doğanay, 2019; Bahadır ve Hırdıç, 2018; Duatepe Paksu, Kazak, Çontay, 2022; Aydoğdu, Aydoğdu ve Aktaş, 2022).



Kuş (2024) çalışmasında, mevcut okul dışı matematik eğitimi programlarını analiz etmek ve eğitim yaklaşımlarını belirlemek için La Belle'in (1982) matrisinin kullanılması önermiştir. Çalışma, okul dışı matematik eğitiminin daha geniş bir perspektifte kavramsallaştırılmasına katkıda bulunarak, gelecekteki araştırmalara yol göstermeyi amaçlamaktadır. Literatürde yer alan çalışma sonuçlarına bakıldığında, kümeler konusunun yapısı ve konunun öğretme ortamı (müze) bağlamında yapılmış olan bu araştırmanın alan yazına önemli katkı sağlayacağı düşünülmektedir.

## Yöntem

Okul dışı öğrenme ortamında kümeler konusuna yönelik tasarlanan bir etkinliğin bu konunun öğrenimi üzerindeki etkisinin incelenmesi amacıyla yürütülen bu çalışmada, nicel araştırma yöntemlerinden tek grulu ön test-son test yarı deneysel bir araştırma tercih edilmiştir. Bu araştırmanın çalışma grubunu bilim ve sanat merkezi byf grubu öğrencileri (5. sınıf öğrencisi 13 öğrenci) oluşturmaktadır. Matematik öğretim programında kümeler konusu ile ilgili kazanımların 6. Sınıf seviyesinde yer almasına rağmen bu araştırmanın 5. Sınıf öğrencileriyle yürütülmesinin nedeni, özel yetenekli öğrencilerin öğretim programı çerçevesinde belirtildiği üzere bir üst öğrenim seviyesinden kazanımlara yer verilmesinin uygun görülmesidir.

Araştırmanın veri toplama araçlarını, okul dışı öğrenme ortamında tasarlanan etkinlikte verilmesi planlanan kazanım doğrultusunda araştırmacılar tarafından hazırlanan *ön test ve son test*, ayrıca öğrencilerin planlanan müze evinde gezisi esnasında gözlemlediklerini not alabilecekleri "*Müze Evi İnceleme Formu*" oluşturmaktadır.

Öğrencinin adı soyadı:		Tarih:	
<h2>Müze İncelemesi</h2>			
Yakup Durmuş Müze Evi			
Müze de yer alan eserler kaç farklı türde sınıflandırılmıştır? Sınıflandırmadıysa kendiniz sınıflandırınız.		Bu tarihi eserleri sınıflandırırken kümeye oluştururken neye dikkat ettiniz?	
Sınıflandırdığınız kümelere isim veriniz ve sınıflara dahil olan tarihi eserlerin sayısını (bu kümelerin eleman sayılarını) bulunuz.		Birden fazla sınıfa dahil olan bir eleman (tarihi eseri) var mıdır?	

Resim1. Müze Evi İnceleme Formu



Araştırma sürecinde öncelikle çalışma grubuna hazırlanan ön test (Ek-1) uygulanmıştır. 15 dk süren test uygulamasının ardından, dersin devamının planlanan okul dışı öğrenme ortamında yapılacağı belirtilmiştir. Müze evi gezisi öncesi araştırmacı öğretmen tarafından öğrencilere bu gezinin neden yapıldığına, amacına, orada nasıl gözlemler yapmalarına ve nasıl davranmaları gerektiğine dair bilgilendirmeler yapılmıştır. Gezi esnasında müze evi inceleme formu öğrencilere dağıtılarak öğrenciler müze evini gezerken konu ile ilgili fark ettikleri noktaları forma kaydetmeleri sağlanmıştır.



**Resim2.** Müze Evi Gezisinden Görüntüler

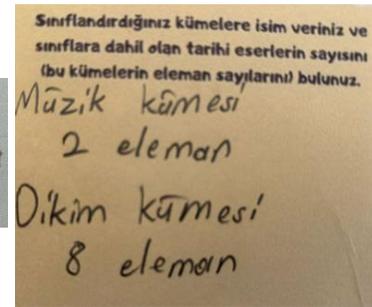
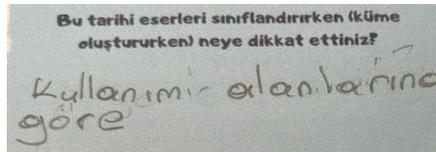
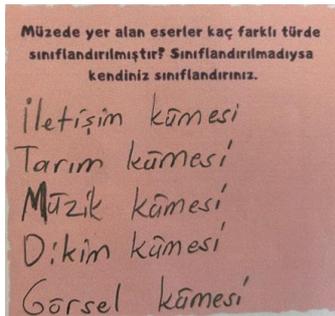
Müze evi kurucusu tarafından eserler ve özelliklerine dair bilgiler alan öğrenciler, aldıkları notları konu ile ilişkili olacak şekilde inceleme formuna not etmiştir (Resim 2). Gerçekleşen etkinliğin sonlandırılmasının ardından bir sonraki derste öğrencilerin müze evi inceleme formuna aldıkları notlar tartışılmış, planlanan kazanımla ilgili genel bir bilgilendirme yapılmıştır. Ardından 15 dk süren son test (Ek-2) uygulaması yapılarak araştırma sürecine son verilmiştir.

Ön test ve son testlerde ilgili kazanım doğrultusunda 10 soru yer almaktadır. Elde edilen verilerin analizinde öğrencilerin cevapları; doğru (1 puan) ve yanlış veya işaretlenmeyen soru (0 puan) olarak iki kategoride değerlendirilmiştir. Ardından okul dışı ortamda gerçekleşen eğitim faaliyetinin öğrencilerin öğrenmeleri üzerine etkisi olup olmadığını anlamak için yapılan veri analizinde istatistiksel analiz programı, veriler normal dağılım göstermediğinden ilişkili ölçümler için nonparametrik t-testi kullanılmıştır.



### Bulgular ve Tartışma

Araştırmanın çalışma grubunu oluşturan 13 öğrencinin 8'i erkek 5'i kız öğrencidir. Öğrencilerin sınıf seviyeleri 5. Sınıf olup bilim ve sanat merkezine kayıtlı öğrencilerdir. Her birinin örgün eğitime dahil oldukları eğitim kurumları farklı olup hiçbirinin okulunda, okul dışı öğrenme ortamında verilmesi planlanan ilgili kazanıma dair bir öğrenme gerçekleştirilmediği bilinmektedir. Öğrencilerin müze evi gezisi esnasında yaptıkları gözlem sonucu müze evi inceleme formuna aldıkları notlar incelendiğinde, müze evindeki eserleri ilgili kazanım doğrultusunda değerlendiren öğrencilerin çoğunlukta olduğu, burada yer alan eserlerin küme oluşturacak şekilde tasnif edebildikleri gözlemlenmiştir. Dolayısıyla küme kavramını anlamlandırdıkları, bir topluluğun küme olması için gereken şartın ne olduğu ile ilgili bilgi sahibi oldukları görülmüştür. Bonotto (2001)'nin araştırması, okulda öğrenilen matematik ile okul dışında kullanılan pratik ve genellikle daha etkili matematik arasındaki farklılığa dikkat çekmektedir. Çalışmada, süpermarket fişleri gibi materyaller kullanarak okul matematiği ile öğrencilerin okul dışı bilgilerinin kesişimini araştırılmıştır. Bu yaklaşım, ondalık sayılar için çarpma algoritması gibi yeni matematiksel kavramları dördüncü sınıf öğrencilerinin aşına olduğu bir bağlamda tanıtmayı ve geliştirmeyi amaçlamaktadır. Kültürel eserleri matematik derslerine entegre ederek bu farkı azaltmayı amaçlayan çalışma, öğrencileri okul dışı bilgilerini okul temelli matematik problemlerine uygulamaya teşvik etmektedir. Çalışma, gerçek dünya bağlamlarına dayanan etkinliklerin öğrencilerin matematiksel anlayışlarını ve konuya yönelik tutumlarını önemli ölçüde geliştirebileceğini göstermiştir. Lavicza, Haas ve Kreis (2020) çalışmalarında, MathCityMap, GeoGebra, 3B Hesap Makinesi ve diğer 3B modelleme yazılımları gibi eğitim teknolojilerinin kullanımı yoluyla matematik eğitimi geleneksel sınıf ortamlarının ötesine taşımak için yenilikçi yöntemleri araştırmışlardır. Bu araştırma, öğrencilerin günlük hayatlarındaki matematiksel kavramları tanıma ve bunlarla etkileşim kurma becerilerini geliştirmeyi ve böylece gerçek dünya bağlamlarında matematiksel ve teknik becerilerini geliştirmeyi amaçlamaktadır. Çalışma verileri, matematik eğitime yönelik bu tür yenilikçi yaklaşımların matematiğin daha erişilebilir ve öğrencilerin yaşamlarıyla ilgili hale getirebileceğini ve matematik teorisi ile gerçek dünya uygulamaları arasındaki algılanan boşluğu potansiyel olarak azaltabileceğini göstermektedir.



Resim 3.

Müze Evi İnceleme Formu Örnek Öğrenci Cevapları



Öğrencilerin okul dışı öğrenme ortamı olan Yakup Durmuş Müze Evi gezisi öncesi ve sonrası yapılan test ortalama puanlarının karşılaştırıldığı t-testi sonuçları aşağıdaki tabloda verilmiştir:

**Tablo 1.** Öğrencilerin Öntest- Sontest Puanları Arasında Yapılan t-Testi Sonuçları

	N	Ort.	S	t	p
Öntest	13	5.4615	1.391	-2.624	0.022
Sontest	13	6.6923	1.797		

Tablo 1 incelendiğinde, müze gezisi öncesi öntest ortalama puanları (5,46) ve sontest ortalama puanları (6,69) arasında istatistiksel olarak anlamlı bir fark olduğu görülmüştür ( $t_{12} = -2.624$ ,  $p < 0.05$ ). Bu bulgudan hareketle müze gezisi etkinliği olarak tasarlanan okul dışı öğrenme ortamının öğrencilerin öğrenmelerine olumlu katkı sağladığı söylenebilir. Müzeler gibi okul dışı öğrenme ortamları ve geleneksel sınıf dışındaki diğer eğitim ortamları, kümeler konusu da dahil olmak üzere matematik eğitimi üzerindeki potansiyel etkileri farklı çalışmalarda araştırılmıştır. Otte, Bølling, Elsborg, Nielsen & Bentsen (2019) çalışmalarında, Sınıf Dışında Eğitim (EOtC) ile öğrencilerin matematik becerileri arasındaki ilişkiyi araştırmışlardır. Çalışmaya Danimarka devlet okullarından öğrenciler katılmış ve bir okul yılı boyunca matematik becerileri ölçülmüştür. Sonuçlar, hem EOtC matematik müdahale sınıflarının hem de karşılaştırma gruplarının matematik becerilerinde iyileşme gösterirken, iki grup arasında anlamlı bir fark olmadığını göstermiştir. Aydoğdu, Aydoğdu ve Aktaş (2022), çalışmalarında, Türkiye'deki müzelerin sanal gerçeklik uygulamalarını kullanarak, geçmişte kullanılan matematiği incelemek ve bu bilgileri öğrencilere aktarmayı amaçlamıştır. Sanal müzeler, matematik ile geçmiş arasında bir bağ kurmak için bir araç olarak değerlendirilmiştir. Sanal müze gezileri sonrasında, öğrencilerin çoğunun matematikle ilgili yeni bilgiler edindiği ve etkinliklerden hoşlandıkları belirlenmiştir. Tüm bu çalışma sonuçları irdelendiğinde, bu çalışma kapsamında elde edilen bulgular ile paralellik gösterdiği görülmektedir.

### Sonuç ve Öneriler

Okul dışı öğrenme ortamı olarak belirlenen müze evinin kümeler konusunun öğretime etkisini incelemek amacıyla yürütülen bu araştırmada; etkinlik öncesi uygulanan ön test ve etkinlik sonrası uygulanan son test puanları arasında istatistiksel olarak son test lehine anlamlı fark olduğu görülmüştür. Müze evi gezisi, öğrencilerin kümeler konusunu daha iyi anlamalarını ve soyut matematik kavramlarını gerçek dünya bağlamlarında görebilmelerini sağlamıştır. Bu durum, öğrencilerin matematiksel düşünme ve problem çözme becerilerini geliştirmelerine yardımcı olmuştur.

Ulusal ve uluslararası literatür incelendiğinde okul dışı öğrenme ortamlarında matematik öğretimi kapsamında yürütülen araştırmaların sınırlı sayıda olması, literatürdeki bu boşluğun yapılacak olan okul dışı öğrenme faaliyetleriyle desteklenmesi gerektiğini düşündürmektedir. Bu sebeple, eğitimcilerin, öğrencilere farklı öğrenme deneyimleri sunmak için okul dışı öğrenme ortamlarını daha sık kullanmaları önerilmektedir. Bununla birlikte, matematik eğitiminin sadece sınıf içindeki teorik bilgiyle sınırlı kalmaması, tarih, sanat, bilim ve teknoloji gibi diğer disiplinlerle bağlantılı olarak



öğretilmesi önerilmektedir. Bu tür bir yaklaşım, öğrencilerin öğrendikleri bilgilerin çeşitli alanlarda nasıl uygulanabileceğini görmelerini sağlayacaktır. Eğitimcilerin, okul dışı öğrenme ortamlarını etkili bir şekilde kullanabilmeleri için gerekli kaynaklara ve eğitimlere kolay erişimleri olmalıdır. Okul dışı öğrenme etkinliklerinin daha geniş öğrenci gruplarına ulaşması için okullar, müzeler ve diğer eğitim kurumları arasında işbirlikleri teşvik edilmelidir. Bu, tüm öğrencilerin bu tür öğrenme fırsatlarından faydalanabilmesini sağlar.

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Ek-1: Ön Test Soruları

Ad:

Soyad:

Tarih:

1- Aşağıdaki cümlelerden hangisi bir küme belirtmez?

- A) Tribündeki formalı taraftarlar
- B) Okulumuzdaki sarı saçlı öğrenciler
- C) Denizdeki bazı gemiler
- D) Çiçekçideki kırmızı güller

2- Aşağıdaki ifadelerden hangisi bir küme belirtmez?

- A) Sınıfımızdaki gözlüklü erkekler
- B) Kalemliğimdeki sarı renkli kalemler
- C) Kitaplığımdeki matematik kitapları
- D) Telefonumdaki güzel resimler

3-  $A = \{0,1,2,3,4\}$  olduğuna göre aşağıdaki ifadelerden hangisi yanlıştır?

- A)  $0 \in A$  ve  $5 \in A$
- B)  $s(A) = 5$  tir.
- C)  $12 \notin A$
- D)  $3 \in A$

4- Boş kümenin sembolü aşağıdakilerden hangisidir?

- A)  $\{\emptyset\}$
- B)  $\{0\}$
- C)  $\emptyset$
- D)  $[\emptyset]$

5-  $M = \{\text{Rakamlar}\}$

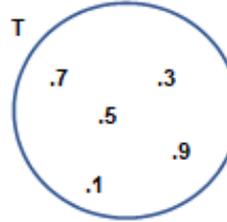
$B = \{\text{Çift Rakamlar}\}$

$T = \{20\text{'den küçük asal sayılar}\}$

$N = \{18\text{'den küçük tek sayılar}\}$

Yukarıda verilen kümelerden hangisinin eleman sayısı diğerlerinden daha fazladır?

6- T



Aşağıda T kümesi ile ilgili verilen bilgilerden hangisi yanlıştır?

- A) T kümesinin eleman sayısı 5'tir.
- B)  $T = \{5,1,3,7,9\}$  liste yöntemiyle gösterilir.
- C)  $T = \{\text{Tek Rakamlar}\}$  kümesiyle gösterilebilir.
- D)  $s(T) = 9$  olarak eleman sayısı verilmiştir.

7- "ANTARTİKA" kelimesinin harflerinden oluşan küme aşağıdakilerden hangisidir?

- A)  $\{A,N,T,A,R,T,İ,K,A\}$
- B)  $\{A,N,T,R,İ,K\}$
- C)  $\{\text{ANTARTİKA}\}$
- D)  $\{A,N,T,R,K,İ,A\}$



8- Aşağıda verilen kümelerden hangisi boş küme belirtir?

- A) Haftanın T ile başlayan günleri
- B) Yılın M ile başlayan ayları
- C) 3'ten büyük tek rakamlar
- D) İki basamaklı asal sayılar

9-  $M = \{\text{Mevsimler}\}$  ortak özellik yöntemiyle verilen kümenin liste yöntemiyle gösterilmiş hali aşağıdakilerden hangisidir?

- A)  $M = \{\text{Mevsimler}\}$
- B)  $M = \{\text{İlkbahar, Yaz, Sonbahar, Kış}\}$
- C)  $M = \{\text{İlkbahar, Yaz, Sonbahar, Kış}\}$
- D)



10- "MATEMATİK" kelimesinin harflerinden oluşan kümenin eleman sayısı kaçtır?

11-  $S = \{\text{Mart, Nisan Mayıs}\}$  liste yöntemiyle verilen kümenin ortak özellik yöntemiyle gösterilmiş hali hangisidir?

- A)  $S = \{\text{Bir yılın ayları}\}$
- B)  $S = \{\text{Mart, Nisan Mayıs}\}$
- C)  $S = \{\text{İlkbahar ayları}\}$
- D) S

İlkbahar ayları

12- I. Uçan kaplumbağalar

II. Yüzen balıklar

III. Yılın 15'inci ayı

IV. 3 ve 4 arasındaki doğal sayılar

Yukarıda verilen kümelerden hangileri boş küme belirtir?

13-  $D = \{\text{Yaz ayları}\}$

$E = \{\text{Asal rakamlar}\}$

D ve E kümeleri ortak özellik yöntemiyle verilen iki küme olduğuna göre  $s(D) + s(E) = ?$



Ek-2: Son Test Soruları

Ad:

Soyad:

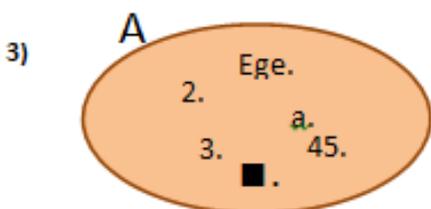
Tarih:

1) Aşağıdakilerden hangisi küme belirtmez?

- A) J harfi ile başlayan iller kümesi.
- B) Sınıfın yakışıklı erkekler kümesi.
- C) 10'dan küçük rakamlar kümesi.
- D) Sesli harfler kümesi.

2) Aşağıdaki ifadelerden hangisi yanlıştır?

- A) Hiç elemanı olmayan kümeye boş küme denir.
- B) Eleman sayıları eşit olan kümelere denk küme denir.
- C) Bir eleman bir kümede bir sefer yazılır.
- D) Kümeler 2 farklı şekilde gösterilir.



Yukarıda verilen kümeye göre aşağıdakilerden hangisi yanlıştır?

- A)  $4 \in A$
- B)  $Ege \in A$
- C)  $s(A) = 6$
- D)  $45 \in A$

4) Aşağıdaki kümelerden hangisinin eleman sayısı daha fazladır?

- A) Haftanın C ile başlayan günleri.
- B) Yılın ayları
- C) 10'dan küçük doğal sayılar.
- D) Çift asal sayılar.

5)

$K = \{ \text{matematik} \}$

Yukarıda verilen K kümesinin eleman sayısı kaçtır?

6)

$M = \{0, 2, 4, 6, 8\}$

kümesinin ortak özellik yöntemiyle gösterimi aşağıdakilerden hangisidir?

- A) Çift asal sayılar.
- B) Rakamlar.
- C) 9'dan küçük doğal sayılar.
- D) Çift rakamlar.



7)

$$A = \{1, 2, 3, 4\}$$

$$B = \{a, b, c, d\}$$

Yukarıda verilen kümeler için aşağıdakilerden hangisi yanlıştır?

- A)  $s(A) = s(B)$
- B) A kümesi ile B kümesi denk kümelerdir.
- C) A kümesi ile B kümesi eşit kümelerdir.
- D)  $a, b \in B$

8) Aşağıdakilerden hangisi boş küme belirtir?

- A) Çift asal sayılar.
- B)  $\{\text{boş}\}$
- C)  $\{\emptyset\}$
- D) Z ile başlayan aylar.

9) Aşağıdakilerden hangisi "KARAASLAN" kelimesinin harflerinden oluşan kümeyi belirtir?

- A)  $\{K, A, R, A, A, S, L, A, N\}$
- B)  $\{K, A, R, S, L, A, N\}$
- C)  $\{K, A, R, S, L, N\}$
- D)  $\{K, R, S, L, N\}$

10) Aşağıdaki ifadelerden hangisi yanlıştır?

- A) Liste yöntemi kümelerin gösteriminden biridir.
- B) Kümelerde aynı elemanlar bir sefer yazılır.
- C) Liste yönteminde elemanların arasına noktalı virgül konulur.
- D) Venn şemasıyla gösterimde elemanların yanına nokta konulur.

11)

**ATATÜRK**

Atatürk kelimesinin harflerinden oluşan kümenin eleman sayısı kaçtır?

12)

$$K = \{360 \text{ sayısının asal çarpanları}\}$$

Yukarıda verilen küme için aşağıdakilerden hangisi yanlıştır?

- A)  $2 \in K$
- B)  $3 \in K$
- C)  $5 \in K$
- D)  $s(K) = 5$



## **Hazards reported on food of plant origin in the Rapid Alert System for Food and Feed (RASFF) from 1997 to 2021 and their occurrence, prevention and reduction**

**Ph.D. Eng. Marcin PIGŁOWSKI**

**Maritime University, Poland**

### **Abstract**

Between 1997 and 2021, notifications relating to food of plant origin accounted for 44.6% of all notifications in the Rapid Alert System for Food and Feed (RASFF) operating in the European Union (EU). Using cluster analysis, notifications of this type of food during the period indicated were examined taking into account the following variables: hazard, product category and country of origin in relation to the year of notification. Mycotoxins, pesticide residues and pathogenic micro-organisms were mainly reported. Meanwhile, the most frequently notified product categories were nuts and seeds, fruit and vegetables, and herbs and spices. These products originated from Asian, African and South American countries. Aspects related to the occurrence, prevention and reduction of the risks mentioned were also presented. Attention was drawn as well to: the need to carry out controls at EU border points, monitor and update risk limits and improve the rapid exchange of information and response to detected risks.



## An Educational Chance Beyond Remote Area Socioeconomic Challenges: Ethnography analysis on Indonesian Youth Perspectives

### Relationship between Self-Adjustment and Degree

University of Muhammadiyah Maumere, [velmimayaputri@gmail.com](mailto:velmimayaputri@gmail.com), Indonesia

Muhamad Epi RUSDIN

University of Muhammadiyah Maumere, [cepi.rusdin@gmail.com](mailto:cepi.rusdin@gmail.com), Indonesia

WAHYUNINGSIH

University of Muhammadiyah Maumere, [wahyuningsih.ikipmu@gmail.com](mailto:wahyuningsih.ikipmu@gmail.com), Indonesia

### Abstract

This study aims at analysing a strong link between students' socioeconomic background and educational opportunity. In this concern, the investigation focuses on how Indonesian university students define the role of socioeconomic challenges towards their educational attainment. This study is significant to serve in-depth account of how university students in remote areas navigate socioeconomic difficulties. Therefore, this study addresses a twofold objective: to shed a light on what need to consider regarding remote area socioeconomic challenges and how socioeconomic challenges shifting to an educational chance for youth generation. Ethnographic approach is employed due to the importance of understanding students' way of thinking towards educational chance beyond socioeconomic challenges. Participants are the socio-economically disadvantaged students in university level. In attempt to discover a comprehensive perception, FGD and interview will be carried. Data collection and analysis process are still on going. Results and discussion will be shared in the presentation session.

**Keywords:** Educational chance, remote area, socioeconomic challenges

### INTRODUCTION

Indonesia has an invaluable opportunity referred to as the 'demographic dividend' by economists, and this opportunity should not be overlooked. To capitalize such dividends, Indonesia needs to invest in the quality of the younger generation. This investment includes health, welfare and other aspects that will determine the ability of these young people to reach their potential (Kristanti & Sebtalesy, 2019). For the welfare of the youth, basic education is the minimum aspect that should be obtained. Not only



that, higher education also needs to be further pursued by young people to gain discipline-specific competencies and other general skills to support their future career (Chan, 2016). As United Nations Sustainable Development Goal 'Quality Education' data states that by 2030 everyone should have equal access to affordable and high-quality education, including at the university level, all member countries are required to put some effort in such a point. Therefore, Indonesia has sought to increase higher education access over the last decade. The enhancement of access to higher education resulted in gross enrolment rates growing from 17.23% in 2005 to 36.31% in 2018 (Bank, 2019). With data showing poor students continue to under-enroll at the country's public universities. The data presented by the Indonesian Ministry of Education and Culture in 2010, only 2.5% of higher education students were from the lowest 20% of households, whereas 64.7% came from the wealthiest 20% of Indonesia's households (KEMDIKBUD, 2013).

The socioeconomically advantaged parents will be able to support children's educational activities, not only for tuition fees but also for extracurricular activities, books, clothing, and transportation (Novajri, Maksum, Indrawan, & Irfan, 2021). On the contrary, the socioeconomically disadvantaged parents will let their children stop studying. In fact, student dropouts in higher education hinders economic growth and productivity, which have an impact not only on university students, but also on universities itself and society (Wild & Heuling, 2020). Educational aspects still become the priority areas of concern for Indonesian youth. According to UNFPA (2014), Indonesian youth confront significant problems in continuing education for those in rural and remote areas. Access to infrastructure and education, restricted household economic resources, and poor education in some regions are among the challenges. A study revealed socioeconomic factors influencing regional education disparities in Indonesia (Azzizah, 2015).

The poverty rate was the most influential factor, followed by the use of local language in everyday interaction. Socioeconomic and education are intertwined issues especially in remote areas of Indonesia. It is crucial to dig out an in-depth description concerning university students' experience in navigating socioeconomic challenges. Additionally, it is significant to discover data on how socioeconomic challenges shift to an educational chance for the youth generation in remote areas. Indeed, a study on socioeconomic status has been a sexy issue among scholars due to its impact on education. However, there is still limited investigation on interventions that address remote youth's voice.

## METHODOLOGY

This study employs ethnography exploration as a detailed description of the culture sharing group or individual. Culture's hidden features, including values, beliefs, assumptions, and attitudes, can significantly impact individuals' thinking, behaviour, and communication (Creswell J. , 2012). This study employed an ethnographic research approach to explore university students' perspectives towards socioeconomic challenges in continuing their study in remote area. Ethnographic design is important for understanding the perspectives of individuals. The participants of this study are the socio-economically disadvantaged students in university of Muhammadiyah Maumere. In collecting the data, this study displays several steps; (1) Conducting focus group discussion to yield a



comprehensive description of university student's perspectives related to their experience of sociocultural challenges. (2) Interviewing several university students to gain the unseen perspectives in FGD session.

## FINDINGS AND DISCUSSION

### The Challenge of Society's Perception about Education

Living in remote area shapes the society's way of thinking left far behind. Remote area societies argue that education is important for basic and general knowledge. Remote society claimed that their children do not need to continue the study to the university level; rather, they need to start earning money through fishing, to support the family living (Poedjiastutie, Mayaputri, & Arifani, 2021). Based on the data from FGD, it was found that parents' perspective concerning higher education negatively impacts to their opportunity in continuing their study. It is said that:

According to my parents, Senior High School is enough for me to apply a job. But I want to be a teacher. My parents did not support me. Then, I am selling goods by online to earn money. So, I can study in this university (CSC)

My father supports me to study in university. However, my mother said that as a girl, I do not have to continue my study because later when I am married, I just stay at home for cooking and cleaning the house (AVM)

Due to the patriarchy, education become cultural taboo for women. It is supported by a study that revealed *Butonese* women in Sikka regency is forbidden to be smarter than men. It is forbidden for *Butonese* women to argue men's decision. This case become a challenge for *Butonese* women to continue their study in higher educational level (Mayaputri & Nasa, 2024). Another study revealed that social factors are crucial for both higher education access and equity. The social factors influencing students before they are accepted by the university, after students have been accepted, and during their learning process at the university (Wanti, Wesselink, Biemans, & Brok, 2022).

### The Challenge of Economic Background

Maumere is the administrative capital of the Sikka Regency and the second largest town on Flores Island, East Nusa Tenggara, Indonesia. Maumere is one of Indonesian remote areas used by the Indonesian government to implement the "*Sarjana mengajar di daerah terdepan, terluar dan tertinggal*" (*SM3T*) program which aims to enhance educational quality in remote areas. Educational quality in remote area concerns many problems, including economic aspect (Smith, 2015). It is in line with another study was found that economical aspect negatively impacted on students' future. According to the parents, education is expensive, they must work extremely hard to earn money and support their children from primary to high school. Some parents indicated that their children do not need to pursue their studies to the university level; instead, they should begin earning money from fishing to support their family's living expenses (Poedjiastutie, Mayaputri, & Arifani, 2021). Due to



this reason, there are several universities in Maumere established to support youth people in furthering their education. One of the universities in Maumere is University of Muhammadiyah. The presence of Muhammadiyah university aims to provide higher education access to the youth from all economic backgrounds. The majority of students' parents are traditional fishers, and small percentages are farmers. Some parents work as civil servants. Due to this situation, University of Muhammadiyah Maumere offers affordable tuition fees. In addition, students also allowed to pay in several steps (monthly). However, students are currently still experiencing problems in finishing the tuition payment. They said:

My parents cannot pay for this semester. They still waiting for the harvesting (NCM)

The tuition is still expensive for me. My parents only pay for my sister in Senior High School. I am working for this payment by myself (TA)

I have to propose dispensation every semester because my father work as a fisherman (NF)

The statements above supported by the data from the university. Only 25% of students who finish the payment every semester. The rest 75% of students employ dispensation. Due to this situation, the university enables students to pay the tuition by using natural resources. In addition, university also delivers several scholarships including the scholarship from Indonesian Government (*KIP*) and the scholarship for the orphans. Hence, there are other voice from the students:

I'm grateful to be poor because I can get *KIP* scholarship (AD)

My economic problem become a chance for me to have a bachelor degree (NA)

Finally, I am university student without being rich (AT)

From the interview data above, students perceive their economic challenges in different way. They claim that poverty become one of the supporting aspects in furthering their education. It can be concluded that the economic challenge turns into a chance for educational attainment. In addition, University of Muhammadiyah Maumere obviously facilitates an educational opportunity for students from all economic backgrounds.

## CONCLUSION

Education in remote area is still undergo several obstacles. One of the critical aspects is socioeconomic. Within socioeconomic challenges experiencing by students, there is an educational chance. It is revealed from University of Muhammadiyah Maumere students have a different perspective in experiencing the socioeconomic challenges. The result of the current study could be used to inform Indonesian Government what need to be done to improve higher education access and opportunity in remote area. Similar study on this issue could be useful to conduct in order to address the needs of education in Indonesian remote areas. In this case, all aspects that support the youth people in remote areas to furthering their educational level.



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## **Knowledge of cardiopulmonary resuscitation among medical personel**

**Ph.D. Przemysław ŻURATYŃSKI**

**Nicolaus Copernicus University in Toruń, Ludwik Rydygier Collegium Medicum in Bydgoszcz;  
Oncology Center prof. F. Łukaszczyk, Poland**

**Ph.D. Daniel ŚLEZAK**

**Medical University of Gdańsk, Poland**

### **Abstract**

**Introduction.** Cardiopulmonary resuscitation is a medical action that saves lives. A distinction is made between basic life-saving procedures and advanced life-saving procedures. Sudden cardiac arrest is a sudden medical condition in which mechanical function of the heart stops, causing cessation of blood circulation. The proper course of action after the diagnosis of sudden cardiac arrest is to begin resuscitation as soon as possible. Medical personnel must be familiar with the algorithms for both basic and advanced resuscitation procedures. Cardiac arrest can occur in any person.

**Aim of the study.** The aim of this study was to assess the knowledge of basic CPR procedures among nurses working in hospital wards.

**Methodology.** The survey was conducted from 01.02.2023 - 01.03.2023 among 165 representatives of nursing staff (88 representatives of nursing staff working at SPWZOZ MSWiA in Bydgoszcz and 77 representatives of nursing staff working at the Oncology Center in Bydgoszcz). A proprietary questionnaire based on the European Resuscitation Council's Resuscitation Guidelines 2021 was used for the study. The study was approved by the Bioethics Committee.

**Conclusions.** The level of knowledge of nursing staff on current resuscitation guidelines is at a good level. Sources of knowledge on resuscitation procedures, are mainly knowledge gained during training or completion of a specialized course "Cardiopulmonary Resuscitation". Employers in healthcare entities organize training courses to improve the skills and thus the level of knowledge of nurses. The frequency of training varies. They are usually held once or twice a year. The impact on increasing the level of knowledge of nurses / nurses in the field of resuscitation is the completion of a specialized course. Influence on increasing the level of knowledge of nurses / nurses on resuscitation is organized in the workplace courses, or trainings. The impact on increasing the level of nurses' / nurses' knowledge of resuscitation is influenced by whether or not a person has participated in resuscitation activities. Those who participated more often in life-saving procedures scored more points on average.



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Statistical analysis showed no relationship between gender, age, length of service, education and place of residence and the respondents' level of knowledge of resuscitation procedures according to the ERC guidelines.



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## Differentiated Learning and Social Science Lesson Content for Grade IV Students in Elementary Schools

**VERA YULI ERVIANA**

**Universitas Ahmad Dahlan, vera.erviana@pgsd.uad.ac.id, Indonesia**

**VIONA AYUNING TYAS**

**Universitas Ahmad Dahlan, viona1900005238@webmail.uad.ac.id, Indonesia**

### Abstract

The changing curriculum framework necessitates that components of the education system adapt to the prior curriculum. This curriculum modification promotes a shift in curriculum and educational paradigms. The planned paradigm shift is to improve teachers' freedom as control holders in the learning process, to remove overly restrictive standard constraints, and to require a uniform learning process in all Indonesian educational institutions. Learning in the context of the conventional educational process entails not only the instructor providing the subject matter but also the act of regulating the environment to ensure that pupils learn.

Differentiated learning enables teachers to view learning from a variety of perspectives, including paying attention to learning profiles that require teachers to pay attention and act to meet the needs of students, recognizing learning readiness in responding to learning based on differences, and identifying student learning interests. Differentiation learning has been used at SD Muhammadiyah Notoprajan, one example being in the content of science lessons through four stages of learning, namely differentiation of content, processes, products, and learning environments, despite the limitations and constraints faced by both teachers and students.

The goal of this research is to describe the use of differentiation learning in science lesson content at SD Muhammadiyah Notoprajan, as well as the supporting and inhibiting factors. The peculiarity of this study is that it investigates and describes how, through the use of differentiation learning, it is possible to determine what supportive and inhibiting factors and difficulties students and teachers face.

**Keywords:** Differentiation Learning, Science Learning, Elementary School

### INTRODUCTION

Independent curriculum updates emphasize flexible and flexible curricula that allow student character growth and skills without losing focus on the material. To achieve the goals set by improving education and learning in Indonesia, careful management is required (Basri & Rahmi, 2023). Learning with the concept of independent learning has some advantages. It's simpler and more intensive, focusing on essential content and developing participants' skills gradually. Students are also more autonomous, which means they can conduct learning activities gradually by regulating their



development, which makes them more relevant and interactive (Alwi et al., 2023; Babayiğit et al., 2020 ; Babayiğit, 2020). Teachers usually use analog learning methodologies, models, and styles to teach to meet the students' learning demands. Therefore, students with low abilities will be lagging behind, and students with high skills will feel unsupported. (Puspitasari et al., 2020). Learning is usually defined as the process of providing an environment in which students can learn according to the way teachers deliver lessons within the framework of the educational process. According to Rachmah (2012) in (Erviana et al., 2022), some of the learning needs of elementary school students are active movements, enjoying playing, learning in groups, and enjoying showing what they know. It suggests that, throughout the learning process, students must be at the center of learning activities. It will help shape the personality, civilization, and quality of life of students.

Independent curriculum programs can be used as an alternative to addressing academic failures and giving freedom to "independent learning" in the learning process. This applies in particular to teachers and the head of school in the preparation and implementation of the learning process as well as the development of programs in schools taking into account the needs and potential of students. (Alimuddin, 2023). This independent curriculum has become a new choice for educators and students. Many teachers and students are still confused about how to do it. One of them is to combine natural science (IPA) and social science (IPS) into one subject. (Marwa et al., 2023). In addition, teachers should understand that assessments, learning modules, and other components of the independent curriculum are very different from the 2013 curricula.

Differential learning is a way to realize independent learning. Differentiating learning means different kinds of services are provided based on each student's characteristics. (Bayumi et al., 2021). Children are very different in terms of skills, life experiences, talents, hobbies, languages, cultures, and learning preferences when they start school. It may be difficult for educators to create a productive learning environment based on their learning style or students' needs. Education (opvoeding), according to the education philosophy of Ki Hajar Dewantara, nurtures the entire innate talent of the child to maximize his sense of safety and pleasure, especially as an individual and contributor to society (Herwina, 2021). By using differential learning, teachers strive to meet the specific needs of each student in the classroom. The purpose of differential teaching is to design a path of development for students by meeting individually designed learning needs, which is an essential condition for introducing effective teaching processes in heterogeneous classrooms. (Dorfberger & Eyal, 2023). Factors that fix this problem include interests, learning styles, and a desire for better academic results.

Differentiation is a teaching philosophy that is rooted in a deep respect for students, recognition of their differences, and the urge to help all students thrive (Smale-Jacobse et al., 2019). According to Tomlinson (2003) in (Smale-Jacobse et al., 2019), the idea implies that teachers proactively modify the curriculum, teaching methods, resources, learning activities, or student product requirements to better meet students' needs. Furthermore, the implementation of differential learning requires students to be analyzed from the outset so that they can make the right learning plans. In addition, students should conduct self-reflection after learning activities to determine how well the implementation of differential learning (Aprima & Sari, 2022). IPAS learning plays an important role in realizing the learning profile of Pancasila as an ideal profile for students in Indonesia. Basically, IPAS learning helps students to cultivate a sense of curiosity for real-world phenomena. (Setyawati, 2023). Students



may be interested in learning about how the universe functions and affects human life on Earth. Students who show this interest will better understand how the universe works and influences human life on Earth. Therefore, teachers should use innovative, effective, and refreshing models, approaches, methods, or strategies to make IPAS learning enjoyable and comfortable for students.

The results of research conducted by the researchers in March 2023 at the Muhammadiyah Notoprajan Elementary School show that the independent curriculum begins in the academic year 2022/2023 and becomes the finalist of the Olympiad for the Implementation of the Merdeka Curriculum (IKM) in 2022. However, there are differences among some students, such as those that do not match their characteristics, even though differentiated learning has been applied to the contents of the IPAS. Because learning styles are always mixed, students are happier to learn when they use the learning style that the teacher likes and less enthusiastic when they are using a learning style that the teacher doesn't like.

Previous research has shown that applying differential learning can improve students' IPA learning outcomes and improve student performance through indicators of collaboration, responsibility, and communication skills (Puspitasari et al., 2020). In their study, teachers have had difficulty differentiating in IPAS classes that use P5 differentiation learning because they are still confused about the correct form of differentiated learning. (Arhinza, 2023). The focus of this research is to explore and explain how differential learning is applied to the teaching load of IV grade students at SD Muhammadiyah Notoprajan. The school has A accreditation, is set as a driving school, and has implemented an independent curriculum since the 2022-2023 academic year. To implement differential learning in SD Muhammadiyah Notoprajan, the role of the head of school and the skills of teachers are very important. Differentiated learning depends on meeting the student's learning needs and the teacher's response to those needs. (Setyawati, 2023). Based on the description, research was carried out on differential learning methods at SD Muhammadiyah Notoprajan.

## METHOD

This research uses qualitative research methodology and uses descriptive approaches as its methodology. (Anggito & Setiawan, 2018). The study will explain how differential learning is applied to the learning load of IPAS students in grade IV at SD Muhammadiyah Notoprajan. In this study, data is collected through interviews with teachers and students in grade IV about learning the difference in the IPAS learning load, observations, and documentation. Researchers must use triangulation techniques to examine the data so that the research can be held accountable, namely: 1) triangulating the source with the research source of teachers and students; 2) triangularizing the technique, i.e., interviews, observations, and documentation; and 3) triangulating the research steps, that is, data collection, data reduction, data submission, and conclusion drawings. A grid table of opinion-based data collection techniques (Farid et al., 2022) and (Purba et al., 2021) can be found here.



### Research Instruments String Table

Variable	Sub Variable	Indicator
Application of Differential Learning to Lesson Loads IPAS Students of Class IV in Elementary Schools	Understanding the Concept of Differential Learning	1) Teacher's understanding of differential learning
	Differential Learning Preparation	1) Design a teaching module or RPP
	Differential Learning Implementation	1) Adjusting content, processes, and products based on student profile or learning style 2) Mapping students according to their learning style 3) Tools and tools supporting the application of differential learning 4) Differentiation of learning processes based on IPAS lesson load
	Factors Supporting and Inhibiting the Application of Differential Learning	1) Factors supporting the application of differential learning 2) Factors inhibiting the implementation of differential learning

## RESULTS AND DISCUSSION

Effective differentiated learning begins with pre-assessment data that tells the teacher about the student's preparedness or current status. This data helps the teacher adjust the learning delivery to meet the different learning desires and needs of the students. It is used as an effective and beneficial learning start for the whole student (Beriso & Girma, 2022). The study examined differential learning in the lesson load of the IPAS students in the fourth grade at SD Muhammadiyah Notoprajan. The objective of this study is to find out: 1) how differential learning is applied to students of the fourth grade in SD Muhammadiyah Notoprajan; 2) what supporting and inhibitory factors support and hinder the application of differentiation learning to the teaching load of IPAS.

### 1. Application of Differential Learning to IPAS Lesson Loads

Differential learning consists of four components: differentiation of content, process, product, and learning environment. Teachers have the opportunity and ability to modify or differentiate the four elements according to student readiness, interests, and learning profiles (Strogilos et al., 2021). This learning philosophy is based on the idea that when teachers consider differences in



interests, levels of readiness, and student learning profiles, students will learn well (Anggoro et al., 2024). Therefore, differential learning is a student-centered approach in which teachers can freely change parts of the learning environment to give greater learning opportunities to all students (Compen et al., 2024). Based on the results of observations, documentation, and interviews, here is an explanation of the four aspects of differential learning in SD Muhammadiyah Notoprajan.

**a. Content differentiation**

Content differentiation refers to what a teacher will be taught or what a student will learn in a classroom (Purba et al., 2021). Teachers can provide students with customized content, give them options for different learning processes, use different assessment tools, or change the learning environment to meet students' needs (Yuen et al., 2023). According to (Irdhina et al., 2021), teachers can use the following strategies for content differentiation: 1) using different learning materials; 2) using learning contracts; 3) providing short workshops to students; 4) presenting materials through various learning methods; and 5) providing various support systems, such as facilities, practices, routines, or programs. In connection with previous research (Miqwati et al., 2023), this study found that students can use a variety of learning resources, such as textbooks, videos, PowerPoint, images, and environments, with material about changing the properties of objects (shape, color, and taste) in IPA subjects.

According to the observations that have been made, teachers can change the content of the IPAS lesson by preparing and presenting materials about "Style Around Us" while using the learning resource-only IPAS package books (Arhinza, 2023). This can mean that the teacher can present a variety of visual resources that are connected to the given information and then let the student see the image media presented. Depending on the learning material, teachers may use different approaches to teaching. Research shows that students see and observe how teachers explain examples. However, with limited facilities and equipment in the classroom, teachers can use the objects around them as safeguards and focus on the material contained in the IPAS book.

**b. Process differentiation**

Differentiation is an activity carried out by students. In this process, teachers assign different learning tasks to students of all levels, which enables students to find solutions that match their abilities (Huang & Chen, 2018). Students can use these activities as learning experiences in the classroom (Purba et al., 2021). According to (Faiz et al., 2022), process differences include: 1) multilevel activities in which students must understand each other by paying attention to support, challenges, and obstacles; 2) asking questions that encourage students to study the materials they learn; 3) facilitating the time students need to complete tasks; 4) setting up personal schedules, such as making notes on student task lists; and 5) providing support to students who are experiencing difficulties.

Adapted to the methods used in research (Miqwati et al., 2023) by providing the Student Working Sheet (LKPD) with rigorous training tailored to each group's learning preferences. The results of observations at the Muhammadiyah SD Notoprajan showed that the learning process of IPAS differs in class IV. Students participated in groups to carry out experiments with friction-style material using objects that were around them, such as pencils, pieces of paper, HW hats, writing books, IPAS books, scratches, and removals. According to research



(Arhinza, 2023), the way teachers distinguish processes is by giving students the opportunity to ask as many questions as possible about the information given. Furthermore, students speak and work together to convey the results of group discussions orally, in writing, or in the form of pictures or posters. However, the grouping of students did not match their learning style, so they were grouped mixed. Teachers can alternately support and encourage groups during the differentiation phase of this process to the maximum extent possible. Because they need special support, children with autism are not grouped with other students.

**c. Product differentiation**

Generating a new product is the purpose of the learning process, which aims to demonstrate the knowledge, ability, and understanding of the student after completing the module or even after discussing the topic. (Purba et al., 2021). Presentations, speeches, essays, written test results, recordings, diagrams, etc. are some examples of the form of this product. (Faiz et al., 2022). The results of the research showed that the products made at the IPAS in SD Muhammadiyah Notoprajan differ from the products that are made with the style of the freeze, i.e., in front of the classroom. Each group discusses the results of their research. As shown by research conducted by (Arhinza, 2023), students can convey the results achieved during the learning process in the form of pictures, posters, written, or oral, depending on what they prefer.

**d. Learning Environment**

The social and physical organization of the classroom are the subject of discussion. When designing a learning environment, students' learning preferences, interests, and profiles should also be taken into account so that students have high learning motivation. (Putranti & Maksum, 2024). According to Irdhina et al. (2021), there are several approaches that educators can use to change the learning environment. First, they can set the number of seats available to students on the class announcement board based on their interests, readiness, and learning style. They can allow students to sit in small or large groups, alone, or in pairs. Second, grouping can be done based on the students' common learning interests and their level of readiness.

The results of the research showed that students in grade 4 SD Muhammadiyah Notoprajan learn in a different way. They're sitting in pairs in the classroom neighborhood. Students are grouped into large groups randomly selected during a particular learning or content. Nowadays, the class condition used as a teaching method is quite effective. However, classroom facilities and equipment are still insufficient to support learning activities.

**2. Supporting and Hindering Factors in the Application of Differential Learning to the Lesson Load of IPAS**

There are supporting variables and barriers inside and outside the learning process of differentiation. While individuals are internal sources, facilities, student situations, environments, and other factors are external sources. According to Yani et al. (2023), head of school leadership that inspires teachers and helps them in various ways, such as seminars, internal training, and other activities, helps implement differential learning. To implement it, there are some challenges. This includes the teacher's ability to organize different teaching activities, their ability to perform diagnostic tests, and their knowledge of the student's profile components that will appear during teaching (Lim & Park, 2022).



The results of interviews with class teachers showed that collaboration with fellow fourth-grade teachers and the support and motivation of the head of school through in-house training and workshops were supportive factors. However, some obstacles include students with special needs, the transition from a thematic curriculum to an independent one, transitions from child to teenager, limited availability of facilities and supplies, and the amount of time needed to prepare differential learning. It is based on opinions about the problems faced by teachers when applying differential learning (Muliani, 2022). These include lack of technological skills; ignorance of self-learning; lack of learning support materials; teachers having difficulty distinguishing teaching; and the application of differential learning poses challenges for teachers. (Muliani, 2022). Other challenges include a lack of reference to different learning models, a lack of means and supplies, a shortage of resources for varied learning, and disparities in teacher understanding and ability caused by the heterogeneity of students.

Based on the description, it can be concluded that some of the obstacles to the implementation of differential learning are as follows: lack of supporting learning facilities, lack of reference materials for differentiated learning models, absence of sufficient means and facilities for differentiated learning, and lack of knowledge and skills of teachers due to the heterogeneity of students.

## CONCLUSION

Based on the findings and discussions on the application of differential learning to the learning load of IPAS students of the fourth grade at SD Muhammadiyah Notoprajan Yogyakarta, this study results in the conclusion that (1) the application of differentiated learning to the IPAS learning load is carried out by teachers in four stages, namely: a) content differentiation; b) process differentiations; c) product differentials; and d) changes in the learning environment. The transition from a 2013 curriculum to an independent curriculum takes a long time to prepare for learning, including compiling teaching modules, learning media, project modules, and conducting diagnostic tests to identify student learning styles. Besides, because the IPAS lessons have more material, the language is too raw, and students have to understand new words because of the transition from children to adolescents. 2) Factors that support the application of differential learning include collaboration with fellow teachers in class IV and the role of the head of school in encouraging teachers by providing various types of support through internal training and seminars. However, the limitations of means, the teacher's ability to adapt students to their learning styles, and the amount of time needed to prepare students for differential learning are some of the obstacles that hinder the application of differentiation learning.

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## The Place and Importance of Body Language in Offices

**Prof. Dr. Adnan CELİK**

**Selcuk University, FEAS, Department of Business, Konya/Turkiye.**

**E-Mail: [adnancelik@selcuk.edu.tr](mailto:adnancelik@selcuk.edu.tr)**

**ORCID ID: 0000-0002-8538-9937**

### Abstract

Business offices are important units for institutions. Offices; They are places where both management and business functions are performed. Office management interacts closely with human resources management. The body language that accompanies them is as important as the words used in interpersonal communication. While organizational activities are exhibited, a lot of body language activities are witnessed. This situation is not only valid for intra-organizational relations. Body language is also needed in communications with the environment outside the organization. "Body Language Activities in Offices" formed the starting point of this study. The study consists of three separate parts. In the literature review section, office management, body language and body language effectiveness in offices are explained. In the second chapter, the methodology is introduced. In the findings and discussion section, the place and importance of body language in offices is emphasized. The study was concluded with conclusions and recommendations. This study consists of three separate parts. Office management, body language and nonverbal communication topics are explained in the literature review title. Within the scope of methodology, problem of the research, purpose and importance and research method and scope are introduced. Under the findings and discussion heading, the subheadings offices and body language interaction and ensuring body language activity in offices are included. The study ended with conclusion and recommendations.

**Keywords:** Office Management, Body Language, Nonverbal Communication, Body Language Activity in Offices

### INTRODUCTION

There is an office management reality for every organization. General management activities are partly similar to public or private sector enterprises. Here, many functions are undertaken at individual and managerial levels. In this sense; "planning, organizing, directing, coordination and control" is recommended. When the issue is addressed specifically in business organizations, divergences come to the fore. Because there is a distinction between "business functions" here. In other words, functions such as "management, procurement, production, marketing, financing, accounting, human resources



management, public relations and research & development” may be encountered. However, whether it is a public or private enterprise; Office management is needed for every organization. Direct office management can be created for some of these, and indirect office management can be created for others.

In the globalizing world, intense competition is on the agenda, especially among business organizations. It has become very important to adapt to developments within and outside the organization in a timely and appropriate manner. In terms of our subject, the "orienting" function stands out here. Because communication is among its sub-functions (Simsek & Celik, 2023: 57). In cooperation with the management function and human resources management, it is aimed to reach qualified personnel. Selection, orientation and proper employment of human resources are very important. Tasks in offices should be carried out with this understanding. Because organizational success does not happen by chance. Every employee needs to cooperate. For this, communication effectiveness is needed. This activity includes various communication roles. So offices are also a kind of communication scene. Different communication roles are witnessed at each level. When these are adequately displayed, organizational success is positively affected. In communication, body language is as important as the words used. Body language is not only a matter of organizational members. It may also be necessary for communications with stakeholders inside and outside the organization. It has a very wide area of influence. It is also known that it has the feature of a kind of evaluation criterion in human relations.

This study titled “The Place and Importance of Body Language in Offices” is organized under three separate headings. First, the literature review is explained. Here, office management, body language and nonverbal communication topics are shared. The second heading is for methodology. Here, the problem of the research, purpose and importance, and research method and scope are introduced. The last heading is for findings and discussion. Here, first the issue of "offices and body language interaction" is clarified. Then, “ensuring body language activity in offices” was emphasized. At the end of the study, useful suggestions were developed for the relevant circles.

## 1. LITERATURE REVIEW

Here, first office management and then body language and nonverbal communication are explained.

### 1.1. Office Management

Business offices are important to organizational life. Organizations make significant use of offices. Management is a universal phenomenon. Management functions are also valid in office environments. In other words, achieving goals is also important in office management. Here too, business and management skills are required. Collaboration with others is needed. Effective management of offices means that the organization gets closer to success. Naturally, this does not happen by itself. There are issues that every stakeholder, from top management to the lowest level, needs to pay attention to. Leadership, communication and motivation are the primary issues.

There are some basic principles that should be taken into consideration when creating organizational structures. In this sense, the following can be listed (Ulgen, 1993: 54-61; Eren, 2019: 207-215; Simsek



& Celik, 2023: 42-48); “The principle of division of labor and specialization; principle of hierarchical structure (stairs); the principle of unity of purpose; principle of unity of command; principle of limited span of control; principle of delegation of authority; the principle of parity of authority and responsibility; principle of rule by exception (separation); principle of balance; principle of efficiency and effectiveness; principle of simplicity; principle of flexibility; disclosure principle”.

Various principles and principles can be put forward specifically for office management. The following are needed for effective office management (Naab, 2019; MITSDE, 2019); “Top management leadership, strategic planning, vision determination, mission determination, determination of goals, division of labor, specialization, effective communication, efficiency, unity of command, personal abilities, coordination, responsibility, delegation of authority, continuity, balance, order, flexibility, simplicity and stability”.

Behind every successful business organization, there is a successful office management. In this context, the contributions of competent managers and employees should not be forgotten. Office management must be considered among the most important positions in an organization. Office staff should be selected in accordance with the organizational culture. Office management; They have to undertake planning organizational functions, management roles, organizing procedures, managing workflows and many other responsibilities. In this context, various communications are entered into, both within and outside the department. These must be maintained in a very appropriate manner. The goal is to focus on business or task goals. Therefore, it is the establishment of a successful working order (WGU, 2020).

## 1.2. Body Language and Nonverbal Communication

Body language and nonverbal communication are very important elements for communication. These are elements that complement each other. Therefore, in some cases, they are used interchangeably. Social anthropologist Edward T. Hall suggests that 60% of all our communication consists of non-verbal communication. Daniel Goleman states in his book “Emotional Intelligence” that we express 90% of our emotions non-verbally. In this sense, the gestures people use can occur in different ways. For example, two drivers trying to pass each other on a wide road is a type of “threatening” situation. Opening our arms as a welcome sign is a kind of “friendly” attitude. An office clerk's description of procedures and methods can be seen as an “informative” behavior (Axtell, 1998: 2; Simsek et al, 2008: 314).

There are various studies showing that interpersonal communication is mostly based on non-verbal communication. Among these, the points highlighted by Psychologist Albert Mehrabian are important. It has been suggested that 7% of a message is given verbally. In other words, the ratio containing only words is stated this way. It was emphasized that the remaining 93% consists of non-verbal communication. Here, body language (facial expressions and other) is given 55% share. Tone of voice was evaluated as having a 38% impact (Mehrabian & Ferris 1967: 248-252). These rates may vary from culture to culture and organization to organization. Words undoubtedly have a place in every type of communication, even if only a little. But there are also body movements, gestures and countless facial expressions. Verbal and non-verbal messages are intertwined as an integral part of



human communication. Sometimes they can get complicated. The conflict between words and non-verbal communication indicators may always arise (Miller, 2006: 7).

Research suggests that nonverbal expressions provide an important resource in the form of a person's impressions, attitudes, beliefs, and reciprocal behavioral expressions. Being a good receiver of messages requires more than just listening to words. Most of the time, communication is achieved through non-verbal means such as emotions and values. Therefore, in order to be a good message receiver, a person must pay attention to non-verbal cues and act accordingly. We are often unaware of other people's nonverbal behavior. We are also unaware of the nonverbal messages we send to other people. We express excitement, intimacy, assertiveness, confidence or dissatisfaction through facial expressions, voice intonation, gestures and use of space. Through smiling, winking, frowning, or evil looks, we send messages that reinforce or modify our behavior. In addition, there are many other less commonly used nonverbal communication methods. For example, touch is often disregarded as a means of conveying messages (Miller, 2006: 7).

## 2. METHODOLOGY

Under the title of methodology, first problem of the research, purpose and importance; then research method and scope was introduced.

### 2.1. Problem of the Research, Purpose and Importance

A significant part of organizational activities is carried out in offices. Office management requires certain processes. In terms of our subject, the "directing" function comes to the fore. Direction is carried out through orders and instructions and constitutes the essence of management. Orders and instructions can be given by people who have the right to determine the behavior of others. These people receive this right either from some power sources they have or from the positions and authorities they occupy within the existing legal order. As sub-functions, it includes "power-authority-order-influence, leadership, communication and motivation" (Simsek & Celik, 2023: 57). One of these, "communication", is one of the foundations of this study. Because the tasks in the offices are carried out by the employees. Additionally, there are many stakeholders in the internal and external environment. One of the elements of communication is body language. In this study, the issues of "body language activity in offices" and "the place and importance of body language in offices" were clarified.

### 2.2. Research Method and Scope

Offices are important for organizational management. Communication is also an important function for employees in offices. Communication undoubtedly includes many related concepts. In this study, effectiveness was aimed in the sub-dimensions of office management and body language. This can also reveal the place and importance of body language in offices. The concepts of body language and nonverbal communication are complementary elements to each other. For this reason, they are also used interchangeably. In this study, there were parts that were evaluated together. In explaining the concepts and elements in question, literature review was preferred. Literature on office management, body language and nonverbal communication was evaluated. Based on theoretical studies, an attempt



has been made to clarify the subject of “The Place and Importance of Body Language in Offices”. Among the sub-goals, it is aimed to explain the dimensions of "Offices and Body Language Interaction" and “Ensuring Body Language Activity in Offices”.

### 3. FINDINGS AND DISCUSSION

Under the title findings and discussion, the subject of offices and body language interaction is first clarified. Then, the issue of ensuring body language activities in offices was evaluated.

#### 3.1. Offices and Body Language Interaction

Communication is necessary for everyone. A person who has the ability to communicate with beings uses different tools for this purpose. One of the tools he uses to communicate is body language. Offices established to serve people accommodate a large number of people. Communication, which is important for individuals, is also vital for offices. Communication is also an important office management principle. The written and verbal dimensions of communication must be compatible with the objectives. There are many issues to consider in stakeholder relations inside and outside the office. Here, both words and context are important. It needs to be spoken not only with conviction and authority, but also with skill to maintain the respect of both employees and customers. First impression is important. A wrong word at the beginning or an inappropriate tone can start the communication problematically. The perspective on the person or the organization may turn negative. Perceptions need to be managed well. Proper communication skills can turn conflicts into positive ones. At the same time, it can also be a kind of motivational element (Naab, 2019; Caliskan & Yesil, 2005: 199).

Many professional employees use a variety of nonverbal behaviors to convey their messages. Because it is beneficial for business negotiations and agreements. It can also provide useful information for any problems and/or solution suggestions within or outside the organization. Because simultaneous behaviors can be exhibited with facial expressions, facial expressions and gestures. It may be result-oriented. Time management may also become easier. Benefits can be gained from product diversification to marketing and promotional activities. For example, advertisers or organizations are aware that non-verbal communication is an integral part of advertising in commercials broadcast on television. This situation can be evaluated in communication activities. The subject also has a management function dimension. For example, managers tell their employees; They may have exhibited nonverbal behavior that could have positive or negative consequences. Maybe their body language and verbal messages may also conflict. In this case, subordinates may become confused. This confusion can closely affect employees' attitudes and abilities. Without words, managers express their feelings, expectations, and things they would not say with other words. Regardless, communication effectiveness management should be ensured in offices (Miller, 2006: 8-10; Simsek et al, 2008: 323; Kayasandik, 2022: 36).

An office worker may exhibit different behaviors and actions during office time. He is expected to do most of these consciously. He may do some of them unknowingly. However, these behaviors and actions can bind the parties if they are within the scope of body language. Because actions taken knowingly or unknowingly can primarily affect the other person. Sometimes even an entire group or organization can be affected. The important thing is to do useful work. To increase cooperation and



motivation. Otherwise, it should be known that various problems may arise (Caliskan & Yesil, 2005: 201).

### 3.2. Ensuring Body Language Activity in Offices

Body language and non-verbal communication is a subject that needs to be studied a lot. Its importance in individual, family and social life is indisputable. The same importance applies to business organizations. Nonverbal communication and body language activities are encountered in every workplace environment. In other words, communication activities are carried out through body language or non-verbal communication. Therefore, the components of body language must be determined well. The basic components within nonverbal communication are: “appearance, movement, facial behavior, vocal behavior, space, touch, time” (Kudesia & Elfenbein, 2013: 805-807). From a different disciplinary perspective, the following are also important; “gestures, postures, proxemics, haptics & oculusics” (Hismanoglu & Hismanoglu, 2008: 168-176). When the main components of body language are adequately analyzed, useful results for office management can be obtained.

If it is known that business offices are created by stakeholders of different numbers and qualities, problems can be overcome more easily. First of all, it should be believed that where there are people, there may be different communication preferences. Often, nonverbal messages can be more effective. This may be incompatible with other behaviors. “What if words and nonverbal cues clash?” situation may be encountered. For example, a colleague may tell you that he or she is not angry. However, when leaving your room, you may pull the door very hard. A manager who says that the report you have prepared looks very good may not even turn its pages. Here, verbal and nonverbal cues do not match. It is necessary to strain the mind to decipher the messages. After all, attitude speaks louder than words! That is, most of the message is non-verbal. Successful communicators recognize the power of nonverbal messages. Hints can help us understand the interlocutor better. However, it may not be meaningful to attribute certain meanings to gestures in every event and time. The attitude shown, the action displayed and the behavior performed; It may depend largely on the environment, time and cultural background of the interlocutor (Guffey & Loewy, 2016: 12).

There may be various visitors from inside and outside the workplace. They may come for business or other reasons. The customer or someone outside the organization should be made to feel an expression of satisfaction. Shake hands with someone you just met in a polite and friendly manner. Look at the interlocutor's face and say the name. General remarks can be made at elevator entrances and exits, corridors and stairs. Offices or negotiation rooms should be chosen for serious business meetings. The seating arrangement should also put the other person at ease. Some conversations may be supported by gestures. But we should not exaggerate. You should wait for the other person to finish speaking. The feeling of "finish it now" should not be given with strange lip expressions. We can support our understanding of the other person with head and facial expressions. Appropriate head movements also indicate agreement on what is being discussed. When the word comes to us, the appropriate tone of voice should be used. Too high or too low tone of voice can negatively affect communication (Marwijk, 2007; Raudsepp, 2007; Schober, 2003: 56-70; Simsek et al, 2008: 322).



There are also things to avoid when providing body language activity in offices. In particular, the following types of actions may not be tolerated; “Looking at places blankly, remaining uninterested in talking, constantly pursing lips, looking over glasses, taking off and putting on glasses, rubbing hands, tying hands behind the head, exaggerated gestures, crossing arms over the chest, constantly putting hands in pockets, and keeping time with the feet, crossing the legs, running the fingers through the hair, wiping the eyes with the fingers, holding the chin with the fingers, touching the nose or face, rubbing the temples, scratching the ear and the nape of the neck, pulling the clothes, straightening the tie, imitative cough, finger in the mouth. walking around, biting nails, drawing strange marks on paper, assertions of dominance and exaggerating the distance of the comfort zone” (Schober, 2003: 56-70; Simsek et al, 2008: 316-322).

Body language activity is also very necessary in negotiation environments. Because negotiation requires speaking in public. Negotiators evaluate some common and/or opposing issues during the negotiation. Thoughts, opinions, attitudes and values are tested through interaction. Maybe it will be adapted or improved. Some issues may be more important or meaningful to a negotiator than others. This closely affects how the expressions heard will be understood and interpreted. Conversations can be lively and fluent. Persuasion skills may come to the fore. For this purpose, some written documents can also be shared. However, in a mutual negotiation, body language or non-verbal communication will always weigh heavily. In the live bargaining process, the negotiator may introduce quite different motivational factors. First of all, it is about himself as a person. Appearance, mannerisms, emotions, etiquette, vocal characteristics, gestures, movements, facial expressions, reactions and similar things are very important (Peleckis & Peleckiene, 2015: 413, 421).

## CONCLUSION AND RECOMMENDATIONS

In this study, it is aimed to clarify the issue of “The Place and Importance of Body Language in Offices”. Offices are versatile workplaces. Office administrations can occur at the levels of public organizations, the private sector and NGOs (non-governmental organizations). Because the relevant business or task unit has establishment purposes. There are duties expected from them. Various visions, missions, strategies, policies and objectives may have been defined for office management. After all, services need to be seen somehow. The personnel of the relevant business or task unit are responsible for this.

Office management includes many stakeholders. There are many officers at the strategic, coordinative and operational levels. Additionally, there are employees at lower levels. Apart from this, there are also external environmental elements. So in a way, a lot of communication activities are on the agenda. Here, effective communication is needed. Effective communication does not only include written elements. Not everything is done by the order of words either. There is a most important communication style. This is body language and non-verbal communication. When organizational personnel interact with the internal and external world, they are expected to be very effective in these. It is not easy to say that an ideal structure is this. It is difficult to talk about an unchanging and even indispensable model. What needs to be done is generally a journey of effective communication. In



particular, body language and nonverbal communication is the most appropriate display. For this purpose, there are various duties falling on the relevant environment. Some of these are listed below:

- Top managers and leaders should know local, national and international environmental dynamics well. Because body language may differ from country to country and culture to culture. A movement is positive in a country; In another country, it may be viewed negatively. Especially personnel of organizations doing business on a global scale should pay attention to this.
- Office management should first internalize the organizational communication process. Then they must learn about their bodily (body language) signals. It should be shared by everyone that the most important factor in communication activities is verbal communication elements. These acceptances should also be harmonized with the organizational culture.
- There may not be much of a problem with general communication elements. However, it is beneficial to internalize body language and nonverbal communication behaviors specific to organizational culture. The meanings of signs, movements, gestures and facial expressions should be known to all stakeholders. Various trainings can be organized for corporate communication purposes. Communication manuals or informative brochures can be prepared. These positively affect organizational communication. Collaboration and teamwork may become easier. There may be an opportunity to get rid of various obstacles to learning and sharing. As a result, organizational success may increase.

This study was created by evaluating the literature within the scope of “office management, body language, nonverbal communication, body language activity in offices”. In order to overcome this limitation; Survey research can be conducted in public, private sector and NGOs offices. Additionally, case study research can also produce useful results.

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## "Exploring the Correlation between Entrepreneurial Behavior and Education Level"

**Dr. Daniela QIQI**

“Eqrem Çabej” University, Faculty of Economy, Tourism Department, Gjirokastra, Albania.

[daniela\\_qiqi@yahoo.com](mailto:daniela_qiqi@yahoo.com) , +355692060943

**Dr. Eduina GUGA**

“Eqrem Çabej” University, Faculty of Economy, Accounting and Finance Department, Gjirokastra, Albania.

[eguga@uoj.edu.al](mailto:eguga@uoj.edu.al) , +355699661373

### Abstract

Entrepreneurship has been widely recognized as a key driver of economic growth and development in emerging markets, including Albania. However, despite the potential benefits of entrepreneurship, there is a significant gap in the literature when it comes to understanding the factors that influence entrepreneurial behavior, particularly in relation to education level.

To address this gap, this research paper examines the correlation between entrepreneurial behavior and education level in Albania. Drawing on a range of sources, including surveys of entrepreneurs and analysis of secondary data, the paper explores the ways in which education level affects the likelihood of individuals becoming entrepreneurs, the types of businesses they start, and their chances of success.

The paper finds that education level plays a significant role in shaping entrepreneurial behavior in Albania. Individuals from higher-income families are more likely to become entrepreneurs, particularly in sectors such as technology, finance, and professional services. These individuals are also more likely to start larger and more profitable businesses, and to have access to more resources and networks that can help them succeed.

However, the paper also finds that education level is not the only factor that influences entrepreneurial behavior in Albania. Other factors, such as experience, and access to financing, also play important roles in shaping the likelihood of individuals becoming entrepreneurs and their chances of success.

In light of these findings, the paper offers several policy recommendations aimed at promoting entrepreneurship among individuals from lower-education level individuals in Albania. These recommendations include increasing access to education and training programs that can help individuals develop the skills and knowledge needed to start and grow businesses, improving access to financing and other resources, and promoting entrepreneurship as a viable career path.



In conclusion, this research paper provides a comprehensive analysis of the correlation between entrepreneurial behavior and education level in Albania. By shedding light on the ways in which education level affects the likelihood of individuals becoming entrepreneurs and their chances of success, the paper offers important insights into the factors that shape the entrepreneurship landscape in Albania. The paper also provides practical recommendations for policymakers and other stakeholders to promote entrepreneurship among individuals from lower-income families, supporting economic growth, job creation, and social mobility in the country.

**Keywords:** Entrepreneurship, Education Level, Albania, Business Development, Economic Growth

## INTRODUCTION

### 1.1. Background

Entrepreneurship stands as a cornerstone of economic development, particularly within emerging economies like Albania. Its potential to drive innovation, job creation, and wealth generation has garnered significant attention from policymakers, scholars, and practitioners alike. However, despite its acknowledged importance, there remains a notable gap in understanding the nuanced interplay between entrepreneurial behavior and individual characteristics, notably education level.

### 1.2. Rationale

Understanding the factors that influence entrepreneurial behavior is imperative for crafting effective policies and strategies aimed at fostering entrepreneurship and spurring economic growth. While the literature offers insights into various determinants of entrepreneurship, the role of education level, particularly within the context of Albania, remains underexplored. Given the country's transition from a centrally planned to a market-oriented economy and its aspirations for sustained economic development, a deeper understanding of the relationship between education level and entrepreneurial behavior is warranted.

### 1.3. Research Gap

A review of existing literature reveals a paucity of studies examining the correlation between education level and entrepreneurial behavior in Albania specifically. While some research has explored the broader determinants of entrepreneurship within the country, few studies have focused explicitly on the role of education level and its implications for entrepreneurial activity and success. Thus, there exists a clear gap in the literature that this research seeks to address.

### 1.4. Objectives

This research aims to fill this gap by examining the correlation between education level and entrepreneurial behavior in Albania. Specifically, it seeks to:

- Investigate the extent to which education level influences the likelihood of individuals engaging in entrepreneurship.
- Explore the types of businesses individuals with different education levels are inclined to start.



- Assess the impact of education level on the success and sustainability of entrepreneurial ventures in Albania.

### 1.5. Scope and Methodology

To achieve these objectives, this research employs a mixed-methods approach, drawing on both primary and secondary data sources. Surveys of entrepreneurs will provide insights into their demographic characteristics, educational backgrounds, and entrepreneurial experiences, while secondary data analysis will complement these findings by offering a broader perspective on the entrepreneurship landscape in Albania.

### 1.6. Significance of the Study

This research holds significant implications for policymakers, practitioners, and scholars interested in promoting entrepreneurship and fostering economic development in Albania. By shedding light on the relationship between education level and entrepreneurial behavior, it offers valuable insights into the drivers of entrepreneurship within the country and provides a basis for the design of targeted interventions and policies aimed at nurturing entrepreneurial talent and fostering a conducive environment for business growth.

### 1.7. Structure of the Paper

The remainder of this paper is organized as follows: Section 2 provides a review of relevant literature on entrepreneurship and education level, setting the theoretical framework for the research. Section 3 outlines the methodology employed, detailing the data sources, sampling procedures, and analytical techniques used. Section 4 presents the findings of the study, followed by a discussion of the implications and policy recommendations in Section 5. Finally, Section 6 offers concluding remarks and avenues for future research.

## Literature Review

### 2.1. Theoretical Framework

Entrepreneurship is a multidimensional phenomenon influenced by various individual, environmental, and contextual factors (Shane & Venkataraman, 2000). At its core, entrepreneurship involves the identification and exploitation of opportunities for value creation (Venkataraman, 1997). One such factor that has received increasing attention in the literature is the role of education level in shaping entrepreneurial behavior.

### 2.2 Education Level and Entrepreneurship

#### 2.2.1 Influence of Education on Entrepreneurial Intentions

Several studies have highlighted a positive relationship between education level and entrepreneurial intentions (Liñán & Fayolle, 2015; Krueger, Reilly, & Carsrud, 2000). Higher levels of education are



often associated with greater exposure to entrepreneurial concepts, skills, and networks, leading to increased confidence and propensity to engage in entrepreneurial activities.

### **2.2.2 Education and Business Start-Up**

Research suggests that education level influences the types of businesses individuals are inclined to start (Folta, Delmar, & Wennberg, 2010). Higher levels of education are associated with ventures in knowledge-intensive sectors such as technology, finance, and professional services, where specialized skills and expertise are paramount.

### **2.2.3 Impact of Education on Business Performance**

Evidence suggests that education level also plays a significant role in determining the performance and success of entrepreneurial ventures (Hoskisson et al., 2013; Aslantas, 2024). Entrepreneurs with higher levels of education tend to establish larger, more profitable businesses and have better access to resources and networks that facilitate growth and sustainability.

## **2.3. The Case of Albania**

Despite the growing body of literature on entrepreneurship and education, research specific to Albania remains limited. However, studies conducted in other emerging economies offer valuable insights that can inform our understanding of the relationship between education level and entrepreneurial behavior in the Albanian context.

### **2.3.1 Entrepreneurship in Emerging Markets**

Studies on entrepreneurship in emerging markets emphasize the importance of contextual factors such as institutional environment, access to finance, and socio-cultural norms in shaping entrepreneurial behavior (Acs & Szerb, 2009; Welter & Smallbone, 2011). These factors interact with individual characteristics, including education level, to influence entrepreneurial outcomes.

### **2.3.2 Education and Economic Development in Albania**

Research on education and economic development in Albania underscores the role of education in fostering human capital accumulation, innovation, and productivity growth (World Bank, 2018). However, the extent to which education level translates into entrepreneurial activity and economic value creation remains underexplored.

## **3. Methodology**

This section describes the methodology employed to investigate the correlation between education level and entrepreneurial behavior in Albania. The methodology encompasses data sources, sampling procedures, and analytical techniques utilized in the study.



### 3.1 Data Sources

The study utilizes a mixed-methods approach, drawing on both primary and secondary data sources to capture a comprehensive understanding of the relationship between education level and entrepreneurial behavior in Albania.

#### 3.1.1 Primary Data

Primary data are collected through structured surveys administered to entrepreneurs across various sectors and regions in Albania. The survey instrument is designed to gather information on participants' demographic characteristics, educational backgrounds, entrepreneurial experiences, business profiles, and performance indicators.

#### 3.1.2 Secondary Data

Secondary data sources include existing databases, reports, and scholarly articles related to entrepreneurship, education, and economic development in Albania. These data provide context and supplementary information to complement the findings derived from primary data analysis.

### 3.2 Sampling Procedures

#### 3.2.1 Primary Data Sampling

The sampling frame for the primary data collection comprises entrepreneurs operating businesses in Albania. A stratified random sampling technique is employed to ensure representation across different sectors, regions, and educational backgrounds. The sample size is determined based on the desired level of statistical power and precision.

#### 3.2.2 Secondary Data Sampling

Secondary data sources are selected based on their relevance to the research objectives and availability. Databases such as the World Bank's Entrepreneurship Database and national statistical reports on education and business demographics are utilized to supplement the primary data analysis.

### 3.3 Analytical Techniques

#### 3.3.1 Descriptive Analysis

Descriptive statistics are employed to summarize the demographic characteristics, educational backgrounds, and entrepreneurial profiles of survey respondents. Key indicators such as mean, median, standard deviation, and frequency distributions are computed to provide an overview of the sample characteristics.

#### 3.3.2 Inferential Analysis

Inferential statistical techniques, including correlation analysis and regression modeling, are utilized to examine the relationship between education level and entrepreneurial behavior in Albania. Correlation analysis is employed to assess the strength and direction of the relationship between education level



and various entrepreneurial outcomes, while regression modeling allows for the identification of significant predictors of entrepreneurial success.

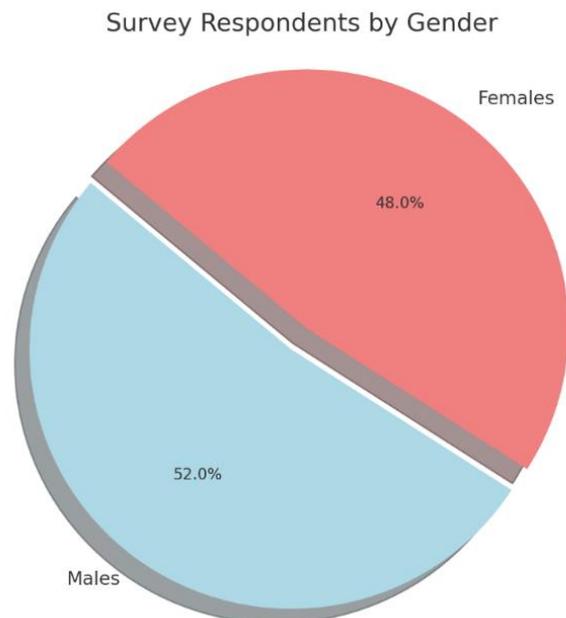
### 3.3.3 Qualitative Analysis

Qualitative data obtained from open-ended survey questions and supplementary sources are analyzed thematically to identify recurring patterns, themes, and narratives related to the influence of education level on entrepreneurial behavior in Albania. Qualitative analysis provides depth and context to complement quantitative findings.

## 4. Findings

### 4.1 Demographic Characteristics of Entrepreneurs

The survey collected demographic information from entrepreneurs across various regions in Albania. Figure 1 illustrates the distribution of survey respondents by gender, showing a relatively balanced representation between males and females. Figure 2 depicts the age distribution of entrepreneurs, with the majority falling within the 25-34 age group. Additionally, Figure 3 presents the regional distribution of entrepreneurs, indicating a higher concentration in Central Albania.

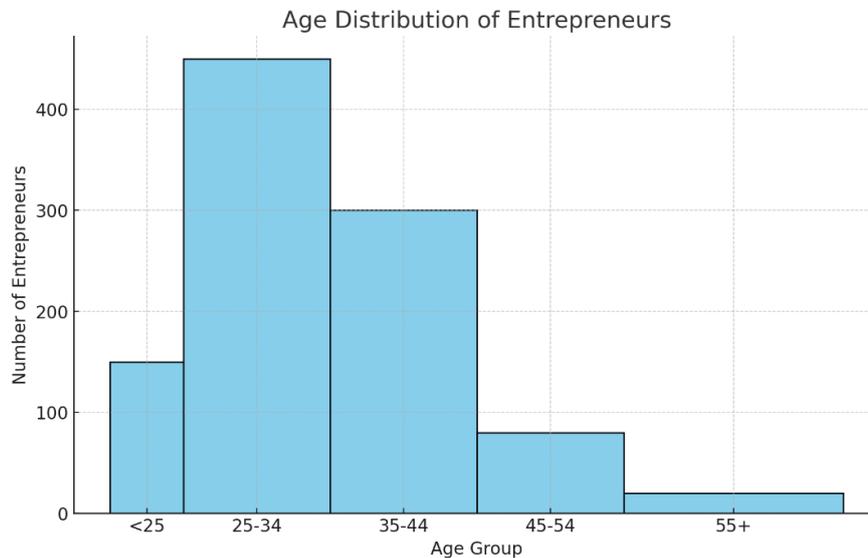


*Figure 1: Distribution of Survey Respondents by Gender*

The pie chart above illustrates the distribution of survey respondents by gender, showcasing a relatively balanced representation between males (52%) and females (48%). This balanced



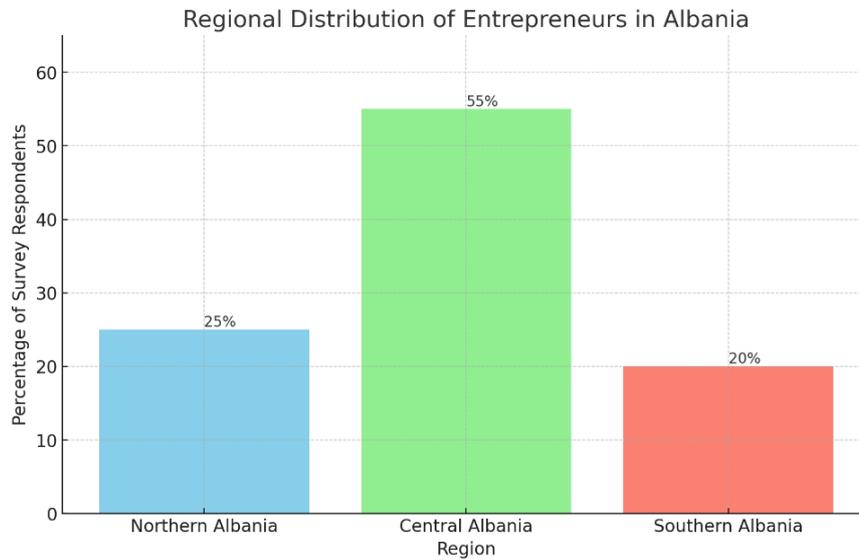
representation suggests that the findings from the survey are likely to reflect a diverse range of perspectives and experiences.



*Figure 2: Age Distribution of Entrepreneurs*

The histogram below illustrates the age distribution of entrepreneurs based on the survey data. It highlights that the majority of entrepreneurs fall within the 25-34 age group, representing 45% of the sample population. Other age groups show varying degrees of representation, with the 35-44 age group accounting for 30%, the under 25 age group representing 15%, the 45-54 age group comprising 8%, and entrepreneurs aged 55 and above constituting the smallest proportion, at 2%.

The concentration of entrepreneurs in the 25-34 age group suggests that individuals in this demographic are particularly active in entrepreneurship within the specified context, likely reflecting a broader trend of entrepreneurial activity among younger individuals



*Figure 3: Regional Distribution of Entrepreneurs*

The bar chart above illustrates the regional distribution of entrepreneurs in Albania based on the survey data. It visually highlights the disparities in entrepreneurial activity within the country, with bars representing the major regions: Northern Albania, Central Albania, and Southern Albania. Each bar is labeled with the respective region and its corresponding percentage of survey respondents.

Central Albania emerges as the region with the highest concentration of entrepreneurs, accounting for 55% of the survey respondents. Northern Albania and Southern Albania have relatively lower proportions, representing 25% and 20% of the respondents, respectively.

This visualization clearly indicates that Central Albania is the dominant region in terms of entrepreneurial presence, suggesting that it may offer more favorable conditions or opportunities for entrepreneurial ventures compared to the other regions.

#### **4.2 Educational Background of Entrepreneurs**

Analysis of educational backgrounds reveals diverse levels of attainment among entrepreneurs in Albania. Figure 4 displays the distribution of entrepreneurs by the highest level of education completed, with a significant proportion holding bachelor's degrees. Furthermore, Figure 5 provides insights into the field of study pursued by entrepreneurs, highlighting a predominant focus on business-related disciplines.

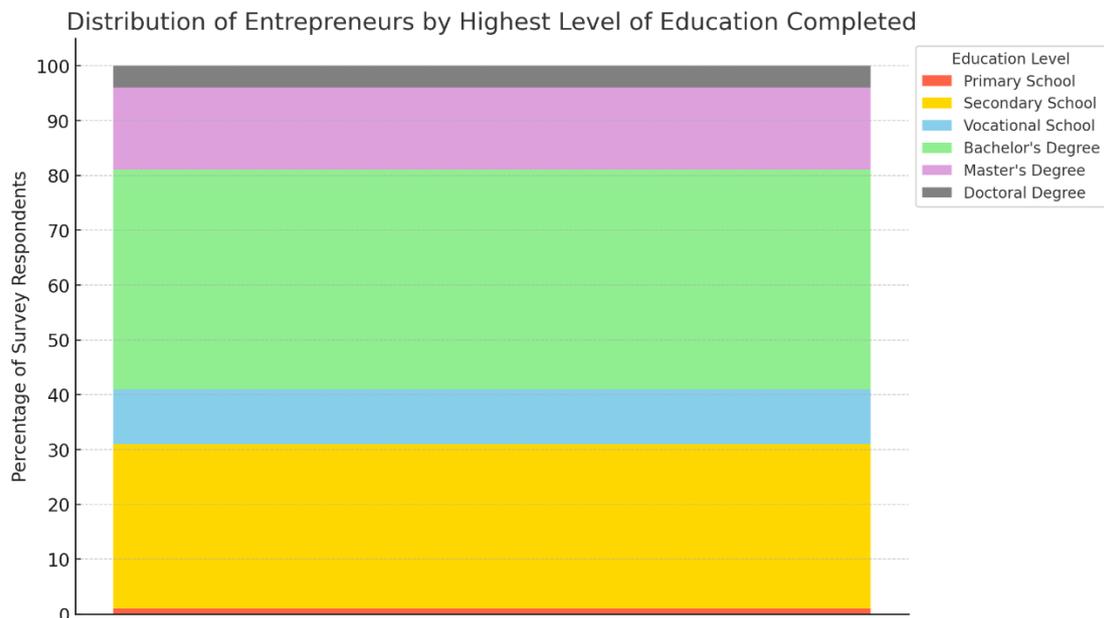


Figure 4: Distribution of Entrepreneurs by Highest Level of Education Completed

The stacked bar chart above illustrates the distribution of entrepreneurs by their highest level of education completed, based on survey data. Different segments of the bar represent various levels of education, including Primary School, Secondary School, Vocational School, Bachelor's Degree, Master's Degree, and Doctoral Degree.

The chart highlights that a significant proportion of entrepreneurs have completed a Bachelor's Degree, accounting for 40% of the survey respondents. This is followed by 30% with a Secondary School education, 15% with a Master's Degree, 10% with a Vocational School education, 4% with a Doctoral Degree, and 1% with a Primary School education.

This stacked chart provides a clear and concise representation of the educational background of entrepreneurs in the survey, underscoring the predominance of individuals with Bachelor's Degrees within the entrepreneurial community.

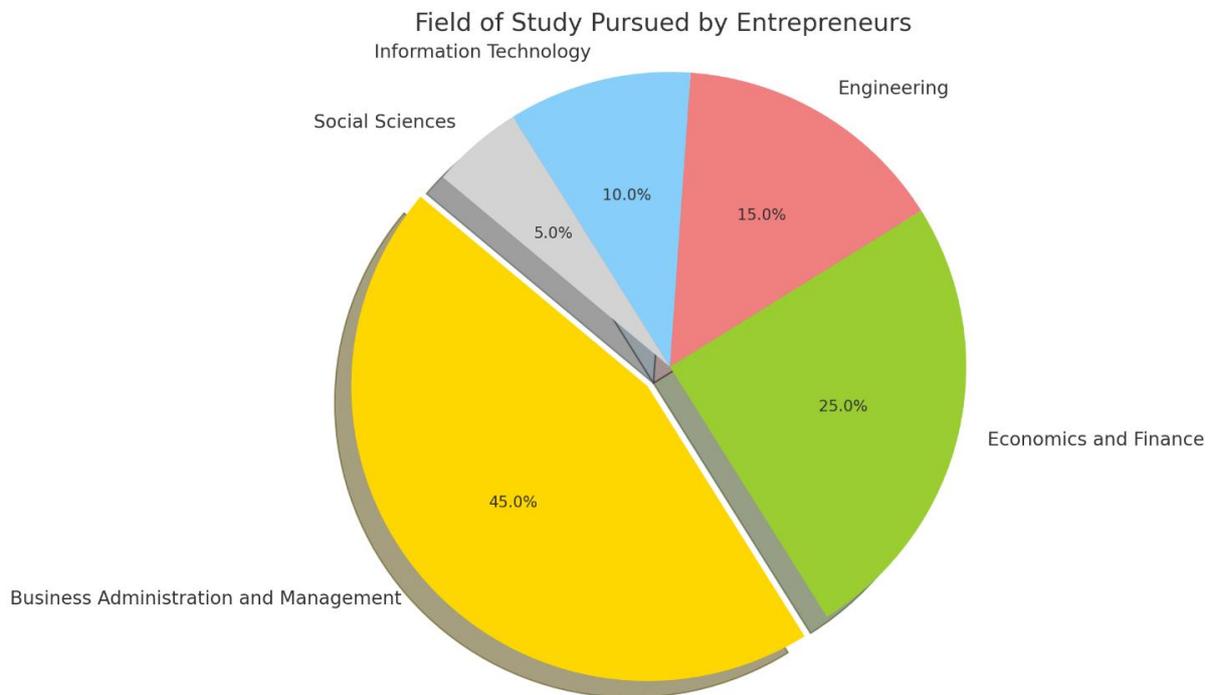


Figure 5: Field of Study Pursued by Entrepreneurs

The pie chart above illustrates the field of study pursued by entrepreneurs, based on the survey data. It highlights the significant focus on business-related disciplines among entrepreneurs in Albania. Specifically, Business Administration and Management is the most common field of study, representing 45% of entrepreneurs. Other business-related disciplines such as Economics and Finance account for an additional 25% of entrepreneurs.

Furthermore, the chart shows smaller proportions of entrepreneurs with backgrounds in Engineering (15%), Information Technology (10%), and Social Sciences (5%). These fields of study contribute to the entrepreneurial landscape but to a lesser extent compared to business-related disciplines.

### 4.3 Entrepreneurial Experience and Business Profiles

Findings regarding entrepreneurial experience and business profiles shed light on the landscape of entrepreneurship in Albania. Figure 6 illustrates the distribution of entrepreneurs by the duration of business operations, indicating a considerable number of established businesses. Moreover, Figure 7 presents the types of businesses operated by entrepreneurs, with a notable presence of sole proprietorships and limited liability companies (LLCs).

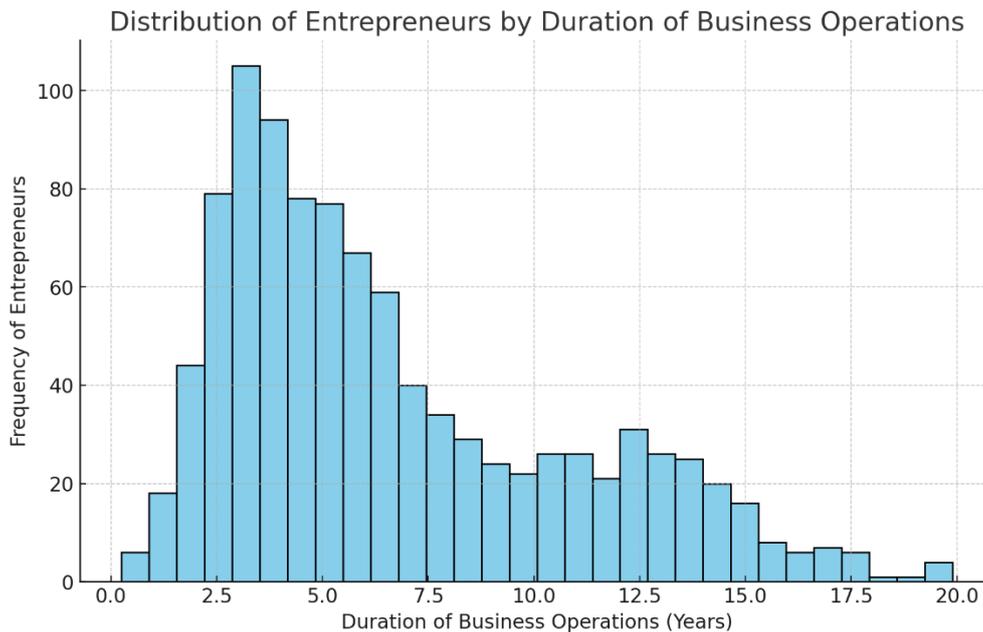


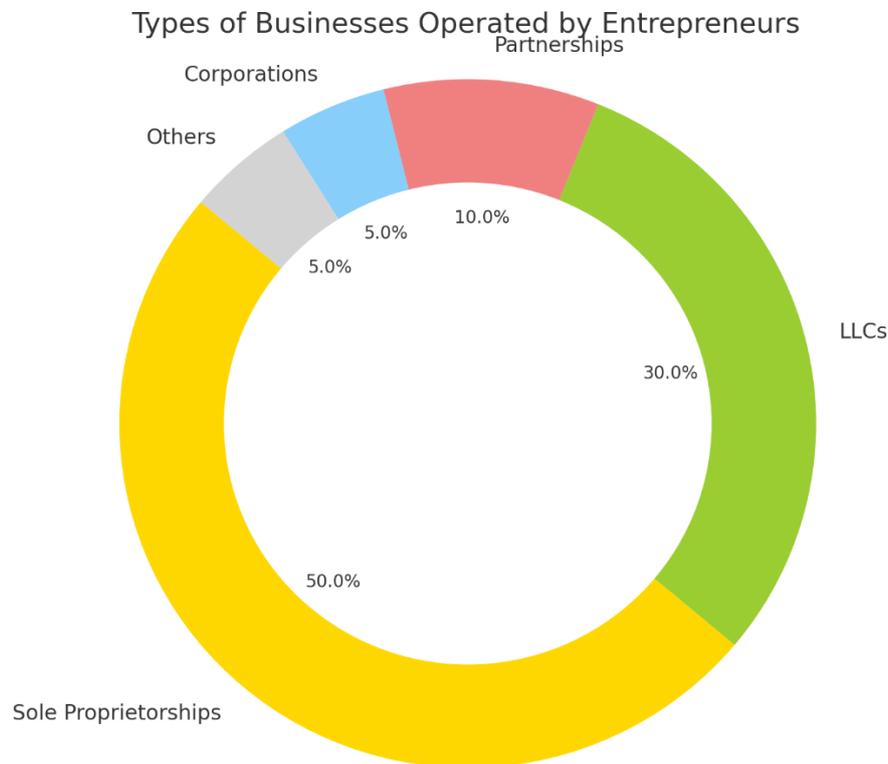
Figure 6: Distribution of Entrepreneurs by Duration of Business Operations

Figure 6 displays a histogram of the distribution of entrepreneurs by the duration of their business operations. The histogram shows that the most common duration for businesses lies between approximately 2.5 to 5 years, as evidenced by the highest peak in the distribution. This suggests that a substantial number of entrepreneurs have maintained their businesses through the initial start-up phase, which is often considered the most challenging period.

There's a noticeable decline in the frequency of entrepreneurs who have been in business for more than 5 years. While there are entrepreneurs with businesses that have longer durations, the number steadily decreases as the duration increases. This decline could be attributed to various factors, such as market changes, increased competition, or personal decisions to close or change businesses.

The concentration of businesses in the 2.5 to 5 years range could indicate a stable entrepreneurial environment where businesses have/the potential to grow and become established. The presence of businesses beyond 5 years also suggests that there is a segment of the entrepreneurial community that has achieved longevity, which could be indicative of sustained success and resilience in the marketplace.

Overall, the histogram indicates a mature business landscape where many entrepreneurs have successfully navigated the early years and a significant number have achieved longer-term sustainability.



*Figure 7: Types of Businesses Operated by Entrepreneurs*

Figure 7 presents the types of businesses operated by entrepreneurs in Albania, visually represented through a donut chart. The chart emphasizes the notable presence of sole proprietorships, which account for 50% of the businesses, and limited liability companies (LLCs) representing an additional 30%. These two types of business entities form a significant majority within the entrepreneurial landscape of Albania.

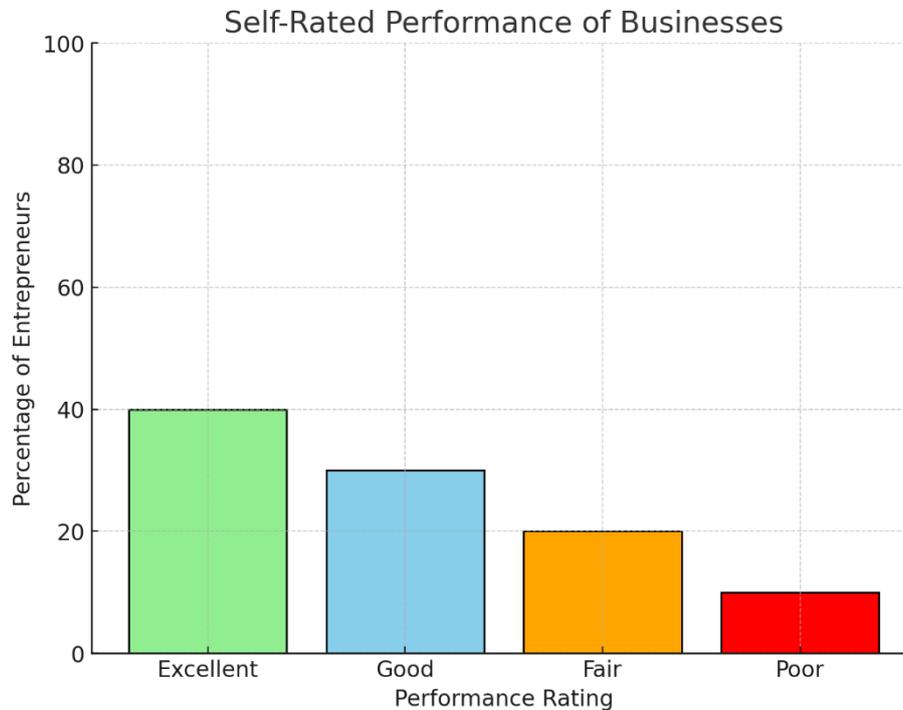
Additionally, the chart includes smaller proportions of other business types such as partnerships (10%), corporations (5%), and other forms of business entities (5%), which have a relatively smaller presence in comparison to sole proprietorships and LLCs.

#### **4.4 Performance Indicators and Challenges**

Assessment of performance indicators and challenges faced by entrepreneurs provides valuable insights into the dynamics of business operations in Albania. Figure 8 showcases entrepreneurs' self-rated performance of their businesses, revealing a predominantly positive outlook. Additionally,



Figure 9 highlights the main challenges reported by entrepreneurs, with access to financing and market competition emerging as prominent concerns.



*Figure 8: Self-Rated Performance of Businesses*

Figure 8 showcases the self-rated performance of businesses by entrepreneurs in Albania, as visualized through a bar chart. The data reveals a predominantly positive outlook, with the majority of entrepreneurs rating their business performance as either "Excellent" (40%) or "Good" (30%). These two categories collectively account for 70% of the responses, indicating a high level of satisfaction and confidence in the performance of their businesses among the entrepreneurial community.

Additionally, a smaller proportion of entrepreneurs, representing 20% of the responses, rate their business performance as "Fair," while a negligible percentage rate their performance as "Poor" (10%). This suggests that while the majority of businesses are thriving or performing satisfactorily, a minority face challenges or issues impacting their performance negatively.

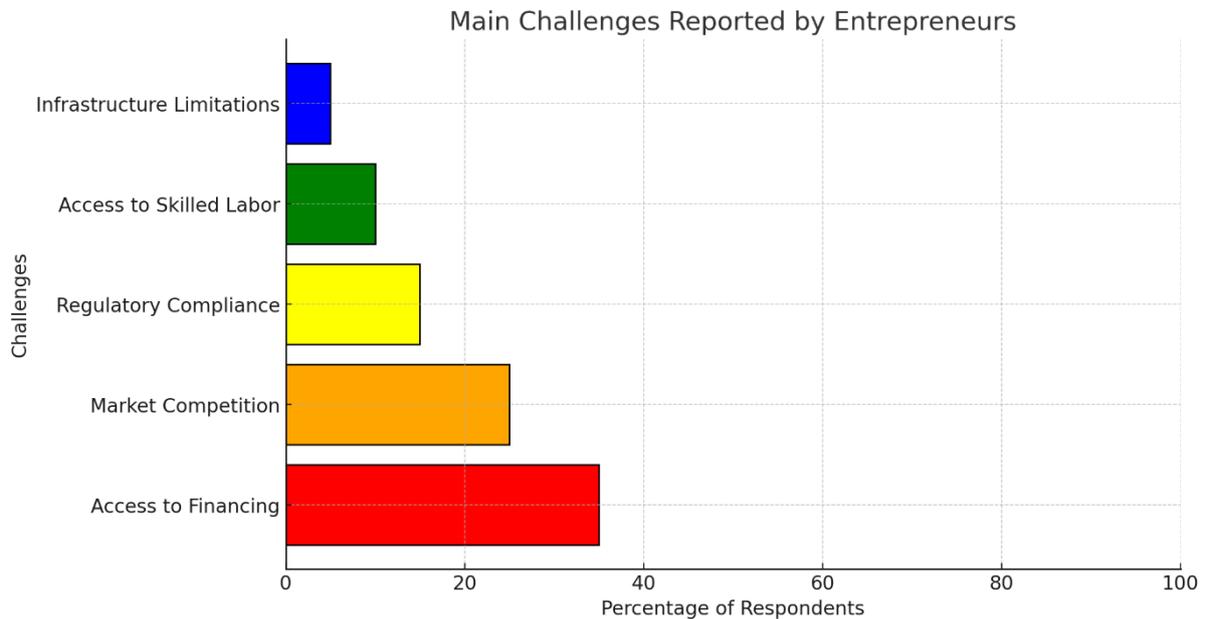


Figure 9: Main Challenges Faced by Entrepreneurs

Figure 9 visually presents the main challenges reported by entrepreneurs in Albania through a horizontal bar chart. The chart highlights that access to financing is the top challenge, cited by 35% of respondents as a significant obstacle to their business operations, indicating a considerable struggle among entrepreneurs to secure adequate funding.

Market competition follows as the next prominent challenge, with 25% of respondents identifying it as a key concern. This suggests that entrepreneurs are facing stiff competition within their industries or sectors, affecting their market share and revenue generation.

Other noted challenges include regulatory compliance (15%), access to skilled labor (10%), and infrastructure limitations (5%). While these challenges impact business operations, they are less prevalent compared to the difficulties related to financing and market competition.

## 5. Conclusions and Recommendations

### 5.1 Conclusions

The findings of this research provide valuable insights into the correlation between education level and entrepreneurial behavior in Albania. Key conclusions drawn from the analysis include:



### **5.1.1 Influence of Education on Entrepreneurship**

- Education level significantly influences entrepreneurial behavior, with individuals holding higher levels of education being more likely to engage in entrepreneurship.
- Entrepreneurs with higher levels of education tend to start businesses in knowledge-intensive sectors such as technology, finance, and professional services.
- Higher levels of education are associated with larger and more profitable businesses, as well as better access to resources and networks that facilitate business growth and success.

### **5.1.2 Regional Disparities in Entrepreneurship**

- Central Albania emerges as the region with the highest concentration of entrepreneurs, suggesting regional disparities in entrepreneurial activity within the country.
- Understanding the regional dynamics of entrepreneurship is essential for policymakers to develop targeted interventions and initiatives to support entrepreneurship across all regions of Albania.

### **5.1.3 Challenges Faced by Entrepreneurs**

- Access to financing and market competition are identified as the primary challenges faced by entrepreneurs in Albania.
- Addressing these challenges is crucial for fostering a conducive environment for entrepreneurship and enabling the growth and sustainability of entrepreneurial ventures.

## **5.2 Recommendations**

Building on the conclusions drawn from the research findings, the following recommendations are proposed to promote entrepreneurship and support entrepreneurial development in Albania:

### **5.2.1 Enhancing Access to Education and Training**

- Develop and implement educational programs and initiatives aimed at fostering entrepreneurial skills and mindset among individuals at all education levels.
- Expand access to vocational training and entrepreneurship education programs to equip aspiring entrepreneurs with the knowledge, skills, and resources needed to start and grow businesses.

### **5.2.2 Improving Access to Financing**

- Establish mechanisms to improve access to financing for entrepreneurs, including the creation of venture capital funds, microfinance institutions, and government-backed loan programs.
- Encourage collaboration between financial institutions, government agencies, and private sector stakeholders to develop innovative financing solutions tailored to the needs of entrepreneurs.



### 5.2.3 Fostering Innovation and Collaboration

- Promote innovation and entrepreneurship ecosystems by fostering collaboration between universities, research institutions, industry partners, and government agencies.
- Create incentives and support mechanisms for startups and entrepreneurs engaged in innovative and high-growth sectors to encourage investment in research and development and foster technological innovation.

### 5.2.4 Addressing Regulatory Barriers

- Streamline regulatory processes and reduce bureaucratic barriers to entry for entrepreneurs, particularly in sectors with high potential for growth and innovation.
- Implement policies to facilitate business registration, licensing, and compliance procedures, thereby reducing the administrative burden on entrepreneurs and fostering a more favorable business environment.

### 5.2.5 Supporting Regional Development

- Implement targeted policies and initiatives to support entrepreneurship in regions with lower levels of entrepreneurial activity, including providing access to training, mentoring, and financial support.
- Encourage the development of local entrepreneurial ecosystems through the establishment of incubators, accelerators, and co-working spaces to foster collaboration and knowledge exchange among entrepreneurs.

## 5.3 Limitations and Future Research

It is important to acknowledge the limitations of this research, including potential biases in the survey sample and the reliance on self-reported data. Future research could explore longitudinal studies to track the evolution of entrepreneurial behavior over time and investigate the effectiveness of different policy interventions in promoting entrepreneurship in Albania.

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## ANNEX 1: Survey

### Entrepreneur Survey: Understanding Entrepreneurial Behavior in Albania

*Thank you for participating in this survey. Your responses will contribute to our research on entrepreneurship in Albania. Please answer the following questions to the best of your ability.*

#### Section 1: Demographic Information

##### 1.1. Gender:

- Male
- Female
- Other (please specify): \_\_\_\_\_

##### 1.2. Age:

- Under 25
- 25-34
- 35-44



- 45-54
- 55 and above

1.3. Region of Residence:

- Northern Albania
- Central Albania
- Southern Albania

1.4. Ethnicity:

- Albanian
- Minority (please specify): \_\_\_\_\_

**Section 2: Educational Background**

2.1. Highest Level of Education Completed:

- Primary School
- Secondary School
- Vocational School
- Bachelor's Degree
- Master's Degree
- Doctoral Degree

2.2. Field of Study (if applicable):

**Section 3: Entrepreneurial Experience**

3.1. Are you currently operating a business in Albania?

- Yes
- No

3.2. If yes, how long have you been in business? (in years)

3.3. Have you previously owned or operated a business in Albania?

- Yes
- No

3.4. If yes, please specify the type(s) of business(es) you have previously owned or operated:



## Section 4: Business Profile

### 4.1. Type of Business:

- Sole Proprietorship
- Partnership
- Limited Liability Company (LLC)
- Corporation
- Other (please specify): \_\_\_\_\_

### 4.2. Industry Sector (please specify):

### 4.3. Number of Employees (including yourself):

- 1-5
- 6-10
- 11-20
- 21-50
- 51 and above

### 4.4. Annual Revenue (in Albanian Lek):

- Less than 1,000,000 ALL
- 1,000,001 - 5,000,000 ALL
- 5,000,001 - 10,000,000 ALL
- 10,000,001 - 50,000,000 ALL
- More than 50,000,000 ALL

## Section 5: Performance Indicators

### 5.1. How would you rate the current performance of your business?

- Poor
- Fair
- Good
- Excellent



5.2. What are the main challenges you face in running your business? (select all that apply)

- Access to financing
- Market competition
- Regulatory compliance
- Access to skilled labor
- Infrastructure limitations
- Other (please specify): \_\_\_\_\_

**Section 6: Additional Comments**

6.1. Please share any additional comments or insights you have regarding entrepreneurship in Albania:

*Thank you for taking the time to complete this survey. Your input is greatly appreciated.*



## **The use of robotic technology in the surgical operating theatre. The role of anesthesiology professionals in robotic surgery**

**Ph.D. Przemyslaw ŻURATYŃSKI**

**Nicolaus Copernicus University in Toruń, Ludwik Rydygier Collegium Medicum in Bydgoszcz;  
Oncology Center prof. F. Łukaszczyk, Poland**

### **Abstract**

**Introduction.** Robotic procedures are medical, surgical or technical procedures that use robotics to perform precision operations or manipulations. These technologically advanced systems are designed to assist surgeons, doctors or engineers in performing complex tasks, minimizing errors and increasing precision. Surgical procedures performed robotically include prostate, colorectal, thoracic, heart and many others. Anesthesiological care for robotic procedures is a key element in ensuring patient safety and comfort during surgeries performed using robotic systems. Anesthesiology personnel play an important role throughout the process, from assessing the patient's condition and selecting the appropriate method of anesthesia, to monitoring the patient's condition during the procedure and ensuring safe recovery after surgery. Important aspects of anesthesiological care for robotic procedures include: assessment of the patient's condition (a detailed evaluation of the patient's health, including an analysis of the patient's medical history, current medical conditions, allergies and medications taken; based on this information, the anesthesiologist decides on the appropriate type of anesthesia); selection of the appropriate anesthetic technique (for robotic procedures, general anesthesia is often preferred to ensure that the patient is completely unconscious and unable to feel pain); monitoring during the procedure (continuous monitoring of the patient's condition throughout the procedure); anesthesia management (anesthesiologists control the level of anesthesia during the procedure, adjusting the dose of anesthetics as needed to ensure adequate analgesia and avoid complications); postoperative management (after the procedure, anesthesiologists supervise the process of awakening the patient from anesthesia, ensuring a safe transition from anesthesia to full consciousness; the patient's response to analgesics and other agents used in the postoperative period is monitored).

**Aim of the study.** The aim of the study was to evaluate robotic procedures performed at the Professor Łukaszczyk Oncology Center in Bydgoszcz in the period from 01.01.2023 - 31.12.2023.



**Results.** The robotic procedure system at the Prof. Lukaszczyk Cancer Center in Bydgoszcz became operational on 28.10.2022 and by the end of 2022, 58 robotic urological procedures - radical prostatectomy with pelvic lymphadenectomy using the robotic system were performed. The procedures were performed on patients with a diagnosis of C61 - Malignant neoplasm of the prostate gland. A total of 478 procedures were performed between 01.01.2023 and 31.12.2023: 355 robotic urological procedures (mostly radical prostatectomy with pelvic lymphadenectomy using the robotic system), 33 robotic gynecological procedures (modified radical excision of the uterus with adnexa. Bilateral sentinel node procedure), 35 robotic thoracic procedures (RATS lobectomy. Mediastinal lymphadenectomy. Left pleural cavity drainage) and 55 robotic surgical procedures (mostly anterior rectal resection). The number of complications requiring prolongation of the patient's stay in the unit or readmission to the hospital - amounted to 1.9%. In terms of anesthesia procedures, anesthesia was unproblematic, and analgesic administration was less compared to procedures using classical methods. The patient after robotic surgery was less of a burden on the staff - he required pain medications far less often, he slept through the night without alerting the nursing staff of the nurses, he was already independent in terms of self-care (washing, meals) the next day, the change of dressings after trocars was quick, in most cases he went home on the second day after surgery.

**Conclusions.** Robotic procedures offer many advantages, such as smaller incisions, lower risk of complications, shorter recovery time and faster return to normal activities. However, they require proper training of medical personnel and adequate follow-up to ensure their safe and effective performance. Anesthesia care during robotic procedures requires a high degree of cooperation and coordination between the anesthesia, surgical and nursing teams. This is a key element in ensuring the safety and success of surgeries performed using advanced robotic technology. For robotic surgery, the patient does not require any special preparation beyond the typical. Robotic procedures are fraught with a low rate of complications compared to procedures using classical methods.



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## **Determination of Pre-Service Preschool Teachers' Perspectives on Science Activities Focused on Developing Children's Scientific Process Skills<sup>1</sup>**

**Prof. Dr. Hakan Şevki AYWACI**

Trabzon University, Türkiye. E-mal: [hsayvaci@gmail.com](mailto:hsayvaci@gmail.com), 0000-0002-3181-3923

**Dr. Gürhan BEBEK**

Trabzon University, Türkiye. E-mal: [gurhan.bebek@gmail.com](mailto:gurhan.bebek@gmail.com), 0000-0003-4862-5782

**PhD Student Selenay YAMAÇLI**

Trabzon University, Türkiye. E-mal: [selenay-3461@gmail.com](mailto:selenay-3461@gmail.com), 0000-0002-4424-2218

### **Abstract**

Preschool preservice teachers must plan, implement, and evaluate activities based on science process skills and these activities should be interesting, innovative, and stimulating to encourage active participation from children. Literature reviews have shown that teachers and pre-service teachers face challenges in planning and implementing science activities that focus on basic science process skills. They also struggle with using methods and techniques to acquire and develop these skills, providing tools and equipment, and demonstrating competencies in science activities. Additionally, preschool teachers often receive insufficient science education during their undergraduate studies, which hinders their ability to teach effectively. While preschool teacher candidates may have taken sufficient theoretical science courses during their university years, they often lack practical examples to draw from. Concordantly, this study aimed to enhance the competencies of pre-service preschool teachers in designing activities that promote the development of children's scientific process skills and to determine their perspectives on science activities based on scientific process skills in preschool. Following a 6-day training on designing science activities to develop children's scientific process skills, structured interviews were conducted with 30 pre-service preschool teachers to determine their perspectives on developing science activities based on scientific process skills and their views on the training. The 6-day online training provided guidance on designing, developing, implementing, and evaluating sample activities for pre-service preschool teachers. The training was effective in teaching methods, techniques, and strategies appropriate for children's age and developmental characteristics, to help them acquire scientific process skills. It was found that pre-service preschool teachers were capable of enhancing the learning environment based on children's interests and curiosities. This, in turn, boosted their self-efficacy in implementing various methods and applications that address scientific process skills. Additionally, it increased pre-service teachers' awareness of scientific process skills in science activities and fostered a positive perspective toward conducting science studies. To further diversify the positive contributions, it is recommended to conduct an experimental study on training preservice

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preschool teachers to design science activities that develop children's scientific process skills in face-to-face environments where they can actively participate.

**Keywords:** preschool, preservice preschool teachers, science activities, scientific process skills

## INTRODUCTION

Preschool education is a systematic and planned model of education that follows specific standards to support the social, emotional, cognitive, physical, and behavioural development of children aged 0-6 years (Kuzik et al., 2020). In essence, early childhood education is a developmental process that spans from birth until the start of primary school. It involves active participation in a stimulating environment that caters to the individual characteristics and developmental levels of children, while also promoting their physical, social, emotional, language, and mental growth. The cultural characteristics of the society are also taken into account to ensure that children can thrive in the best possible conditions (MoNE, 2013).

Pre-school education is the process by which young children develop their imagination, express their thoughts and feelings, and come up with new ideas. It helps them maintain their interest and attention on a subject for a long time, observe and explore the environment and nature in relation to form and space, find solutions to overcome difficulties, conduct research and experiments, and ask questions by being curious (Wilson, 2007). The objective of this programme is to cultivate fundamental behaviours such as attention to detail, recognition of deficiencies and errors, and the development of self-confidence, self-improvement, and independence. Participants are encouraged to remain open to the world around them and to the people with whom they interact, to be willing to try new experiences, and to take advantage of opportunities as they arise (Morgan, 2017). It is stated that children will utilise the knowledge and skills acquired during preschool education throughout their lives. The fundamental knowledge, skills and habits acquired during early childhood experiences have the ability to shape a child's social and emotional life, as well as their later educational life.

Preschool education services should be guided by a serious scientific and systematic organization, as it is the first and most valuable step in the education system. This is because preschool children have an intense sense of curiosity and a great desire to learn. During the preschool period, children are curious about their environment and eager to explore the unknown. As a result, they begin to observe and question the events and phenomena around them using their five senses. This leads to a conscious or unconscious acquisition of scientific knowledge (Dienes and Seth, 2010). Science plays a crucial role in preschool education as it allows children to utilize their senses effectively, observe, and learn naturally. Therefore, science education in the preschool period is of utmost importance for comprehending and making sense of scientific concepts at an early age (Gelman and Brenneman, 2004). They acquire scientific process skills such as comparison, classification, establishing cause-effect relationships, paying attention to details, observation, experimentation, and hypothesizing, which are the cornerstones of science. Science education should directly support the development of children's scientific process skills.



Aslan, Kilic and Kilic (2016) defined scientific process skills as basic skills, causal skills, and experimental skills. Basic skills include observation, prediction, inference, comparison, measurement and recording, classification, and communication. Causal skills involve prediction, determining variables, and inference. Experimental skills include hypothesizing, modelling, experimenting, controlling variables, and inference. Buyuktaskapu (2010) highlights that science teaching in preschool should not solely focus on knowledge acquisition. Instead, it should also emphasize the practical application of basic scientific processes to develop children's thinking skills. Conscious education during this period can have a positive impact on their future learning and interest in science. Therefore, it is essential to teach science using appropriate methods and techniques that facilitate the acquisition of scientific process skills, particularly in preschool institutions. It is also crucial to create a conducive learning environment and support it with relevant activities (Ayvaci, 2010). Preschool teachers are required to design activities that develop children's skills. According to Unal and Akman (2006), the use of effective teaching techniques and positive attitudes by teachers is crucial for the formation of sound scientific foundations in children. Teachers' attitudes and the activities they prepare have a direct impact on the use of scientific processes and the development of thinking skills in children (Ayvaci, 2010). Determining the perspectives of pre-service preschool teachers towards the innovative science activities development trainings (TÜBİTAK 2237-A project) for developing scientific process skills is believed to contribute to the literature.

## METHOD

### Research Design

The study aims to determine pre-service preschool teachers' perspectives on developing innovative science activities to enhance scientific process skills. The qualitative research approach of case study was chosen for this study (TÜBİTAK 2237-A project). The case study method was chosen because it allows for an in-depth examination of the mental models of the research group. The study focuses on the preferred concepts within the context and seeks to answer the questions 'What?', 'How?' and 'Why?' (Buyukozturk et al., 2008).

### Participants

The study's participant group was selected using purposive sampling, as they had previously taken part in training on developing innovative science activities to enhance scientific process skills. This training was conducted as part of the TUBITAK 2237-A project for pre-service preschool teachers. Affinity sampling is a purposive sampling method used to identify a distinct sub-group by creating a small homogenous sample (Buyukozturk et al., 2008). This method is predicted to provide an advantage in creating a sample that serves the research purpose. When determining the sample size, it is important to consider the focus of the research and the amount of data. A study was conducted with 30 pre-service preschool teachers from various universities using this approach.

Table 1 shows the demographic characteristics of the participants.



**Table 1.** Demographic information of the participants

Variables	Qualities	f
<b>Gender</b>	Female	25
	Male	5
<b>University</b>	Ankara University	1
	Aydın Adnan Menderes University	1
	Burdur Mehmet Akif Ersoy University	3
	Gazi University	9
	Giresun University	4
	İstanbul Medeniyet University	2
	Muğla Sıtkı Koçman University	5
	Kocaeli University	1
	Trabzon University	4
	<b>Grade Level</b>	Third Level
Fourth Level		15

### Data Collection Tools

The clinical interview questions for pre-service preschool teachers were prepared and finalized by six researchers, three of whom are experts in the field of science and three of whom are experts in the field of pre-school education. The questions were piloted with five participants during the process. The purpose of clinical interviews in education is to characterize students' strategies, knowledge structures, and skills, to better understand their developmental processes, and to investigate their mental models (Baki, Karatas, and Guven, 2002). Clinical interview questions for pre-service preschool teachers were oriented towards 'exploratory' clinical interview questions in line with the rationale of identifying or revealing important variables and generating hypotheses for further research. The following are examples of finalized interview questions:

(i) What is your opinion on the process of designing science activities that are based on scientific process skills? What do you think about the process of designing science activities that are based on scientific process skills?

(ii) What is your opinion on the process of developing science activities that are based on scientific process skills? What do you think about the process of developing science activities that are based on scientific process skills?



(iii) What is your opinion on the process of implementing science activities that are based on scientific process skills? What do you think about the process of implementing science activities that are based on scientific process skills?

(iv) What is your opinion on the evaluation process of science activities that are based on scientific process skills? What do you think about the evaluation process of science activities that are based on scientific process skills?

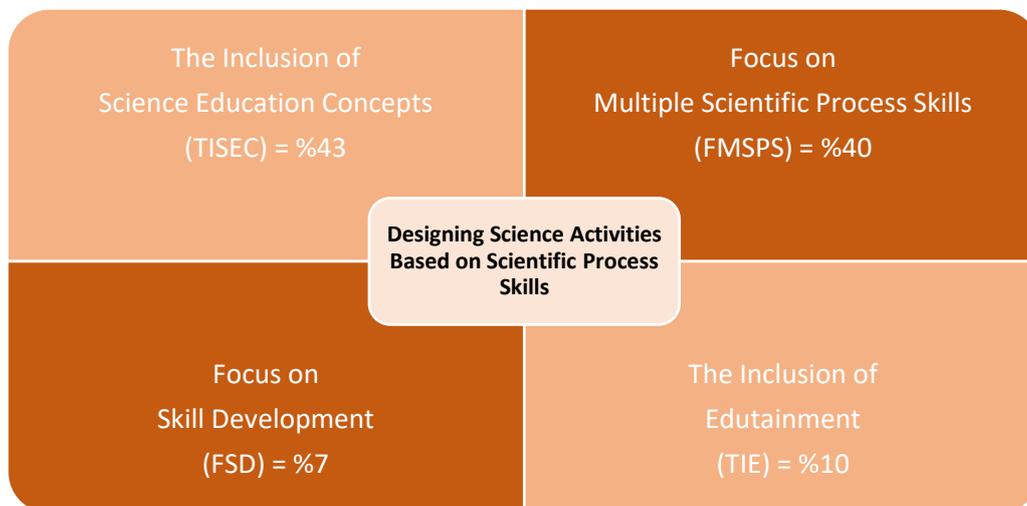
### Data Analysis

The data obtained from the clinical interviews were analysed using the NVivo Package Programme. This programme facilitated a comprehensive analysis process, including creating categories, establishing relationships, changing theme names, and creating matrices. Content analysis was used to analyse the data.

### FINDINGS

The activities designed by the preschool teachers during the six-day activity process were evaluated and analyzed daily by a science education expert and a preschool education expert. The analyses are presented below in the form of headings.

#### Designing Science Activities Based on Scientific Process Skills



**Figure 1.** The Opinions about Designing Science Activities Based on Scientific Process Skills

Figure 1 shows that pre-service preschool teachers' views on designing science activities based on scientific process skills are grouped into four categories: the inclusion of science education concepts, focus on multiple scientific process skills, focus on skill development, and the inclusion of edutainment. The most common view among pre-service preschool teachers is category the inclusion of science education concepts (%47). Sample sentences for each category are provided:



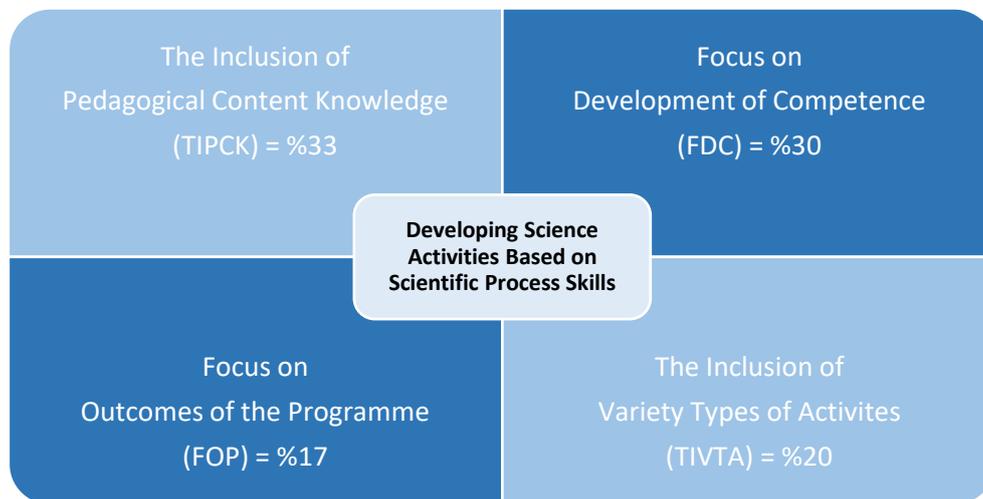
**PPT07:** “Activities aimed at developing children's science process skills should focus on skill development. This will contribute to the acquisition of scientific process skills” (**FSD**)

**PPT16:** “Design activities that focus on multiple scientific process skills instead of just one. This approach can lead to greater gains” (**FMSPS**)

**PPT20:** “Science education concepts are necessary for designing activities that develop scientific process skills. This is because the skill group is an integral part of science education” (**TISEC**)

**PPT20:** “Activities aimed at developing children's scientific process skills should be edutainment. It is important to avoid activities that are solely educational or solely entertaining, as they can hinder the achievement of the intended goal.” (**TIE**)

### Developing Science Activities Based on Scientific Process Skills



**Figure 2.** The Opinions about Developing Science Activities Based on Scientific Process Skills

Figure 2 shows that pre-service preschool teachers' views on developing science activities based on scientific process skills are grouped into four categories: the inclusion of pedagogical content knowledge, focus on development of competence, focus on outcomes of the programme, and the inclusion of different types of activities. The most common view among pre-service preschool teachers is category the inclusion of pedagogical content knowledge (%33). Sample sentences for each category are provided:

**PPT02:** “The activities should focus on the outcomes of the programme to avoid carrying out a development process without a target” (**FOP**)

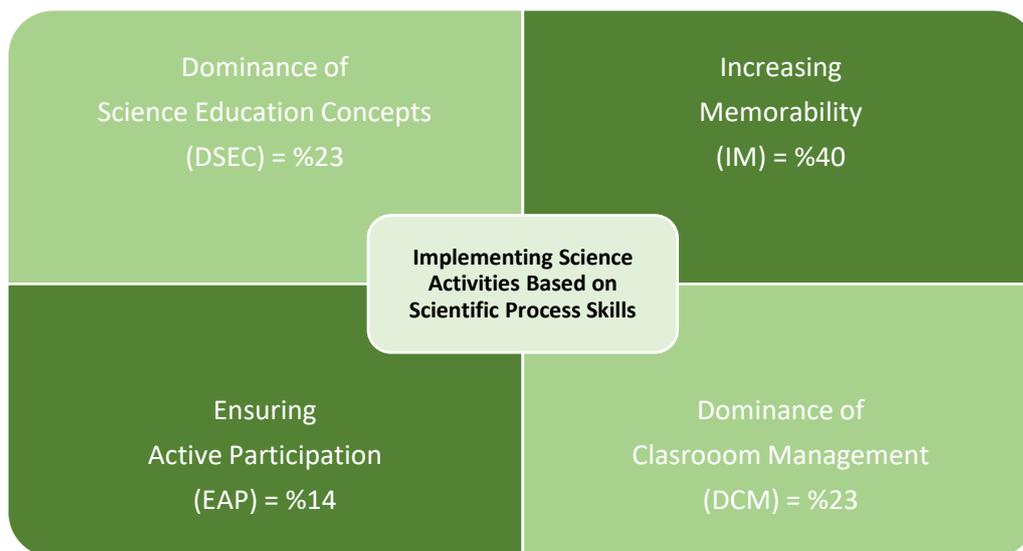
**PPT05:** “To develop children's scientific process skills, activities should focus on development of competence. This will facilitate the acquisition of scientific process skills” (**FDC**)



**PPT27:** “Activities that inclusion pedagogical content knowledge are more effective in acquiring scientific process skills” (*TIPCK*)

**PPT28:** “Activities that the development of scientific process skills should encompass a variety of types. Including multiple activities can facilitate the acquisition of multiple scientific process skills” (*TIVTA*)

### Implementing Science Activities Based on Scientific Process Skills



**Figure 3.** The Opinions about Implementing Science Activities Based on Scientific Process Skills

Figure 3 shows that pre-service preschool teachers' views on implementing science activities based on scientific process skills are grouped into four categories: dominance of science education concepts, increasing memorability, ensuring activate participation, and dominance of classroom management. The most common view among pre-service preschool teachers is category increasing memorability (%40). Sample sentences for each category are provided:

**PPT11:** “Activities that ensure active participation of students are always more effective, even if the focus is on skill development” (*EAP*)

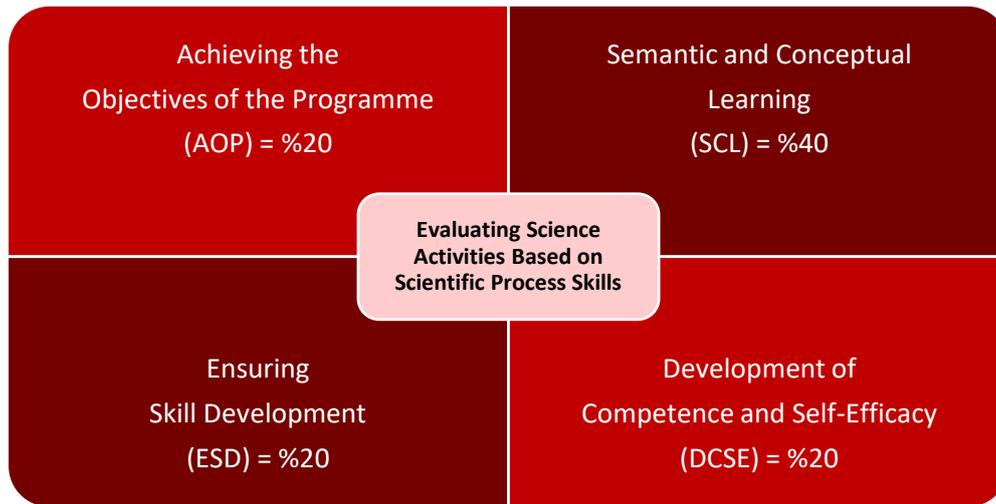
**PPT21:** “During the implementation of the developed activities, it is important to increasing memorability. Without memorability, skill development cannot be guaranteed” (*IM*)

**PPT29:** “When developing children's scientific process skills, it is important for the teacher to have a dominance of science education concepts. This helps to prevent the development of misconceptions in students” (*DSEC*)



**PPT04:** “During the implementation of activities, it is essential for teachers to have a dominance of classroom management. Without this skill, students will not be able to develop their skills or achieve their learning outcomes” (DCM)

### Evaluating Science Activities Based on Scientific Process Skills



**Figure 4.** The Opinions about Evaluating Science Activities Based on Scientific Process Skills

Figure 4 shows that pre-service preschool teachers' views on evaluating science activities based on scientific process skills are grouped into four categories: achieving objectives of the programme, semantic and conceptual learning, ensuring skill development, and development competence and self-efficacy. The most common view among pre-service preschool teachers is category semantic and conceptual learning (%40). Sample sentences for each category are provided:

**PPT30:** “The initial factor to consider during the evaluation process is whether the activity provides skill development or not” (ESD)

**PPT06:** “The activities should contribute to children's semantic and conceptual learning to ensure effective learning” (SCL)

**PPT08:** “Evaluation requires concrete situations to ensure objectivity. Concordantly, the achievement of objectivities of the programme can be assessed” (AOP)

**PPT07:** “When evaluating activities, it is important to assess the development of competence and self-efficacy first and foremost” (DCSE)

### DISCUSSION, CONCLUSION and RECOMMENDATIONS

Pre-service preschool teachers' views on designing science activities based on scientific process skills are grouped into four categories: the inclusion of science education concepts, focus on multiple



scientific process skills, focus on skill development, and the inclusion of edutainment. The most common view among pre-service preschool teachers is category the inclusion of science education concepts (%47). Given that children acquire scientific process skills through science activities (Ayvaci, 2010), it is expected that pre-service teachers may face challenges at these two overlapping points. However, it is important to note that the teacher's role is crucial in children's acquisition of scientific process skills (Unal & Akman, 2006). Therefore, eliminating this difficulty is of critical importance.

Pre-service preschool teachers' views on developing science activities based on scientific process skills are grouped into four categories: the inclusion of pedagogical content knowledge, focus on development of competence, focus on outcomes of the programme, and the inclusion of different types of activities. The most common view among pre-service preschool teachers is category the inclusion of pedagogical content knowledge (%33). It is evident that pre-service teachers concentrate on science concepts and scientific process skills when designing activities. However, they require pedagogical knowledge when they engage in the process of developing activities. Therefore, it is essential to note that teachers need pedagogical knowledge in the process of developing activities, regardless of whether they are science-related or not.

Pre-service preschool teachers' views on implementing science activities based on scientific process skills are grouped into four categories: dominance of science education concepts, increasing memorability, ensuring activate participation, and dominance of classroom management. The most common view among pre-service preschool teachers is category increasing memorability (%40). The pre-service teachers may have based their opinions about the students on their own experiences. It is possible that they found their own experiences memorable and assumed that children would have a similar experience. Concordantly, it can be argued that science activities that focus on scientific process skills are crucial and offer lasting benefits to pre-service teachers.

Pre-service preschool teachers' views on evaluating science activities based on scientific process skills are grouped into four categories: achieving objectives of the programme, semantic and conceptual learning, ensuring skill development, and development competence and self-efficacy. The most common view among pre-service preschool teachers is category semantic and conceptual learning (%40).

## Recommendations

- (i) To enhance the development of science activities based on scientific process skills, it is recommended to increase the number of activities and projects in which pre-service preschool teachers can actively participate. This will provide them with learning and teaching environments that involve hands-on experience.
- (ii) Conducting comparable studies on the processes of developing science activities based on scientific process skills for preschool teachers.



(iii) To develop science activities based on scientific process skills and then to observe teachers and prospective teachers in classroom environments and to determine the reflections of these activities on teaching environments.

(iv) As experimental studies on the processes of developing science activities based on scientific process skills are believed to contribute to the literature.

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## Matematik Eğitimi Alanındaki Lisansüstü Metaforik Çalışmalarının Tematik İncelenmesi (2010-2023)

**Hatice Nur KONAKLI**

**Sorumlu yazar. Milli Eğitim Bakanlığı, Cebelibereket Şehit Ali Alkan Ortaokulu,  
Osmaniye/Türkiye. [haticenurkonakli@gmail.com](mailto:haticenurkonakli@gmail.com)**

**Prof. Dr. Davut KÖĞCE**

**Niğde Ömer Halisdemir Üniversitesi, Eğitim Fakültesi, Niğde/Türkiye.  
[kogced@gmail.com](mailto:kogced@gmail.com)**

### Öz

Bu araştırma, Türkiye’de 2010-2023 yıllarında arasında matematik eğitiminde metafor kavramına ilişkin yapılmış lisansüstü çalışmaların incelenmesi amacıyla yapılmıştır. Bu amaçla araştırma doküman analizi metodolojisi kullanılarak yürütülmüştür. Araştırma örneklemini Yükseköğretim Kurulu (YÖK) Ulusal tez merkezi veri tabanında gerçekleştirilen alan yazın taramaları sonucunda ulaşılan 1 Doktora, 18 Yüksek Lisans olmak üzere toplam 19 lisansüstü tez çalışması oluşturmaktadır. Veri analiz sürecinde tezler, araştırma problemlerine göre içerik analizine tabi tutulmuştur. Araştırma sonucunda lisansüstü tez çalışmalarının eğitim düzeyi olarak yüksek lisans, danışman unvanı olarak yardımcı doçent/ doktor öğretim üyesi, yayın yılı olarak 2023, anahtar kelime olarak metafor/metaforik, yayıldığı üniversite olarak Tokat Gaziosman Paşa Üniversitesi, örneklem belirleme tekniği olarak amaçlı örnekleme tekniği, araştırma yöntemi olarak nitel yaklaşıma dayalı fenomenoloji (olgubilim) modeli ve veri toplama aracı olarak form-anket-ölçek gibi nitel araçların ve buna bağlı veri analiz testlerinin gerçekleştirildiği sonucuna ulaşılmıştır.

**Anahtar Kelimeler:** Matematik Eğitimi, Metafor Kavramı, Doküman Analizi

### Abstract

This research was conducted to examine postgraduate studies on the concept of metaphor in mathematics education in Turkey between 2010 and 2023. For this purpose, the research was conducted using document analysis methodology. The research sample consists of a total of 19 postgraduate theses, including 1 PhD and 18 Master's degrees, obtained as a result of the literature review carried out in the Council of Higher Education (YÖK) National Thesis Center database. During the data analysis process, theses were subjected to content analysis according to the research problems. As a result of the research, the education level of postgraduate thesis studies is master's degree, assistant professor/doctor faculty member as the advisor title, 2023 as the publication year, metaphor/metaphoric as the keyword, Tokat Gaziosman Paşa University as the university



where it is published, purposeful sampling technique as the sample determination technique, research. It has been concluded that qualitative tools such as phenomenology model based on qualitative approach as a method and form-questionnaire-scale as data collection tool and related data analysis tests were carried out.

**Keywords:** Mathematics Education, Concept of Metaphor, Document Analysis

## GİRİŞ

İnsan hayatı için önemi ve bilimsel gelişmelere olan katkısı nedeniyle matematik öğretimi önem kazanmakta ve öğretimine okul öncesinden başlanılarak geniş bir zaman ayrılmaktadır (Altun, 2018). Fakat öğretimine bu denli önem verilmesine rağmen ilköğretim ve ortaöğretim öğrencilerinin matematikle ilgili temel kavramları öğrenmede sıkıntılar yaşamaları ve matematik ders başarılarının düşük olması önemli bir sorundur (Ekizoğlu & Tezer, 2007). Çünkü matematikse başarısız olan öğrencilerin çoğu ne kadar çok çabalarsa çabalasın hiçbir zaman başarılı olamayacağına yönelik olumsuz tutum ve önyargıya da kapılabilmektedir. Ayrıca bu durum matematik öğretim programının “*Matematiğe yönelik olumlu tutum geliştirecektir.*” (Milli Eğitim Bakanlığı [MEB], 2009) amacıyla çelişki göstermesi bakımından etkili bir matematik eğitim sürecinin gerçekleşmesini de engellemektedir. Bu noktada öğrencilerin matematiğe yönelik tutumlarının ortaya çıkarılması önem kazanmaktadır. Eğitim öğretim ortamlarında öğrenci tutum ve algılarının saptanmasında kullanılan önemli araçlardan biriside metaforlardır. (Şahin, 2013)

Metafor, bireylerin herhangi bir olgu, durum veya süreç hakkındaki algı ve tutumlarının belirlenmesini sağlayan, söz konusu öğelere karşılık gelen zihinsel kavramlardır. (Aydın & Pehlivan, 2010). Bu bağlamda metaforlar, öğrencilerin matematiğe karşı duydukları olumsuz tutumların belirlenerek ortadan kaldırılmasına ve matematik öğretim programının “*Matematiğe yönelik olumlu tutum geliştirecektir.*” (MEB, 2009) hedefine ulaşılmasına yönelik yapılacak yeni uyarlamalara önemli katkılar sağlayabilir. Bu anlamda matematik eğitiminde metafor kavramına ilişkin çalışmaların incelenmesi ve bu alandaki genel araştırma eğilimlerinin tespit edilmesi son derece önemlidir.

### Araştırmanın Amacı ve Problemi

Matematik eğitimi alanında 2010-2023 yılları arasındaki lisansüstü metaforik tez çalışmalarını tematik olarak incelemeyi amaçlayan bu çalışmanın araştırma soruları aşağıdaki gibidir:

1. Lisansüstü tezlerin öğrenim düzeylerine göre dağılımları nasıldır?
2. Lisansüstü tezlerin danışman unvanlarına göre dağılımları nasıldır?
3. Lisansüstü tezlerin yayın yıllarına göre dağılımları nasıldır?
4. Lisansüstü tezlerin yayımlandığı üniversitelere göre dağılımları nasıldır?
5. Lisansüstü tezlerin anahtar kelimelerine göre dağılımları nasıldır?
6. Lisansüstü tezlerin araştırma türlerine göre dağılımları nasıldır?
7. Lisansüstü tezlerin örneklem türlerine göre dağılımları nasıldır?



8. Lisansüstü tezlerin araştırma modellerine göre dağılımları nasıldır?
9. Lisansüstü tezlerin örneklem belirleme yöntemlerine göre dağılımları nasıldır?
10. Lisansüstü tezlerin veri toplama araçlarına göre dağılımları nasıldır?
11. Lisansüstü tezlerin veri analiz tekniklerine göre dağılımları nasıldır?
12. Lisansüstü tezlerin araştırma konularına göre dağılımları nasıldır?

## YÖNTEM

### Araştırma Modeli

Bu çalışma nitel araştırma yöntemlerinden doküman incelemesi modeline göre tasarlanmıştır. Doküman incelemesi, araştırılması hedeflenen olgu veya olgular hakkında bilgi içeren yazılı materyallerin analizini içeren bir araştırma modelidir (Yenilmez & Sölpük, 2014). Bu modelde araştırma konusu ile ilgili yazılı bilgi içeren raporlar, kitaplar, arşiv dosyaları, video ve ses kayıtları, fotoğraflar gibi özgünlüğü kontrol edilen belgeler dokümanlar sistematik bir şekilde incelenir (Karataş, 2015). Bu çalışmada ise doküman materyali olarak matematik eğitimi alanında yapılan metaforik lisansüstü tez çalışmaları tematik olarak incelenmiştir.

### Evren ve Örneklem

Bu araştırmanın evrenini matematik eğitimi alanında yapılan metaforik lisansüstü çalışmalar oluştururken örneklemi matematik eğitimi alanından 2010-2023 yıllarında arasında yapılmış metaforik lisansüstü tezleri oluşturmaktadır. Bu doğrultuda matematik eğitimi alanında yapılan metaforik ile ilgili lisansüstü tezlere ulaşılmada ölçüt örnekleme yöntemi kullanılmıştır. Çalışmaya dâhil edilecek lisansüstü tezlerin belirlenmesinde “matematik”, “matematik öğretimi”, “matematik eğitimi”, “metafor”, “metaforik” anahtar kelimelerini içermesi ve YÖK Ulusal tez merkezinde erişime açık olması ölçütlerine göre alan yazın taraması gerçekleştirilmiştir. Bu kapsamda YÖK Ulusal tez merkezi veri tabanında yapılan taramalar sonucunda ulaşılan 1 Doktora, 18 Yüksek Lisans olmak üzere toplam 19 lisansüstü teze ulaşılmıştır.

### Veri Toplama Aracı

Bu çalışmada 2010 yılı Eylül- 2023 yılı Ağustos ayı arasında matematik eğitimi alanındaki lisansüstü metafor tez çalışmaları veri toplama aracı olarak kullanılmıştır.

### Verilerin Analizi

Bu araştırma kapsamında incelenen lisansüstü tez verileri içerik analizi tekniği kullanılarak analiz edilmiştir. İçerik analizi, belirli kurallar bağlamındaki kodlamalarla bir metnin bazı sözcüklerinin daha küçük içerik kategorilerle ifade edildiği sistematik bir veri analiz tekniğidir (Büyüköztürk, Kılıç Çakmak, Akgün & Karadeniz, 2019). Araştırma kapsamında incelenilmesine karar verilen lisansüstü tezler Microsoft Word programında incelenmiştir. İncelemeye alınan tezlerin her biri “öğrenim düzeyi, danışman unvanları, yayın yılı, yayınlandığı üniversite, anahtar kelimeleri, araştırma türü, örneklem türü, araştırma modeli, örneklem belirleme yöntemi, veri toplama araçları, veri analiz teknikleri ve araştırma konusu” özelliklerine göre iki araştırmacı tarafından içerik analiz edilmiştir. Böylelikle tema



ve kodlar oluşturulmuştur. Oluşturulan tema ve kodlar arasındaki güvenilirlik Miles-Huberman (1994) güvenilirlik katsayısı ” Güvenirlik = (Benzer kategorilerin sayısı) ÷ (Benzer ve farklı kategorilerin toplam sayısı) ” formülünden yararlanılmıştır. Bu formül uygulaması sonucunda yapılan hesaplamalarda iki araştırmacı tarafından kodlanılarak oluşturulan kategoriler arası benzerlik oranı %90 olarak hesaplanmıştır. Bu oran %70’ten büyük olduğundan (Miles & Huberman, 1994) bu araştırmada oluşturulan kategorilerinin güvenilir olduğu tespit edilmiştir. Güvenirlik çalışmaları sonrasında oluşturulan kategori ve kod bulgularının sunumu frekans ve yüzde değerlerinin yer aldığı tablo ve grafikler aracılığıyla gerçekleştirilmiştir. Bazı tezlerin verileri aynı anda birçok kod altında toplanabildiği için bazı tablolara ilişkin frekansların toplamı araştırma kapsamına alınan tez sayısını, yüzde değerlerinin toplamı ise %100’ü aşabilmektedir.

## BULGULAR

### 4.1. Lisansüstü Tezlerin Öğrenim Düzeyleriyle İlgili Bulgular

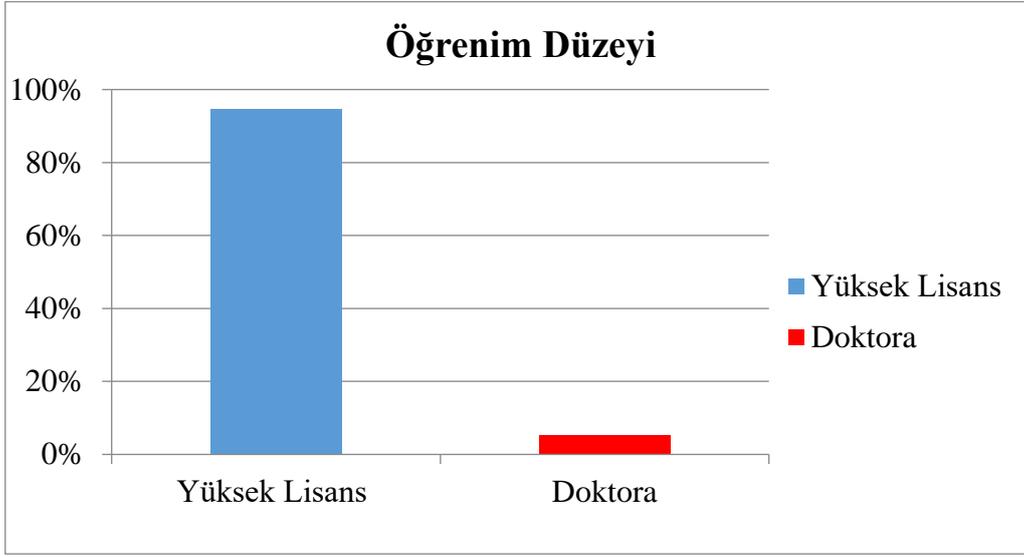
Araştırma kapsamında incelenen lisansüstü tezlerin öğrenim düzeylerine göre dağılımlarına ilişkin veriler Tablo 1’de verilmiştir.

**Tablo 1.** Lisansüstü tezlerin öğrenim düzeylerine göre dağılımı

Öğrenim Düzeyi	Tezler	f	%
Yüksek Lisans	Polat (2010), Ada (2013), Satmaz (2015), Gül Uysal (2016), Çağlayan (2018), Sönmez (2018), Kenç (2019), Yıldırım (2019), Çetinsoy (2019), İnci (2021), Özkan (2021), Soydan (2021), Özsoy (2022), Cansız (2022), Aydın (2023), Yüzükırmızı (2023), Karabacak (2023), Cansız (2023)	18	94,73
Doktora	Arıkan (2014)	1	5,26

Araştırmanın amacı kapsamında matematik eğitimi alanında metaforik alguların incelendiği lisansüstü tezlerin öğrenim düzeylerinin dağılımıyla ilgili olarak Tablo 1’e bakılırsa 18 tezin (%94,73’ü) yüksek lisans, 1 tezin (%5,26’sı) ise doktora düzeyinde olduğu görülmektedir.

Lisansüstü tezlerin öğrenim düzeylerine göre dağılımlarının görsel olarak karşılaştırması Şekil 1’de sunulmuştur.



Şekil 1. Lisansüstü Tezlerin Öğrenim Düzeylerine Göre Dağılımı

#### 4.2. Lisansüstü Tez Danışmanlarının Unvanlarıyla İlgili Bulgular

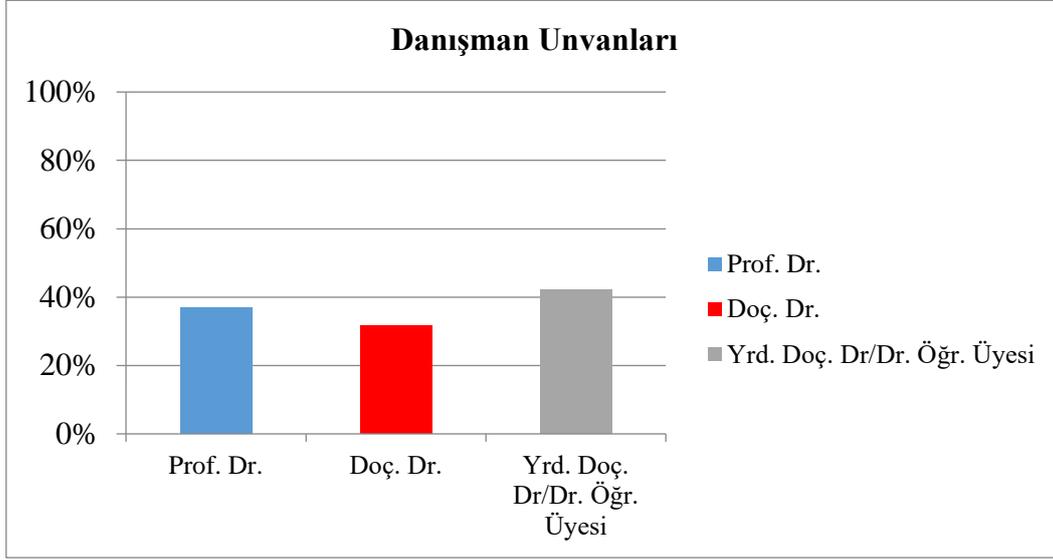
Araştırma kapsamında incelenen lisansüstü tezlerin danışman unvanlarına göre dağılımlarına ilişkin veriler Tablo 2’de verilmiştir.

Tablo 2. Lisansüstü tez danışmanlarının unvanlarına göre dağılımları

Unvanlar	Tezler	f	%
Prof.Dr.	Polat (2010), Gül Uysal (2016), Yıldırım (2019), İnci (2021), Özkan (2021), Sönmez (2018), Karabacak (2023)	7	36,84
Doç.Dr	Arıkan (2014), Satmaz (2015), Çağlayan (2018), Çetinsoy (2019), Aydın (2023), Yüzükırmızı (2023)	6	31,57
Yrd. Doç. Öğr. Üyesi	Dr/Dr. Ada (2013), Satmaz (2015), Sönmez (2018), Keleş (2019), Soydan (2021), Özsoy (2022), Cansız (2022), Cansız (2023)	8	42,10

Araştırmanın amacı kapsamında matematik eğitimi alanında metaforik algıların incelendiği lisansüstü tezlerin yazarlarının danışman unvanlarıyla ilgili olarak Tablo 2’de bakılırsa danışmanların 7’si (%36,84’ü) profesör, 6’sı (%31,57’si) doçent ve 8’inin (%42,10’u) ise yardımcı doçent/ doktor öğretim üyesi unvanına sahip olduğu görülmektedir.

Lisansüstü tez danışmanlarının unvanlarına göre dağılımlarının görsel olarak karşılaştırması Şekil 2’de sunulmuştur.



Şekil 2. Lisansüstü Tez Danışmanlarının Ünvanlarına Göre Dağılımı

#### 4.3. Lisansüstü Tezlerin Yayın Yıllarına Göre Dağılımlarıyla İlgili Bulgular

Araştırma kapsamında incelenen lisansüstü tezlerin yayın yıllarına göre dağılımlarına ilişkin veriler Tablo 3'de verilmiştir.

**Tablo 3.** *Lisansüstü tezlerin Yayın Yıllarına Göre Dağılımları*

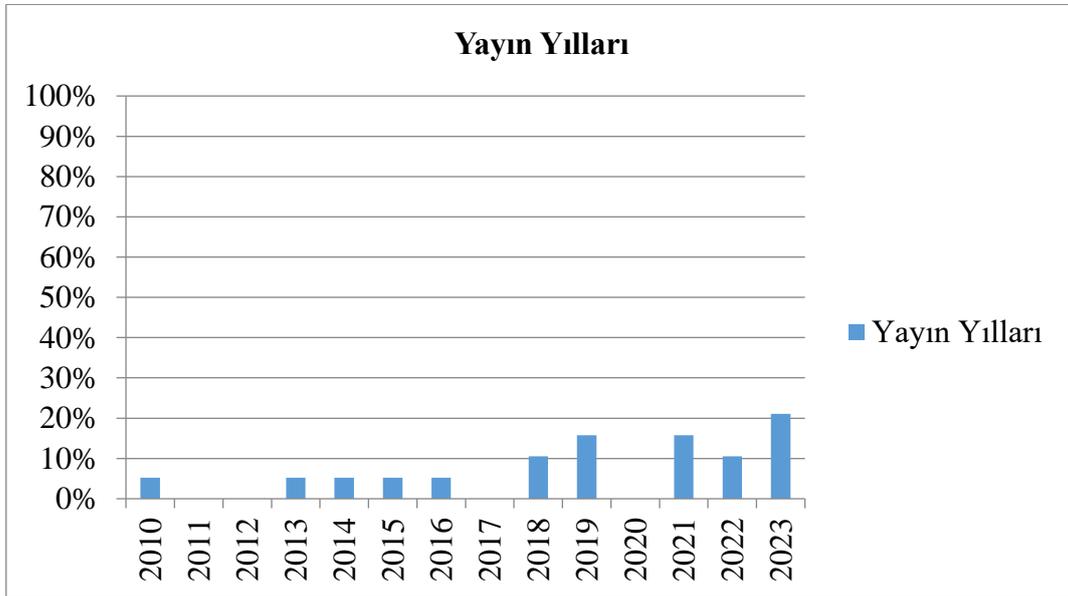
Yıllar	Tezler	<i>f</i>	%
2010	Polat (2010)	1	5,26
2011	-	0	0
2012	-	0	0
2013	Ada (2013)	1	5,26
2014	Arıkan (2014)	1	5,26
2015	Satmaz (2015)	1	5,26
2016	Gül Uysal (2016)	1	5,26
2017	-	0	0



2018	Çağlayan (2018), Sönmez (2018)	2	10,56
2019	Kenç (2019), Yıldırım (2019), Çetinsoy (2019)	3	15,78
2020	-	0	0
2021	İnci (2021), Özkan (2021), Soydan (2021)	3	15,78
2022	Özsoy (2022), Cansız (2022)	2	10,56
2023	Aydın (2023), Yüzükırmızı (2023), Karabacak (2023), Cansız (2023)	4	21,05

Araştırmanın amacı kapsamında matematik eğitimi alanında metaforik alguların incelendiği lisansüstü tezlerin yayın yıllarıyla ilgili olarak Tablo 3'e bakılırsa, 2023 yılında 4 tez (%21,05), 2019 ve 2021 yılında 3'er tez (%15,78), 2018 ve 2022 yıllarında 2'şer (%10,56) tez, 2010, 2013, 2014, 2015 ve 20 yıllarında sadece 1'er tezin yapıldığı görülmektedir. Ayrıca 2011, 2012, 2017 ve 2020 yıllarında ise hiçbir tez çalışmasının yapılmadığı görülmektedir.

Tezlerin yapıldığı yıllara göre dağılımlarının görsel olarak karşılaştırması Şekil 3'de sunulmuştur.



Şekil 3. Lisansüstü Tezlerin Yayın Yıllarına Göre Dağılımları

#### 4.4. Tezlerin Yayınlandığı Üniversitelere Göre Dağılımlarıyla İlgili Bulgular

Araştırma kapsamında incelenen lisansüstü tezlerin yayınlandığı üniversitelere göre dağılımlarına ilişkin veriler Tablo 4'te verilmiştir.



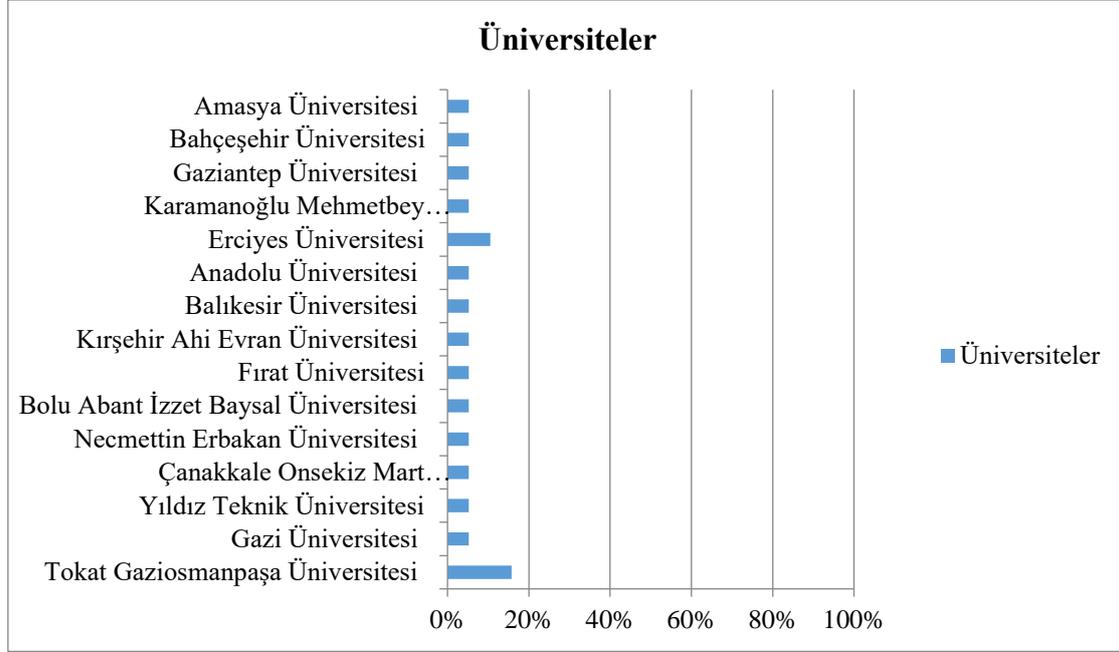
**Tablo 4.** Lisansüstü tezlerin yapıldığı üniversitelere göre dağılımları

Üniversiteler	Tezler	f	%
1 Tokat Gaziosmanpaşa Üniversitesi	Polat (2010), Özsoy (2022), Cansız (2022)	3	15,78
2 Gazi Üniversitesi	Ada (2013)	1	5,26
3 Yıldız Teknik Üniversitesi	Arıkan (2014), Sönmez (2018)	2	10,52
4 Çanakkale Onsekiz Mart Üniversitesi	Satmaz (2015)	1	5,26
5 Necmettin Erbakan Üniversitesi	Gül Uysal (2016)	1	5,26
6 Bolu Abant İzzet Baysal Üniversitesi	Çağlayan (2018)	1	5,26
7 Fırat Üniversitesi	Kenç (2019)	1	5,26
8 Kırşehir Ahi Evran Üniversitesi	Yıldırım (2019)	1	5,26
9 Balıkesir Üniversitesi	Çetinsoy (2019)	1	5,26
10 Anadolu Üniversitesi	İnci (2021)	1	5,26
11 Erciyes Üniversitesi	Özkan (2021), Yüzükırmızı (2023)	2	10,52
12 Karamanoğlu Mehmetbey Üniversitesi	Soydan (2021)	1	5,26
13 Gaziantep Üniversitesi	Aydın (2023)	1	5,26
14 Bahçeşehir Üniversitesi	Karabacak (2023)	1	5,26
15 Amasya Üniversitesi	Cansız (2023)	1	5,26

Tablo 4'te sunulan veriler incelendiğinde araştırmanın amacı kapsamında matematik eğitimi alanında metaforik algıların incelendiği lisansüstü tezlerin 15 farklı üniversite yaptırıldığı görülmektedir. Metaforik çalışmaların 2010 yılından günümüze 13 yıl boyunca en çok tez (3 tane) Tokat Gaziosmanpaşa Üniversitesinde, 2'şer tez ise Yıldız Teknik Üniversitesi ve Erciyes Üniversitesinde yapılmıştır. Tablo 4'e bakılırsa diğer üniversitelerde ise sadece 1'er tane tez çalışmasının yayımlandığı görülmektedir.



Lisansüstü tezlerin yayınlandığı üniversitelere göre dağılımlarının grafiksel olarak karşılaştırması Şekil 4’de sunulmuştur.



Şekil 4. Tezlerin Yayınlandığı Üniversitelere Göre Dağılımı

#### 4.5. Tezlerin Anahtar Kelimelerine Göre Dağılımlarıyla İlgili Bulgular

Araştırma kapsamında incelenen lisansüstü tezlerin anahtar kelimelerine göre dağılımlarına ilişkin veriler Tablo 5’te verilmiştir.

Tablo 5. Lisansüstü tezlerin anahtar kelimelerine göre dağılımları

Anahtar Kelimeler	Tezler	f	%
Matematik Faktörü	Matematik/Matematik Dersi	16	84,21
Matematik Faktörü	Metafor/Metaforik	16	84,21



	(2018), Keleş (2019), Yıldırım (2019), Çetinsoy (2019), Karabacak (2023)	9	47,36
Matematik Eğitimi/Matematik Öğretimi	Polat (2010), Sönmez (2018), İnci (2021),	3	15,78
Matematik Öğretmeni/Öğretmen Adayı	Ada (2013), Keleş (2019), Çetinsoy (2019), Özkan (2021), Yüzükırmızı (2023), Karabacak (2023)	6	31,57
Matematiksel Oyunlar	Sönmez (2018)	1	5,26
Matematiksel Yılmazlık Öğrenciler	Çağlayan (2018)	1	5,26
	Arıkan (2014), Sönmez (2018), Aydın (2023), Cansız (2023)	4	21,05
Tutum	Sönmez (2018)	1	5,26
Algı	Sönmez (2018), Keleş (2019), Çetinsoy (2019), İnci (2021), Yüzükırmızı (2023)	5	26,31
DİĞER FAKTÖRLER	Akademik Başarı	2	10,52
	Gül Uysal (2016), Aydın (2023)		
	Problem Kurma/Çözme	1	5,26
	Arıkan (2014)		

\* Aynı araştırmada birden fazla kod ifade edildiği için kod dağılımları toplamı %100 aşabilir.

Araştırmanın amacı kapsamında matematik eğitimi alanında metaforik algıların incelendiği lisansüstü tezlerin belirlenen anahtar kelimelere/sözcüklere yönelik olarak Tablo 5'e bakıldığında anahtar kelimelerin genel olarak "metafor faktörü", "matematik faktörü" ve "diğer faktörler" şeklinde kodlandığı görülmektedir.

Metafor faktörü altında "metafor/metaforik" anahtar kelimesine 16 tezde (%84,21) yer verildiği görülmektedir.

Matematik faktörü altında 3 farklı anahtar kelime-sözcük kodlanmıştır. Matematik faktörü altında "matematik/matematik dersi" anahtar kelimesine 9 tezde (%47,36), "matematik öğretmeni/öğretmen adayı" anahtar kelimesine 6 tezde (%31,57), "matematik eğitimi/öğretimi" anahtar kelimesine 3 tezde (%15,78), "matematiksels oyunlar" ve "matematiksels yılmazlık" anahtar kelimelerine ise sadece 1'er tezde (%5,26) yer verildiği görülmektedir.

Diğer faktörler altında ise 4 farklı anahtar kelime-sözcük kullanılmıştır. Bu faktör altındaki anahtar kelimelere bakılırsa "algı" anahtar kelimesiyle 5 tezde (%26,31), "akademik başarı" anahtar



kelimesine 2 tezde (%10,52), “tutum” ve “problem çözüme/kurma” anahtar kelimelerine ise sadece 1’er tezde yer verildiği görülmektedir.

#### 4.6. Tezlerin Araştırma Türlerine Göre Dağılımlarıyla İlgili Bulgular

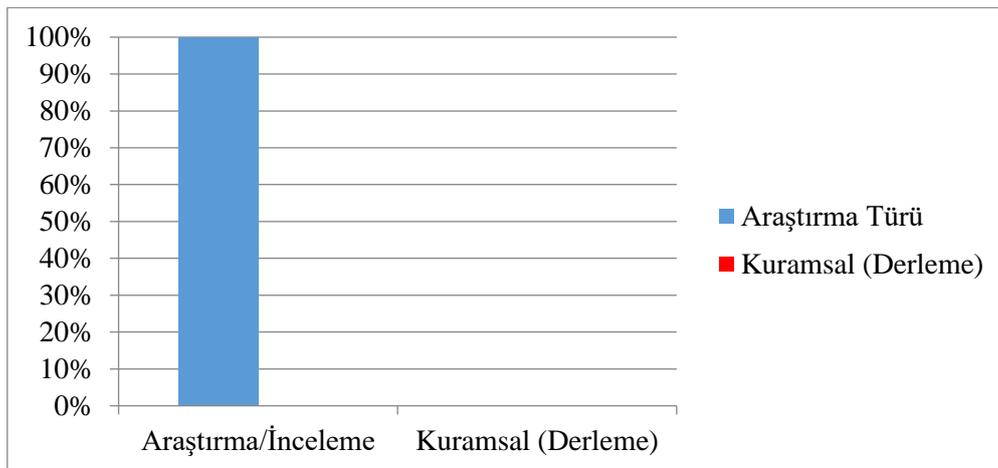
Araştırma kapsamında tematik olarak incelenen lisansüstü tezlerin araştırma türlerine göre dağılımlarına ilişkin veriler Tablo 6’de verilmiştir. .

**Tablo 6.** Lisansüstü tezlerin araştırma türlerine göre dağılımları

Araştırma Türü	Tezler	f	%
Araştırma/İnceleme	Polat (2010), Ada (2013), Arıkan (2014), Satmaz (2015), Gül Uysal (2016), Çağlayan (2018), Sönmez (2018), Keç (2019), Yıldırım (2019), Çetinsoy (2019), İnci (2021), Özkan (2021), Soydan (2021), Özsoy (2022), Cansız (2022), Aydın (2023), Yüzükırmızı (2023), Karabacak (2023), Cansız (2023)	19	100
Kuramsal (Derleme)	-	0	0

Tablo 6 incelendiğinde, araştırmanın amacı kapsamında matematik eğitimi alanında metaforik algıların incelendiği lisansüstü tezlerin 19’unun da (%100’ünün de) araştırma-inceleme türünde olduğu görülmektedir.

Tezlerin araştırma türlerine göre dağılımlarının grafiksel olarak karşılaştırması Şekil 5’de sunulmuştur.



**Şekil 5.** Lisansüstü Tezlerin Araştırma Türlerine Göre Dağılımı



#### 4.7. Lisansüstü Tezlerin Örneklem Türlerine Göre Dağılımlarıyla İlgili Bulgular

Araştırma kapsamında incelenen lisansüstü tezlerin örneklem türlerine göre dağılımlarına ilişkin veriler Tablo 7’de verilmiştir.

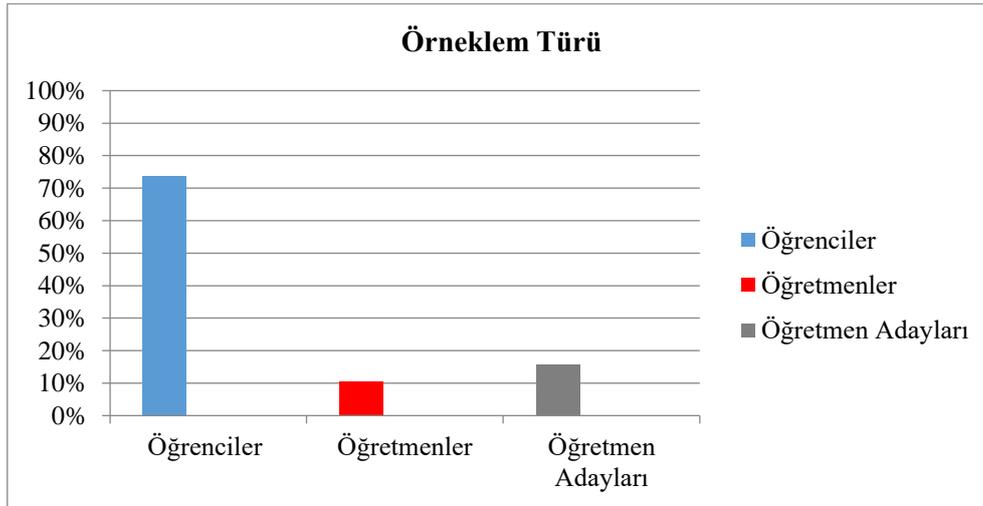
**Tablo 7.** Lisansüstü tezlerin örneklem türlerine göre dağılımları

Örneklem Türü	Tezler	f	%
Öğrenciler	Polat (2010), Ada (2013), Arıkan (2014), Satmaz (2015), Çağlayan (2018), Sönmez (2018), Keleş (2019), Yıldırım (2019), Soydan (2021), Özsoy (2022), Cansız (2022), Aydın (2023), Karabacak (2023), Cansız (2023)	14	73,68
Öğretmenler	Özkan (2021), Özsoy (2022)	2	10,52
Öğretmen Adayları	Çetinsoy (2019), Özkan (2021), İnci (2021)	3	15,78

*\*Bir çalışma birkaç örneklem türü kategorisi altında incelenebildiğinden frekans çalışmaya dahil edilen toplam tez sayısı ve yüzdeler toplamı %100’ü aşan değerler olabilir.*

Araştırmanın amacı kapsamında tematik olarak incelenen lisansüstü tezlerin örneklem türüne göre dağılımları incelendiğinde 14 tezde (%73,68’i) öğrenciler, 3 tezde (%15,78’i) öğretmen adayları, 2 tezde (%10,52’i) ise öğretmenlerin örneklem grubu olarak seçildiği görülmektedir.

Lisansüstü tezlerin örneklem türlerine göre dağılımlarının grafiksel olarak karşılaştırması Şekil 6’de sunulmuştur.



**Şekil 6.** Lisansüstü Tezlerin Örneklem Türlerine Göre Dağılımı



#### 4.8. Lisansüstü Tezlerin Araştırma Modellerine Göre Dağılımı İle İlgili Bulgular

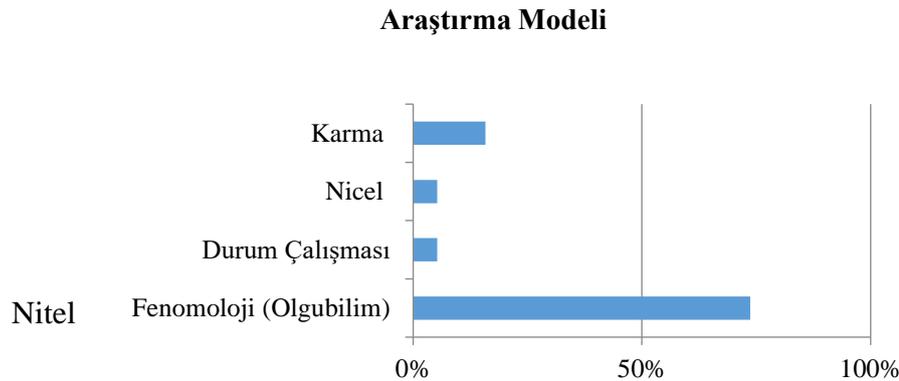
Araştırma kapsamında incelenen lisansüstü tezlerin araştırma modellerine göre dağılımlarına ilişkin veriler Tablo 8’de verilmiştir.

**Tablo 8.** Lisansüstü tezlerin araştırma modellerine göre dağılımları

Teknikler	Tezler	f	%
Nitel	Fenomenoloji (Olgubilim)	14	73,68
	Durum Çalışması	1	5,26
Nicel	Gül Uysal (2016)	1	5,26
Karma	Arıkan (2014), Sönmez (2018), Aydın (2023)	3	15,78

Araştırmanın amacı kapsamında matematik eğitimi alanında metaforik algıların incelendiği lisansüstü tezlerin araştırma modellerine göre dağılımları incelendiğinde 14 tezde (%73,68’i) nitel yaklaşım kapsamında Fenomenoloji (Olgubilim) modelini ve 1’er tezde ise nitel yaklaşım kapsamında durum yaklaşımı ve nicel yaklaşımın kullanıldığı görülmektedir. Nicel ve nitel yaklaşımın birlikte kullanıldığı karma araştırma yaklaşımına dayalı araştırmaların ise 3 tezde kullanıldığı görülmektedir.

Lisansüstü tezlerin araştırma modellerine göre dağılımlarının grafiksel olarak karşılaştırması Şekil 7’de sunulmuştur.



Şekil 7. Lisansüstü Tezlerin Araştırma Modellerine Göre Dağılımı



#### 4.9. Lisansüstü Tezlerin Örneklem Belirleme Yöntemlerine Göre Dağılımı

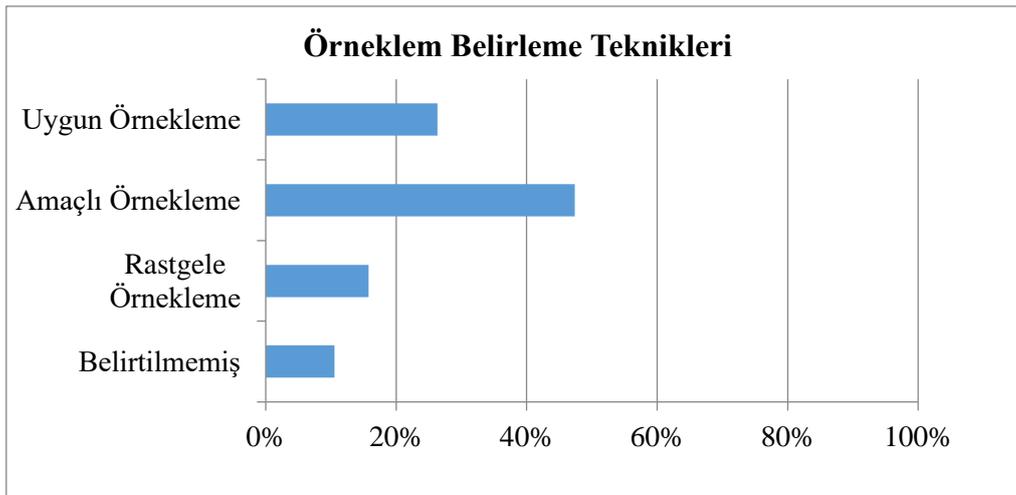
Araştırma kapsamında tematik olarak incelenen lisansüstü tezlerin örneklem belirleme tekniklerine göre dağılımlarına ilişkin veriler Tablo 9'da verilmiştir.

**Tablo 9.** Lisansüstü tezlerin örneklem belirleme tekniklerine göre dağılımları

Teknikler	Tezler	f	%
Uygun Örneklem	Polat (2010), Çağlayan (2018), İnci (2021), Özkan (2021), Karabacak (2023)	5	26,31
Amaçlı Örneklem	Ada (2013), Salmaz (2015), Sönmez (2018), Çetinsoy (2019), Soydan (2021), Özsoy (2022), Cansız (2022), Yüzükırmızı (2023), Cansız (2023)	9	47,36
Rastgele Örneklem	Arıkan (2014), Gül Uysal (2016), Aydın (2023)	3	15,78
Belirtilmemiş	Kenç (2019), Yıldırım (2019)	2	10,52

Araştırmanın amacı kapsamında matematik eğitimi alanında metaforik algıların incelendiği lisansüstü tezlerin örneklem belirleme yöntemine göre dağılımı incelendiğinde 9 tezde (%47,36'ı) amaçlı örneklem, 5 tezde (%26,31'i) uygun örneklem, 3 tezde rastgele örneklem, 2 tezde ise örneklem türünün belirtilmediği görülmektedir.

Tezlerin örneklem belirleme tekniklerine göre dağılımlarının grafiksel olarak karşılaştırması Şekil 8'de sunulmuştur.



**Şekil 8.** Lisansüstü Tezlerin Örneklem Belirleme Tekniklerine Göre Dağılımı



#### 4.10. Lisansüstü Tezlerin Veri Toplama Araçlarına Göre Dağılımlarıyla İlgili Bulgular

Araştırma kapsamında tematik olarak incelenen lisansüstü tezlerin veri toplama araçlarına göre dağılımlarına ilişkin veriler Tablo 10'da verilmiştir.

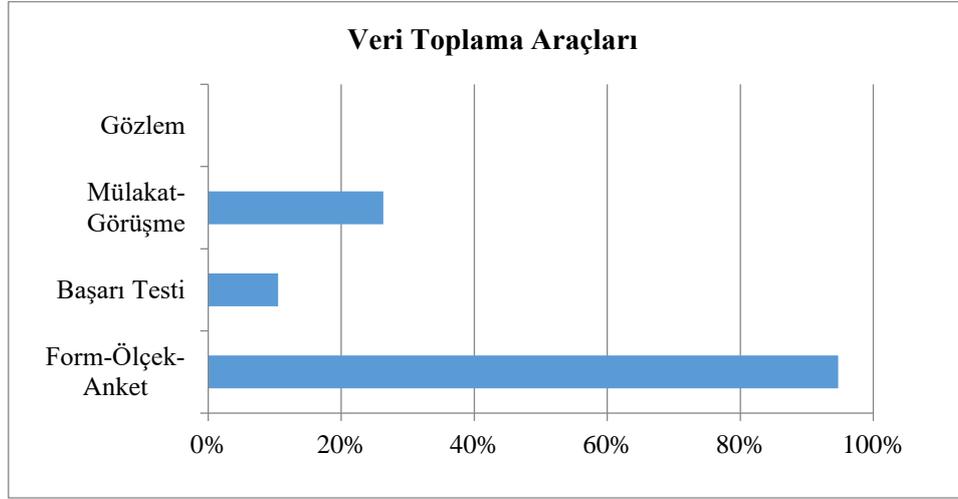
**Tablo 10.** *Lisansüstü tezlerin veri toplama araçlarına göre dağılımları*

Veri Araçları	Tezler	f	%
Form-Ölçek-Anket	Ada (2013), Satmaz (2015), Gül Uysal (2016), Çağlayan (2018), Sönmez (2018), Yıldırım (2019), Çetinsoy (2019), Kenç (2019), İnci (2021), Özkan (2021), Soydan (2021), Özsoy (2022), Cansız (2022), Aydın (2023), Yüzükırmızı (2023), Karabacak (2023), Cansız (2023)	18	94,73
Başarı Testi	Arıkan (2014), Gül Uysal (2016)	2	10,52
Mülakat-Görüşme	Polat (2010), Satmaz (2015), Kenç (2019), Özsoy (2022), Cansız (2023)	5	26,31
Gözlem	-	0	0

\* *Bir araştırmada birden fazla veri toplama aracı kullanıldığından çalışmalar farklı veri toplama araçları kategorileri altında yer alabilmektedir.*

Araştırmanın amacı kapsamında matematik eğitimi alanında metaforik algıların incelendiği lisansüstü tezlerin veri toplama araçlarına göre dağılımları incelendiğinde 18 tezde (%94,73'ü) form-ölçek-anket, 5 tezde ise mülakat-görüşme kullanıldığı görülmektedir. Ayrıca incelenen tezlerin hiç birisinde gözleme dayalı veri toplama tekniğinin kullanılmadığı da görülmektedir.

Tezlerin veri toplama araçlarına göre dağılımlarının grafiksel olarak karşılaştırması Şekil 9'da sunulmuştur.



Şekil 9. Lisansüstü Tezlerin Veri Toplama Araçlarına Göre Dağılımı

#### 4.11. Lisansüstü Tezlerin Veri Analiz Tekniklerine Göre Dağılımıyla İlgili Bulgular

Araştırma kapsamında incelenen lisansüstü tezlerin veri analiz tekniklerine göre dağılımlarına ilişkin veriler Tablo 11'de verilmiştir.

Tablo 11. Lisansüstü tezlerin veri analiz tekniklerine göre dağılımları

Analiz Teknikleri		Tezler	f	%	
Nicel	Parametrik Testler	T testi	Gül Uysal (2016)	11	5,26
		Geleneksel Vardamlı İstatistik Teknikleri	Karabacak (2023)	11	5,26
		Kümeleme Analizi	Çağlayan (2018)	11	5,26
	Non-Parametrik Testler	Ki-Kare (Chi-Square) Testi	Polat (2010), Ada (2013), Arıkan (2014), Özsoy (2022), Cansız (2022),	55	26,31
		Mann Whitney U testi	Arıkan (2014), Sönmez (2018)	2	10,52



		Metode	Referensi	Frekuensi	Oran (%)
Nitel	Betimsel Analizler	Wilcoxon Testi	Arıkan (2014), Sönmez (2018)	2	10,52
		Frekans	Polat (2010), Yıldırım (2019)	2	10,52
	İçerik Analizi	Oran	Polat (2010)	1	5,26
			Polat (2010), Ada (2013), Satmaz (2015), Kenç (2019), Yıldırım (2019), Çetinsoy (2019), İnci (2021), Özkan (2021), Soydan (2021), Özsoy (2022), Cansız (2022), Aydın (2023), Yüzükırmızı (2023), Cansız (2023)	14	73,28

\* Aynı araştırmada birden fazla kod ifade edildiği için kod dağılımları toplamı %100 aşabilir.

Araştırmanın amacı kapsamında matematik eğitimi alanında metaforik algıların incelendiği lisansüstü tezlerin veri analiz tekniklerine göre dağılımları incelendiğinde nitel yaklaşım kapsamında içerik analizi, nicel yaklaşım kapsamında parametrik, non-parametrik testler ve betimsel analiz tekniklerinin kullanıldığı görülmektedir.

Nitel analiz kapsamında 14 tezde (%73,28'i) içerik analizi kullanılmıştır.

Parametrik testler kapsamında 1'er tezde (%5,26'si) t testi ve Geleneksel Vardamlı İstatistik Teknikleri kullanılmıştır.

Non-parametrik testler kapsamında 5 tezde (%26,31'i) Ki-Kare (Chi-Square) Testi, 6 tezde ve 2'şer tezde ise Mann Whitney U testi ve Wilcoxon Testinin kullanıldığı görülmektedir.

Betimsel analiz teknikleri kapsamında ise 2'er tezde (%10,52'si) frekans, 1 tezde (%5,26'sı) oran analizi kullanıldığı görülmektedir.

#### 4.12. Lisansüstü Tezlerin Araştırma Konularına Göre Dağılımlarıyla İlgili Bulgular

Araştırma kapsamında incelenen lisansüstü tezlerin araştırma konularına göre dağılımlarına ilişkin veriler Tablo 12'de verilmiştir.



**Tablo 12.** *Lisansüstü tezlerin araştırma konularına göre dağılımları*

No	Araştırma Konuları	Tezler	f	%
1	Matematiğe ve matematik kavramına ilişkin metaforlar	Polat (2010), Ada (2013), Satmaz (2015), Çağlayan (2018), Kenç (2019), Yıldırım (2019), Çetinsoy (2019), Aydın (2023), Karabacak (2023)	8	42,10
2	Matematik öğretmenine yönelik öğrenci metaforları	Ada (2013), Kenç (2019)	2	10,52
3	Öğrencilerin matematik konularındaki (Kesirler, kümeler, doğrusal denklemler, oran-orantı, geometrik cisimler) metaforik algıları	Gül Uysal (2016), Soydan (2021), Özsoy (2022), Cansız (2022), Cansız (2023)	5	26,31
4	Öğrencilerin matematiksel problem kurma ile ilgili metaforik düşünceleri	Arıkan (2014)	1	5,26
5	Öğretmenlerin matematik öğretim sürecinde kullandıkları metaforlar	Şentürk (2015)	1	5,26
6	Zekâ oyunlarına yönelik matematik öğretmeni ve öğretmen adaylarının metaforik algıları	Özkan (2021)	1	5,26
7	Uzaktan matematik eğitime ilişkin öğrenci ve öğretmen metaforları	İnci (2021), Yüzükırmızı (2023)	2	10,52

\* Aynı araştırmada birden fazla kod ifade edildiği için kod dağılımları toplamı %100 aşabilir.

Araştırmanın amacı kapsamında incelenen lisansüstü tezlerin araştırma konularına göre dağılımları incelendiğinde 8 tezin (%42,10'u) matematiğe ve matematik kavramına ilişkin metaforlar konusu kodu altında toplandığı görülmektedir. Aynı zamanda 5 tezde (%26,31'i) öğrencilerin matematik konularındaki (Kesirler, kümeler, doğrusal denklemler, oran-orantı, geometrik cisimler) metaforik algıları koduyla, 4 tezde (%16'sı) Örgütsel değişim algı düzeyleri, 2'şer tezde (%10,52'i) matematik öğretmenine yönelik öğrenci metaforları ve Uzaktan matematik eğitime ilişkin öğrenci ve öğretmen metaforları, 1'er tezde ise Öğrencilerin matematiksel problem kurma ile ilgili metaforik düşünceleri, öğretmenlerin matematik öğretim sürecinde kullandıkları metaforlar, zekâ oyunlarına yönelik matematik öğretmeni ve öğretmen adaylarının metaforik algıları konularının araştırıldığı görülmektedir.



## SONUÇ VE ÖNERİLER

Araştırmanın bulguları incelenerek ulaşılan sonuçlar ve bu sonuçlara bağlı olarak birtakım öneriler sunulmuştur.

Matematik eğitimi alanında metaforik algıların incelendiği lisansüstü tez çalışmalarının öğrenim düzeyine yönelik bulgular incelendiğinde daha fazla yüksek lisans öğrenim düzeyinde tez çalışmalarının yapıldığı açığa çıkmıştır.

Lisansüstü tez çalışmalarının danışman unvanları ile ilgili bulgular incelendiğinde daha çok yardımcı doçent/ doktor öğretim üyesi unvanına sahip danışmanlar tarafından yürütüldüğü belirlenmiştir.

Lisansüstü tez çalışmalarının yayın yılları ile ilgili bulguları incelendiğinde en fazla tezin 2023 yılında yapılmasına rağmen 2011, 2012, 2017 ve 2020 yıllarında hiçbir tez çalışmasının yapılmadığı ortaya çıkmıştır.

Lisansüstü tezlerin yayınlandığı üniversite ile ilgili bulgular incelendiğinde Tokat Gaziosmanpaşa Üniversitesinde matematik eğitimi alanında metaforik ile ilgili akademik çalışmalarının daha fazla yapıldığı açığa çıkmıştır. Bu sonuç matematik eğitiminde metafor alanına Tokat Gaziosmanpaşa Üniversitesi lisansüstü programında daha çok ağırlık verilmesinden kaynaklanmış olabilir.

Lisansüstü tezlerin anahtar kelimelerine ilişkin bulgular incelendiğinde daha çok metafor faktörü altında “metafor/metaforik” anahtar yer verildiği ortaya çıkmıştır. Bu sonucun ortaya çıkmasında metafor alanında yapılan çalışmaların genel anlamda bu anahtar kelimeler üzerine temellendirilmiş olmasıyla açıklanabilir.

Lisansüstü tezlerin araştırma türlerine ilişkin bulgular incelendiğinde matematik eğitimi alanındaki metaforik çalışmaların tamamının araştırma-inceleme türünde olduğu ortaya çıkmıştır. Bu sonuç matematik eğitimi alanındaki çalışmaların genel olarak matematik ve matematik kavramıyla ilişkili kavramlar üzerine metaforların araştırma-inceleme çalışmalarına ağırlık verilmesinden kaynaklanmış olabilir.

Lisansüstü tezlerin örneklem türlerine ilişkin bulgular incelendiğinde matematik eğitimi alanındaki metaforik tez çalışmalarının daha çok öğrencilerden oluşan örneklem gruplarıyla yürütüldüğü ortaya çıkmıştır. Bu sonucun ortaya çıkmasında öğrenci örnekleminin matematik eğitimi kavramlarına olan metaforların ve metaforik algıların belirlenmesine yönelik çalışmalara odaklanılması ile ilişkilendirilebilir.

Lisansüstü tezlerin araştırma modellerine ilişkin bulgular incelendiğinde matematik eğitimi alanında yapılan metaforik çalışmalarında daha çok nitel yaklaşım kapsamında yer alan fenomenoloji (olgubilim) modelinin benimsendiği ortaya çıkmıştır.

Lisansüstü tezlerin örneklem belirleme tekniklerine ilişkin bulgular incelendiğinde matematik eğitimi alanında yapılan metaforik çalışma örneklemelerini belirlemede daha çok amaçlı örnekleme tekniğinin kullanıldığı ve açığa çıkmıştır. Bu sonucun ortaya çıkmasında metaforik algı çalışmalarını yapan araştırmacıların genellikle öğretmenlerden oluşması ve kendi görev yaptıkları kurumlardaki örneklemelerde araştırma süresinin daha rahat ilerletilmesi ile açıklanabilir. Ayrıca iki tezde örneklem belirleme tekniğinin belirtilmediği açığa çıkmıştır.



Lisansüstü tezlerin veri toplama araçlarına yönelik bulgular incelendiğinde daha çok form-anket-ölçek araçlarının kullanıldığı belirlenmiştir. Bu durum ile ilgili metaforik çalışmaların daha çok bilinen somut bir kavram ile soyut bir kavram arasında kurulan benzerlik ilişkisinin form-anket-ölçek gibi araçlarda yer alan cümle tamamlama etkinlikleriyle incelenbilmesine bağlı olarak tercih edilmesi etkili olmuş olabilir. Ayrıca tezlerde form-anket-ölçeklerin yanı sıra başarı testi, mülakat-görüşme gibi farklı veri toplama araçlarının kullanıldığı ortaya çıkmıştır. Bu sonucun ortaya çıkmasında metaforik çalışmalarda nitel çalışmalara ağırlık verilmesi ve buna bağlı olarak nitel ölçme araçlarının kullanılmasından kaynaklanmış olabilir.

Lisansüstü tezlerin veri analiz tekniklerine yönelik bulgular incelendiğinde ağırlıklı olarak nitel analiz yöntemlerinden içerik analiz tekniğinin kullanılmasına rağmen zaman zaman nicel yöntemlerden parametrik, non-parametrik ve betimsel analiz testlerinin de kullanıldığı belirlenmiştir. Bu sonuç metaforik çalışmaların daha çok nitel araştırma yöntemine göre yürütülmesi ve içerik analizi yöntemiyle verilerin araştırma problemine uygun olarak yanıtlanmasıyla açıklanabilir. Ayrıca nicel ve betimsel analiz tekniklerinin kullanılmasına da yapılan analizlerin farklı testlerle de desteklenmesi ile ilişkilendirilebilir.

Lisansüstü tezlerin araştırma konularına yönelik bulgular incelendiğinde matematiğe ve matematik kavramına ilişkin metaforlar ile öğrencilerin matematik konularındaki (Kesirler, kümeler, doğrusal denklemler, oran-orantı, geometrik cisimler) metaforik algıları konularına odaklandığı belirlenmiştir.

Aşağıda araştırmada ulaşılan sonuçlara dayalı olarak bazı öneriler sunulmuştur:

- Bu çalışmada açığa çıkan sonuç bağlamında matematik eğitiminde metafor ile ilgili alanın daha kapsamlı incelenbilmesi için doktora eğitim düzeyinde gerçekleştirilen lisansüstü tez çalışmalarının sayısı artırılabilir.
- Araştırma kapsamında incelenen lisansüstü tezlerde yardımcı doçent/ doktor öğretim üyesi unvanlarına sahip öğretim üyelerinin daha çok danışmanlık yaptığı sonucu dikkate alındığında profesör unvanına sahip öğretim üyelerinin de lisansüstü öğrencilerin tez danışmanlığını yapması önerilebilir.
- Bu çalışmada ortaya çıkan sonuçlara dayalı olarak matematik eğitimi alanında lisansüstü eğitim almak ve metafor alanında çalışmak isteyen eğitimci adaylarının bu çalışmalara ağırlık Üniversitenin ilgili anabilim dalına başvuruda başvurumaları önerilebilir.
- Araştırma kapsamında incelenen lisansüstü tezlerin tamamının araştırma-inceleme türünde olduğu göz önüne alındığında bu alanın daha geniş bir bakış açısıyla incelenbilmesi için kuramsal-derleme çalışmalarının yapılması önerilebilir.
- Matematik eğitimi alanında metafor ile ilgili lisansüstü tez çalışmalarında örneklem grubu olarak öğrencilerden farklı olarak örnekleme yürütülen yeni araştırmalar yapılabilir. Bu şekilde farklı örneklemlerin matematik eğitimi ile ilgili metaforları hakkında daha kapsamlı bilgiler elde edilebilir.
- Bu çalışmada açığa çıkan sonuç bağlamında lisansüstü tez çalışmalarında nitel araştırma yöntemlerin yanı sıra nitel-nicel araştırma yönteminin birlikte kullanıldığı karma araştırmalar yapılabilir. Böylelikle araştırma kapsamında toplanan nitel veriler, nicel verilerle desteklenerek daha güvenilir sonuçlara ulaşılabilir.



- Araştırma kapsamında incelemeye alınan lisansüstü tezlerin bazılarında örneklem belirleme tekniğinin belirtilmemiş olması bilimsel çalışma sürecinin nesneliği açısından önemli bir problem oluşturabilir. Bu nedenle tez çalışmalarında örneklem belirleme tekniklerinin detaylı bir şekilde raporlanması önerilmektedir.

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## The environmental policy in Poland as an element of the sustainable development strategy

Ph.D. Dorota STOKOWSKA

Helena Chodkowska University of Technology and Economics in Warsaw, Poland

### Abstract

It is in the interest of every society to develop, both economically and socially. In general, development can be defined as "a series of the following social phenomena which, on the basis of available knowledge, can be assessed as more beneficial for a given community than others"<sup>1</sup>.

More concretely, socio-economic development takes place "as a result of the accumulation, creation and enlargement of the real size of the social product, with simultaneous changes in economic institutions and relations"<sup>2</sup>. As a result of development processes, the quality of life improves, the availability and redistribution of goods and services improves, the division of labour is better, social conflicts and the possibility of economic crises are reduced.

Socio-economic development will only be sustainable if it is carried out with respect for the natural environment. That is why the importance of the so-called sustainable development has been emphasized for many years, and such development is currently the goal of conscious societies. According to European Union standards, sustainable development is "development that meets the needs of present generations without compromising the ability to meet the needs of future generations. Sustainable development is about raising people's living standards by providing them with real choices, creating an enabling environment and disseminating knowledge and better information. This should lead to a situation where we 'live well within our planet's boundaries' through smarter use of resources and a modern economy that serves our health and well-being."<sup>3</sup>

Sustainable development is a multidimensional process that entails a variety of changes in social structures, attitudes and institutions, as well as in economic growth processes, and is expected to lead to the reduction of social inequalities and the eradication of poverty. Its primary objective is to achieve a balance between the environment, the economy and society. Therefore, we can talk about three aspects (pillars) of sustainable development – environmental, social and economic<sup>4</sup>.

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<sup>1</sup> Hryniewicz J., *Czynniki rozwoju regionalnego w: Oblicza polskich regionów* pod red. nauk. B. Jałowickiego, Studia Regionalne i Lokalne, EUROREG 17 (50) Warszawa 1996 a. 90.

<sup>2</sup> Serafin P., *Identyfikacja podstawowych pojęć rozwoju regionalnego i lokalnego*, Zeszyty Naukowe / Akademia Ekonomiczna w Krakowie, 2001, nr 568, s. 85.

<sup>3</sup> *TOWARDS A SUSTAINABLE EUROPE BY 2030*, 6 European Commission COM(2019)22 of 30 January 2019 REFLECTION PAPER, s. 14

<sup>4</sup> Mensah J., *Sustainable development: Meaning, history, principles, pillars, and implications for human action: Literature review*, Cogent Social Sciences, 2019 s. 10. <https://doi.org/10.1080/23311886.2019.1653531>



In this article, the most important aspect is the environmental one, implemented, inter alia, by means of pro-ecological policy, which is one of the development policies. Article 2 of the Act on the Principles of Development Policy states that "development policy is understood as a set of interrelated activities undertaken and implemented in order to ensure the sustainable and balanced development of the country, socio-economic, regional and spatial cohesion, increasing the competitiveness of the economy and creating new work places on a national, regional or local scale."<sup>1</sup>

Environmental policy consists in setting such norms and principles as well as conducting specific actions by the state or its agencies that will ensure the rational use of resources and values of the natural environment and its proper protection. In order to implement the environmental policy in Poland in the "National Environmental Policy 2030 – Development Strategy in the Area of Environment and Water Management" (PEP2030) was adopted on 16 July 2019<sup>2</sup>.

Its basic role is to ensure ecological security of Polish and high quality of life for all residents, as well as to strengthen the state's activities consisting in building an innovative economy while maintaining the principles of sustainable development<sup>3</sup>.

This article will discuss the individual general and specific objectives of the eco-friendly policy and their impact on the sustainable development of Polish.

“The key element ensuring safe functioning of societies in the social, economic and cultural dimension is the **environment**, including its condition, diversity and wealth. The environment shapes the conditions of people life, provides water, food, energy and many other natural resources. The quality of particular components of the environment have a strong impact on human health and comfort of life”<sup>4</sup>.

The way in which the natural environment is used determines also possibilities of socio-economic development.

**Socio-economic development** could be defined as a “(...) a process of quantitative, qualitative and structural [positive – author’s note] changes that are a result of actions of subjects taken within social (economic) practice. This changes influence life conditions in the following fields: material conditions (...), economic structure and entrepreneurship, access to public goods and services (...), relations within social system (...), environment condition, and life satisfaction”<sup>5</sup>. As a result of that development processes, the quality of life improves, the availability and redistribution of goods and

<sup>1</sup> Ustawa z dnia 6 grudnia 2006 r. o zasadach prowadzenia polityki rozwoju, Dz. U. z 2021 r. poz. 1057, z 2022 r. poz. 1079, 1846

<sup>2</sup> <https://www.gov.pl/web/srodowisko/polityka-ekologiczna-panstwa-polityka-ekologiczna-panstwa-2030>

<sup>3</sup> ibidem

<sup>4</sup> UCHWAŁA Nr 67 RADY MINISTRÓW z dnia 16 lipca 2019 r. w sprawie przyjęcia „Polityki ekologicznej państwa 2030 – strategii rozwoju w obszarze środowiska i gospodarki wodnej”, M.P.2019.794, s. 17

<sup>5</sup> Liwiński M., *The evolution of idea of socio-economic development*, EKONOMIA I PRAWO. ECONOMICS AND LAW, Volume 16, Issue 4, December 2017, s. 451



services improves, the division of labour is better, social conflicts and the possibility of economic crises are reduced.

Socio-economic development will be continuous and sustainable only if it is carried out with respect for the natural environment. That is why the importance of the so-called **sustainable development** has been emphasized for many years, and such development is currently the goal of conscious societies. According to European Union standards, sustainable development is "development that meets the needs of present generations without compromising the ability to meet the needs of future generations"<sup>1</sup>.

Sustainable development means socio-economic development achieved with respect for the natural environment, its limitations on the one hand, and its values on the other. So, sustainable development is based on three pillars: economic growth, environmental protection and social equality<sup>2</sup> and its primary objective is to achieve a balance between them.

The state actively participates in shaping socio-economic development – it defines its framework, indicates directions, disciplines socially harmful activities, etc. The role of the state is particularly important in shaping the environmental dimension of development – the society understands economic and social issues more, but is not always aware of the need to care for the natural environment. Hence, the issue of conducting environmental policy becomes important.

Environmental policy consists in setting such norms and principles as well as conducting specific actions by the state or its agencies that will ensure the rational use of resources and values of the natural environment and its proper protection. Environmental policy in Poland is treated as a one of the **development policies**, which further underlines its importance. Article 2 of the Act on the Principles of Development Policy states that "development policy is understood as a set of interrelated activities undertaken and implemented in order to ensure the sustainable and balanced development of the country, socio-economic, regional and spatial cohesion, increasing the competitiveness of the economy and creating new work places on a national, regional or local scale<sup>3</sup>."

In order to implement the environmental policy in Poland, inter alia, the "National Environmental Policy 2030 – Development Strategy in the Area of Environment and Water Management" (PEP2030) was adopted on 16 July 2019<sup>4</sup>.

Its basic role is to ensure sustainable development in Poland basing on environmental pillar. PEP2030 diagnoses the current state and trends of changes in the natural environment in Poland, indicates the basic problems and sets out the directions of actions that should be taken in order to be able to enter the path of sustainable development.

<sup>1</sup> TOWARDS A SUSTAINABLE EUROPE BY 2030, 6 European Commission COM(2019)22 of 30 January 2019 REFLECTION PAPER, s. 14

<sup>2</sup> Mensah J, *Sustainable development: Meaning, history, principles, pillars, and implications for human action: Literature review*, Cogent Social Sciences, 2019 s. 9. <https://doi.org/10.1080/23311886.2019.1653531>

<sup>3</sup> Ustawa z dnia 6 grudnia 2006 r. o zasadach prowadzenia polityki rozwoju, Dz. U. z 2021 r. poz. 1057, z 2022 r. poz. 1079, 1846

<sup>4</sup> UCHWAŁA Nr 67 RADY MINISTRÓW z dnia 16 lipca 2019 r. w sprawie przyjęcia „Polityki ekologicznej państwa 2030 – strategii rozwoju w obszarze środowiska i gospodarki wodnej, op. cit.



Based on PEP2030 and other sources (eg own experienced)<sup>1</sup>, there are the most important challenges connected with environment in Poland:

- high carbon intensity of the economy, resulting from the dominant role of coal in the production of electricity and heat;
- climate changes and changeable weather - downpours causing flooding, droughts, hailstorms;
- poor air quality, especially in cities;
- chaos of spatial development, caused by insufficient control of the investment process, mainly concerning residential development;
- problems of the so-called low emission, which is the result of the use of solid fuels (including low-quality coal) and waste for individual heating of buildings, exploitation and technological inadequacy of furnaces and small local boiler rooms, as well as low energy standard of buildings;
- unsatisfactory condition of water management infrastructure;
- general decline in the natural values of the country;
- low level of implementation of the concept of circular economy (CE) in Poland, which covers all stages of the life cycle and affects both the social and economic spheres;
- insufficient level of eco-innovation of Polish enterprises;
- lack of clearly indicated responsibility for the state of nature;
- insufficient financing.

These challenges are compounded by the following trends (also listed in PEP2023)<sup>2</sup>

- the increasing effects of climate change,
- increasing competition for natural resources,
- increasing pressure on ecosystems,
- the increasingly important negative impact of the environment on human health,
- depletion of existing sources of financing for environmental protection.

In response to the above trends and environmental problems in Poland, the basic objectives and directions of action within the framework of environmental policy have been formulated. They have been defined in such a way as "to harmonise environmental issues with the economic and social needs"<sup>3</sup> so - in a way that allows to embark on the path of sustainable development.

The main objective of environmental policy is the broadly understood development of the potential of the environment for the benefit of citizens and entrepreneurs. This objective is complemented by specific objectives and horizontal objectives (horizontal objectives support the achievement of environmental objectives). Intervention directions have been assigned to each objective, and within the

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<sup>1</sup>Ibidem, s. 17-28

<sup>2</sup> Ibidem, s. 29

<sup>3</sup> Ibidem, s. 46



intervention directions, specific actions have been described to achieve the objectives. At the same time, these activities are methods for achieving environmental sustainability.

The table 1 presents a summary of the objectives and direction of the intervention.

Table 1. Objectives and direction of intervention of PEP2030

Objectives	Direction of intervention
<b>Specific objective I: Environment and health. Improvement of environmental quality and ecological safety</b>	<ul style="list-style-type: none"> <li>• Sustainable water management, including ensuring access to clean water for society and the economy and achieving good water status;</li> <li>• Elimination of sources of pollutant emissions into the air or significant reduction of their impact;</li> <li>• Protection of the earth's surface, including soils;</li> <li>• Counteracting environmental hazards and ensuring biosecurity, nuclear and radiation protection.</li> </ul>
<b>Specific objective II: Environment and economy. Sustainable management of environmental resources</b>	<ul style="list-style-type: none"> <li>• Management of natural and cultural heritage resources, including conservation and improving the status of biodiversity and landscape;</li> <li>• Supporting multifunctional and sustainable forest management;</li> <li>• Waste management towards a circular economy;</li> <li>• Management of geological resources through development and implementation of the country's raw materials policy;</li> <li>• Support for the implementation of eco-innovation and dissemination of best available BAT techniques</li> </ul>
<b>Specific objective III: Environment and climate. Climate change mitigation and adaptation and disaster risk management</b>	<ul style="list-style-type: none"> <li>• Combating climate change;</li> <li>• Climate change adaptation and disaster risk management.</li> </ul>
<b>Horizontal objective: Environment and education. Developing competences (knowledge, skills and attitudes) ecological society</b>	<ul style="list-style-type: none"> <li>• Environmental education, including shaping sustainable consumption patterns.</li> </ul>
<b>Horizontal objective: Environment and administration. Improving the efficiency of environmental instruments</b>	<ul style="list-style-type: none"> <li>• Improvement of the environmental control and management system and improvement of the financing system.</li> </ul>

Source: own elaboration based on: UCHWAŁA Nr 67 RADY MINISTRÓW z dnia 16 lipca 2019 r. w sprawie przyjęcia „Polityki ekologicznej państwa 2030 – strategii rozwoju w obszarze środowiska i gospodarki wodnej”, M.P.2019.794, s. 51



Within each direction of intervention, specific actions are foreseen. In the following article, it is impossible to list all of them and highlight their impact on the possibility of achieving sustainable development. Therefore, only a selected few will be presented (see table 2).

Table 2. Through environmental policy to sustainable development – directions of intervention, specific action and their results in the context of sustainable development.

Direction of intervention	Actions	Direct results	Main result
<b>Sustainable water management, including ensuring access to clean water for society and the economy and achieving good water status</b>	Eg protection against floods and droughts, water supply of adequate quality, sewage disposal and treatment	Eg healthier society, reduction of healthcare expenditures, reduction of agriculture costs or increasing prices of food	SUSTAINABLE DEVELOPMENT
<b>Elimination of sources of pollutant emissions into the air or significantly reduce their impact</b>	eg. elimination of the „low emissions”, appropriate spatial planning and protection of aeration corridors and wedges	eg. Air pollution is reducing people's life expectancy and increasing medical expenses, so reduction of pollution gives people a better, cheaper and longer life	
<b>Protection of the earth's surface, including soils</b>	Eg. Protecting the productivity of agricultural land, reducing pollution of soil, protecting before physical changes such as compaction and soil sealing	Eg. Better food, lower costs of agriculture (less fertilizers, better productivity), food security, lower risk of floods	
<b>Counteracting environmental hazards and ensuring biosecurity, nuclear and radiation protection</b>	Eg Improving the qualifications of staff dealing with environmental protection against noise and electromagnetic fields or supervising the safe use of ionizing radiation; Ensuring safety radiation protection, especially in the context of plans to build nuclear power units; regulation of the conditions for conducting activities involving genetically modified organisms	Eg more safety life, without unexpected side effects of using new technologies, preparation to using more effective nuclear energy	



<p><b>Support for the implementation of eco-innovation and dissemination of best available BAT techniques</b></p>	<p>Eg Implementation and promotion of Environmental Technology Verification (ETV) System, which aims to provide independent and reliable information on innovative environmental technologies, Supporting R&amp;D works in the field of innovative environmental technologies.</p>	<p>Eg Better technology, healthier environment, using renewables – higher GDP</p>
<p><b>Environmental education, including shaping sustainable consumption patterns</b></p>	<p>Ecological education</p>	<p>Environmental education aimed at developing a society that accepts interdisciplinary principles of sustainable and sustainable development of the country, with the skills to assess the state of ecological security and to take action to improve it, as well as aware of the need to take care of the common cultural and natural heritage.</p> <p>Environmental education is also a basic condition for changing social practices towards a sustainable consumption model</p>

Source: own elaboration based on: UCHWAŁA Nr 67 RADY MINISTRÓW z dnia 16 lipca 2019 r. w sprawie przyjęcia „Polityki ekologicznej państwa 2030 – strategii rozwoju w obszarze środowiska i gospodarki wodnej”, M.P.2019.794

### Summary

1. The key element ensuring safe functioning of societies in the social, economic and cultural dimension is the environment.
2. Process of socio-economical development should be sustainable, based on respect for the natural environment.
3. Sustainable development is supported by economic policy, among others by environmental policy
4. The main strategic document in field of environment in Poland, regulated matters of environmental policy, is National Environmental Policy 2030 – Development Strategy in the Area of Environment and Water Management" (PEP2030)
5. Its basic role is to ensure ecological security of Poland and high quality of life for all residents, as well as to strengthen the state's activities consisting in building an innovative economy while maintaining the principles of sustainable development; analysis of declared activities shows that each of them contributes to the sustainable development.



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7. Ustawa z dnia 6 grudnia 2006 r. o zasadach prowadzenia polityki rozwoju, Dz. U. z 2021 r. poz. 1057, z 2022 r. poz. 1079



## Academic Procrastination: Inevitable Disaster or Irresponsible

Ass. of professor, Mammadov Jeyhun Hasan oqlu

Sumgait State University, Azerbaijan

[j.mamedov@gmail.com](mailto:j.mamedov@gmail.com)

### Abstract

The article is devoted to the study of the problem of academic procrastination in the context of students' educational activities. The article also presents the results of an empirical study.

In psychology, procrastination means deliberately postponing the implementation of planned actions, despite the fact that this will entail certain problems. It can affect any area of the subject's activity: labor (failure to implement a project on time, submit work on time), social (postponing important phone calls, meetings, answering letters, etc.), household (postponing planned repairs, avoiding doing household chores). duties, etc.) etc.

According to available data, procrastination is one of the significant factors causing learning difficulties. In this regard, a separate direction in the study of procrastination is identified - the so-called academic procrastination.

Therefore, we can conclude that academic procrastination, which is mainly manifested by delays in completing coursework, current assignments, postponing preparation for exams until the last day, etc., is accompanied by a deterioration in student grades and, accordingly, a decrease in overall performance.

Academic procrastination involves a delay in completing academic tasks and is associated with poor study skills, disorganization, forgetfulness, and general behavioral rigidity. The consequence of this behavior in most cases is a decrease in academic performance and learning effectiveness. Despite the widespread prevalence of this psychological phenomenon, there are practically no studies of this kind in our country. It is hoped that new data will bring greater clarity to the study of the sources of academic procrastination and, accordingly, ways to cope with it.

Based on the purpose of the study, a diagnostic complex was constructed, including the following methods: "Student Procrastination Questionnaire" (C. Lay, tested by T. Yu. Yudeeva), "Diagnostics of typologies of psychological defense" (R. Plutchik adapted by L. I. Wasserman), "Coping Methods Questionnaire" (R. Lazarus, S. Folkman, adapted by L. I. Wasserman).

During the study, the following results were obtained:



1. A negative relationship was found between academic procrastination and student performance. Therefore, we can conclude that academic procrastination is accompanied by a deterioration in students' grades and, accordingly, a decrease in overall performance.

2. Student procrastinators often use the following unproductive coping strategies: "escape-avoidance", "confrontation", "distancing", "accepting responsibility". Also, the most characteristic defense mechanisms for them are "replacement" and "regression".

Prospects for studying. Further study of academic procrastination seems highly promising due to the lack of knowledge of this social phenomenon and requires an assessment of its prevalence among schoolchildren of different ages, college students, university students of various specialties, etc. Further development and creation of normative indicators of academic procrastination and the study of its psychological determinants are also necessary, creation of psychological correction programs.



## The Essence of the Concept of Generalization in Psychology

Dos. Lala ALIYEVA

Department of pedagogy and psychology

Sumgait State University. Azerbaijan

### Abstract

The process of generalization in psychology has not been sufficiently investigated. The reason for this is the complexity of the concept of generalization, its penetration into various fields of science more and more. The concept of "generalization" was first brought to the scientific literature by I.P. Pavlov. The scientist explained the essence of the concept from a physiological point of view, as it was based on the results of his researches on physiology. However, in modern times, the concept of generalization is used not only in psychology, but also in research related to various fields of medicine, cartography, management, and creativity.

I. P. Pavlov considered the phenomenon of generalization in the context of thinking. One of the important aspects of I.P. Pavlov's approach to the issue is that he reveals the connection between the phenomenon of generalization and the associations created directly or indirectly by the world around us. I.P. Pavlov shows that the emergence of thought is related to association. How true the idea is, how well it meets the requirements of correct generalization depends on the nature of the association and the level of neural connections it creates.

As noted by I.P. Pavlov, this is a part of thinking, a stage, and the associative relationship is analyzed in the thinking process. Here, the analytical ability of the receptors and the cortex of the large hemispheres of the brain come into play, the nature of conditioned stimuli is revealed. Two cases arise. Either correct generalization occurs or reflexes triggered by previous associations result in generalization.

The outcome of generalization is highly dependent on whether the irradiation is associated with arousal or retardation. Retardation and arousal are related to the mental processes involved in the formation of conditioned reflexes. To what extent and at what level do the receptors' analytical capabilities come into play? The correct answer to this question is an important factor in the formulation of generalization as a concept.

**Keywords:** generalization, event, thinking, in the context, in the attitude of I.P. Pavlov, to the issue.



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## The Impact of Health Expenditures on Human Development Indicators

**Mehmet Ali POLAT**

*Assoc. Prof. Dr., Bursa Uludağ University, Faculty of Economics and Administrative Sciences, Economics, Özlüce/Bursa, TÜRKİYE.*

*E-mail: [mapolat@uludag.edu.tr](mailto:mapolat@uludag.edu.tr), ORCID ID: 0000-0001-9239-8228.*

### Abstract

At the global level, it is a fact that growth and development do not occur at the same pace in all countries. Since 1990, the United Nations Development Programme has published Human Development Reports, which calculate the Human Development Index (HDI) for each country. This index is important because it provides an alternative to one-dimensional measures of development based on Gross Domestic Product (GDP) calculations. The index has three distinct dimensions. The basic indicators of the Human Development Index (HDI) used to explain human development are education, health and standard of living (income). According to this index, health services must be accessible and adequate. Expenditure on health services, which are very important for society, is one of the main components of social sector expenditure for any country. Since the mid-20th century, with the growth of development and welfare-oriented approaches in the economy, the health sector, which has a significant external effect on society and the economy, has come to the fore. As a result, more resources have been allocated to health spending within development-oriented public programmes. Health expenditure includes all expenditure on the provision of health services, family planning activities, nutrition activities and emergency health assistance. Although increasing health spending in recent years has been associated with better health outcomes, especially in low-income countries, there is no accepted level of spending as a benchmark for health spending. Whether health expenditure affects the HDI, as well as many other indicators of social welfare and level of development, has been the subject of various studies. One of the most important economic characteristics of health services is that they generate positive externalities, both for the individual receiving the service and for society as a whole, starting from the individual's environment. The fact that health services are so effective in the economy makes it necessary for government to intervene effectively in this area through health spending. All over the world, countries are trying to develop their own health systems in order to make progress both in human development and in ensuring fairness in the distribution of income. In this context, it is essential for states to allocate more resources to health services for development purposes. This study analyses the relationship between health expenditure and the Human Development Index in the E-7 countries, using annual data for the period 2000-2022. As a result of the cointegration test, it was found that there is a long run relationship between health expenditure and human development index.

**Keywords:** E-7 Countries, Health Expenditure, Human Development Index, Panel Data Analysis.



## 1. Introduction

At the global level, it is a fact that growth and development do not take place at the same pace for all countries. Since 1990, the United Nations Development Programme has published Human Development Reports, which calculate the Human Development Index (HDI) for each country. This index is important because it provides an alternative to one-dimensional measures of development based on Gross Domestic Product (GDP) calculations. The index has three distinct dimensions. The basic indicators of the Human Development Index (HDI) used to explain human development are education, health and standard of living (income). According to this index, health services must be accessible and adequate. Expenditure on health services, which are very important for society, is one of the main components of social sector expenditure for any country (Ray and Sarangi, 2021: 467).

Health is one of the three main components of human development. In calculating the HDI, the life expectancy index is used as the health component. In this sense, the general level of health in a society affects life expectancy. It is assumed that there is a positive correlation between the level of general health and the level of economic development. If the general level of health in society is improved, a number of very important economic benefits will result (Mazgit, 2002).

In recent years, one of the most fundamental criteria of development has been the relationship between health and human development. Since the middle of the twentieth century, the health sector, which has significant externalities on society and the economy, has come to the fore with the growth of development and welfare-oriented approaches to the economy. As a result, more resources have been allocated to health spending in development-oriented public programmes. Health expenditure includes all expenditure on the provision of health services, family planning activities, nutrition activities and emergency health assistance. Although increasing health spending in recent years has been associated with better health outcomes, especially in low-income countries, there is no accepted level of spending as a benchmark for health spending. Whether health expenditure affects HDI, as well as many other indicators of social welfare and level of development, has been the subject of various studies (Kızılkaya and Dağ, 2021).

One of the most important economic characteristics of health services is that they generate positive externalities, both for the individual receiving the service and for society as a whole, starting from the individual's environment. The fact that health services are so effective in the economy makes it necessary for the state to intervene effectively in this area through health spending. By developing their own health systems, countries around the world are attempting to make progress both in terms of human development and equity in the distribution of income. In this context, it is essential for states to allocate more resources to health services for development purposes (Stiglitz, 1988).

## 2. Literature Review

There are many studies in the literature that analyse the relationship between the Human Development Index and health expenditure. According to the results obtained in the study; in general, increasing health expenditure has a positive effect on the Human Development Index.



Gupta et al. (1998) examined the impact of public health expenditure on human development. In their study on the impact of fiscal policy on human capital, they found that public expenditure on human capital increased in developing countries and decreased in transition countries. As a result of their study, they found that spending on health services has a positive impact on the Human Development Index.

Gupta et al. (2002) analysed cross-sectional data for 50 developing countries and found that increased public spending on health and education can improve school performance and reduce mortality.

Opreana and Mihaiu (2011) analysed the effectiveness of health spending and its impact on human development using multiple regression analysis in their study of EU countries. In EU countries that allocate very high levels of resources to public health, a very high and significant relationship was found between the efficiency of the health system and the Human Development Index.

Razmi et al. (2012) analysed the relationship between health expenditure and human development index in Jeneponto, South Sulawesi using multiple regression analysis. As a result of their study, they found that health expenditure has a positive impact on the Human Development Index.

Bundala (2012); in his study conducted in 40 countries using the regression analysis method, concluded that the improvement in health expenditure has a positive impact on the Human Development Index.

Iheoma (2012) analysed the relevant data of Nigeria, Ghana and Senegal for the years 2000-2010 using the least squares method. As a result of his study, he concluded that health expenditure positively affects the Human Development Index in these countries.

Prasetyo and Zudhi (2013) analysed the relevant data for 81 countries for the period 2006-2010 using the Data Envelopment Analysis method. Although increases in health expenditure do not have the same effect in all countries, they do contribute positively to human development.

Gebregziabher and Nino-Zarazua (2014) analysed the relevant data of 55 developing and transition countries using the panel data analysis method. As a result of their study, they found that government social expenditure (health, education and welfare) has a positive impact on the human development index.

Agarwal (2015) analysed the data of the states of India for the period 1991-2008 by using panel data analysis method. As a result of his study, he found that health expenditure has a positive impact on the Human Development Index.

Barouni et al. (2015) analysed the relationship between health expenditures and the Human Development Index in 16 high-income countries, 13 middle-income countries and 22 low-income countries. As a result of their study using the relevant data for the years 2000-2010, they found that health expenditure has a positive effect on the Human Development Index. This effect was found to be particularly strong in low-income countries.

Sofilda et al. (2015) examined the impact of public health expenditures on the Human Development Index in 33 provinces in Indonesia. As a result of their study using the multiple linear regression method, they found that health expenditures have a positive effect on the Human Development Index.



Beauty (2016), in his study conducted in 33 provinces of Indonesia, found that health expenditure has a positive impact on the Human Development Index.

Mirahsani (2016), using the relevant data of 25 Southwest Asian countries for the period 2000-2008, concluded that the increase in health expenditure has a positive effect on the Human Development Index.

Li et al. (2017) analysed the relationship between health expenditure and socio-economic development using the panel data analysis method for 17 regions in Shandong Province, China for the period 2000-2015. As a result of the study, it was found that health expenditure has a positive impact on human development.

Pahlevi (2017) in his study based on 33 provinces in Indonesia, analysed the relevant data for the period 2008-2021 using the regression and exploratory data analysis method. He concluded that health expenditure has a negative impact on human development.

Edeme et al. (2017) analysed the impact of public health expenditure on health indicators using multivariate regression analysis method, using data from Nigeria for the period 1981-2014. As a result of their study, they found that the increase in health expenditure has a positive impact on the human development index.

Fadilah et al. (2018) analysed the relevant data for the period 2010-2015 in 38 provinces and districts in East Java using the Panel Data Analysis method. As a result of their study, they found that health expenditure has a positive impact on the Human Development Index.

Chavarria and Bruno (2019) analysed the relevant data of more than 300 municipalities in Bolivia using the two-stage least squares method. As a result of their study, they found that public spending on health increases the level of human development.

Reddy and Narsi Reddy (2019) analysed the relevant data of India for the period 2001-2015 using Togit regression analysis. As a result of their study, they found that health expenditure has a positive impact on the Human Development Index.

Erasmus (2021) analysed the relevant data of Nigeria for the period 1960-2019 using the least squares method. As a result of his study, he found that health expenditure has a positive but insignificant effect on the Human Development Index.

Nurjannah et al. (2022) analysed data from the Indonesian province of South Sulawesi for the period 2009-2018 using multiple linear regression analysis and concluded that health expenditure has a positive effect on the Human Development Index.

### 3. Data Set and Econometric Method

This study examines the relationship between health expenditures and the human development index (HDI) in the E-7 countries (Brazil, China, Indonesia, India, Mexico, Russia and Turkey) using Fourier-based panel data methods based on annual data for the period 2000-2018. The share of health expenditures in gross domestic product (GDP) and the HDI are used as data. The data on health



expenditure were obtained from the World Bank website, while the data on the human development index (HDI) were obtained from the United Nations Development Programme database.

In the analysis section of the study, the existence of horizontal cross-section dependence was initially investigated. This was followed by the application of the panel LM (Im et al., 2005) unit root test with breaks, which was employed to ascertain the stationarity properties of the variables. The existence of a cointegration relationship between the variables was then examined using the fractional frequency panel Fourier cointegration test, which was proposed by Olayeni et al. (2020). In the final stage of the econometric analysis, the direction of causality between the variables was investigated using the panel Fourier causality test (Yilanci and Gorus, 2020).

### 3.1 Panel Fourier Coherence Test

Panel cointegration tests are employed to ascertain the long-run relationship between the variables utilised in the analysis. In order to apply panel cointegration tests, the series must be stationary at the first level. Given that the variables employed in this study are stationary at the first level, there is no issue in applying cointegration tests. Consequently, Pedroni (1999, 2004) and Kao (1999) cointegration tests were employed to ascertain the existence of a long-run relationship between the human development index and public education expenditures, public health expenditures and public social protection expenditures.

In order to apply the test, equation (1) is estimated in the initial step (Yilanci and Kilci, 2021: 14).

$$Y_{i,t} = \beta_{0,i} + \beta_{1,i} Z_{i,t} + v_{i,t} \quad (1)$$

The residuals are then obtained by equation (2).

$$\hat{v}_{i,t} = Y_{i,t} - (\hat{\beta}_{0,i} + \hat{\beta}_{1,i} Z_{i,t}) \quad (2)$$

### 3.2. Panel FMOLS Test

FMOLS (Full Modified Ordinary Least Square) test developed by Pedroni (2000) is a test that allows the coefficient and direction estimation of the series. The FMOLS test ensures heterogeneity across horizontal sections. In this respect, it takes into account the presence of the constant term, the error term and the correlation between the differences of the independent variables (Egeli and Egeli, 2007). Pedroni (2000) used Monte Carlo simulations to analyse the characteristics of small samples and obtained positive results (Pedroni 2000: 93).



#### 4. Empirical Findings

Pesaran (2006) stated that in case of horizontal cross-section dependence, ignoring this situation may lead to bias and dimension distortion problems. Therefore, in this study, the presence of horizontal cross-section dependence between the units was investigated before the stationarity test. The results of the horizontal cross-section dependence test are given in Table 1.

**Table 1: Yatay Kesit Bağımlılığı Testi Sonuçları**

Methodology	ige	sh
Breusch-Pagan LM	363.45 (0.000)	80.18 (0.000)
Pesaran LM	44.84 (0.000)	6.08 (0.000)
Deviation Adjusted LM	44.68 (0.000)	6.88 (0.000)

Note: The symbols \*, \*\* and \*\*\* indicate statistical significance at the 1%, 5% and 10% levels, respectively. Values in parentheses indicate p-values.

The results of the Breusch-Pagan LM, Pesaran LM and Deviation Adjusted LM tests indicate that the null hypothesis of no horizontal cross-sectional dependence is rejected for the HDI and health expenditure variables. This implies that there is horizontal cross-sectional dependence among the panel members. In other words, any shock occurring in one of the countries also affects other countries. Consequently, panel data methods that account for horizontal cross-sectional dependence should be employed in the stationarity tests of the data.

#### 5. Result

This study examines the relationship between health expenditures in E-7 countries, which represent a significant proportion of the global economy, and human development index (HDI) indicators. To this end, the study employs annual data from E-7 countries over the period 2000-2022 to investigate the relationship between health expenditures and HDI. The analysis investigated the existence of horizontal cross-sectional dependence, which was found to exist among members. To reveal the stationarity properties of the variables, a panel LM unit root test with breaks was used. The results of the unit root test show that the HDI and health expenditure series become stationary when first differences are taken. The existence of a cointegration relationship between the variables was investigated using a panel Fourier cointegration test. The cointegration test results indicate the existence of a long-run relationship between health expenditures and HDI in the E-7 countries. The analysis revealed a positive and statistically significant relationship between public health expenditures and human development, in line with economic theory and expectations. In the 1991-2013 period, a 1% increase in public health expenditures was found to result in a 0.06% increase in the human development index value.

The results of the analysis indicate that health expenditures exert an impact on human development. Consequently, it is recommended that the government increase health expenditures in terms of



quantity and quality in order to achieve a higher human development index. The acceptance of the improvement in the human development index by policy makers as a general framework for the future will contribute to the welfare and sustainable development of the countries concerned.

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## **Rural Political Dynamics in Indonesia: A Case Study of Genuine Democracy and Leadership Selection in Payaman Village**

**Gitadi Tegas SUPRAMUDYO**

**Public Administration Departement**

**Social & Politics Faculty, Airlangga University, Indonesia**

### **Abstract**

This paper aims to explore the dynamics of democratic governance and leadership selection through a case study of village head elections in Payaman, Solokuro District, Lamongan Regency, Indonesia, conducted in December 2021. The primary objective is to scrutinize the degree to which these elections embody principles of good governance and participatory democracy at the grassroots level. The study employs a qualitative research approach, utilizing data collected through interviews and observations. Semi-structured interviews were conducted with key stakeholders, including village residents, election officials, and candidates, to gain insights into the selection process, perceptions of democracy, and governance dynamics. Observations were made during campaign events and election proceedings to understand the interaction between candidates and the electorate. The findings reveal a multifaceted picture of democratic governance and leadership selection in Payaman Village. The village head elections were characterized by intense competition among candidates, reflecting a vibrant political landscape at the grassroots level. Contrary to conventional perceptions of Indonesian democracy as elitist and predatory, the election process showcased elements of participatory democracy, with active engagement from the community in candidate selection and electoral decision-making. The village operates as a hybrid model of community-led governance, where the village government represents not only a local administrative body but also a platform for community involvement in decision-making. Beyond mere local state governance, the village operates as a community-led entity, embodying a hybrid model of self-governing community and local self-government, as theorized by Zaini. While familial ties and nepotism within the village apparatus persist, efforts have been made to professionalize the administration and mitigate dynastic politics through regulatory reforms of "Lamongan Regency Regulation No. 43 of 2017". Moreover, the election process served as a catalyst for community empowerment and civic engagement, fostering a sense of ownership and accountability among residents towards village development. Contrary to oligarchic tendencies, competition among village head candidates reflects the realization of everyday politics at the village level, aligning with Antlov's conceptualization of devolving public affairs to the grassroots. Elected village heads emerged as transformative leaders capable of mobilizing community initiatives and creating a conducive political environment for collective action. This finding highlights



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the significance of inclusive community participation in grassroots governance and underscores the potential of village head elections to promote democratic principles and local development agendas.



## The Role of Agriculture in Ensuring Poland's Energy Security

Ph.D. Artur LIS

The John Paul II Catholic University of Lublin, Poland

### Abstract

Agriculture is a complex system that combines natural, economic, cultural, and political factors. This paper discusses the potential of obtaining energy from agricultural production and its significance in the country's energy security. The main source of renewable energy is biomass in solid form. The production of energy in agricultural biogas plants is becoming increasingly important, as well as the conversion of wind energy into forms useful for humans. The aim of the presentation is to indicate the directions of sustainable development of energy economy in rural areas of Poland, taking into account the energy used in modern agriculture, with an emphasis on renewable energy sources. The paper will discuss the "2030 Sustainable Development Strategy for Rural Agriculture and Fisheries," which is the basic strategic document of agricultural policy and rural development presenting goals, intervention directions, and actions to be taken by the year 2030.

Changes occurring in agriculture can be described as a revolution. A rapidly developing new field of agriculture is energy agriculture. According to the assumptions of Poland's energy policy by 2030, there is an emphasis on supporting the sustainable use of energy from renewable sources (RES). Its positive effects include, among others, increasing energy security through diversification of energy sources. In Polish conditions, renewable energy sources can have a significant share in the energy balance and contribute to improving energy supply in areas with poorly developed energy infrastructure.

Energy balance of the country involves the sustainable adjustment of supply to the forecasted demand for energy and fuel both in the short term and in the long term. It should take into account economic and ecological aspects as well as the ability to manage energy demand without limiting the satisfaction of consumers' needs for useful energy. Biogovernance for the European Union is defined as the sustainable production of renewable biological resources (plants, animals, microorganisms), as well as their rational use in the production process of food, feed, industrial goods, and bioenergy.

The European Union advocates for the development of second-generation biofuels as a means to more effectively reduce CO<sub>2</sub> emissions. The essence of second-generation biofuels lies in the utilization of waste materials that are not suitable for food production. The widespread adoption of decentralized energy sources with low capacity, generating energy locally and supplying it directly to households, is of great importance. These criteria are best met by installations using renewable energy sources such as biomass boilers, micro biogas plants, small wind turbines, and solar collectors. Utilizing energy



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from renewable sources on farms allows for the replacement of increasingly scarce and expensive non-renewable resources in agriculture, such as coal and coke, for generating electricity, heating spaces and water, and liquid fuels used to power internal combustion engines and heating.

Despite ongoing changes, the energy potential of Polish agriculture is not fully utilized. Agriculture will play a significant role in achieving goals related to renewable energy sources. In addition to supplying raw materials, rural areas can process energy resources locally and utilize them at the site of production.



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## Studies on Mathematics and Music

**Sena GÜMÜŞ**

**Fırat University, Department of Mathematics and Science Education, Türkiye**  
[senatemizer.s@outlook.com](mailto:senatemizer.s@outlook.com)

**Tayfun TUTAK**

**Fırat University, Department of Mathematics and Science Education, Türkiye**  
[tayfuntutak@hotmail.com](mailto:tayfuntutak@hotmail.com)

### Abstract

Mathematics is a branch of science. Music is a branch of art. Although mathematics and music seem independent from each other, these two branches have actually been parallel since their existence in history. The purpose of this research is to examine postgraduate thesis research relating mathematics and music in the field of education in Turkey. For this purpose, document review, one of the qualitative research designs, was used. In the research, 14 postgraduate theses available at the National Thesis Center of the Council of Higher Education were examined. These were examined in terms of thesis type (master's degree, doctorate), publication year, university where the thesis was conducted, discipline in which the research was conducted (mathematics education/music education), research method, and sample type variables using the "study review and evaluation form". In the light of the findings obtained, the results of the study were reached. Additionally, various suggestions were made as a result of the study.

**Key Words:** Mathematics, music, mathematics and music

### INTRODUCTION

Education is a period of time that starts from the womb and continues at every stage of our lives until death. We encounter education in some form at every stage of our lives, from pre-birth to now. In the early days, we learn to crawl, walk and talk. Then, we learn to share our toys and make friends. Afterwards, we continue education and training activities by adding school life. In summary, we try to improve our behaviors in line with our consciousness through education. The beginning of our school life is pre-school education. Preschool education adds value to our lives in terms of making progress in cognitive, kinesthetic, visual and many other areas and prepares us for the future (Uyanık & Kandır, 2010). Mathematics, one of the abstract and mental lessons, is one of the lessons that children have difficulty learning. Primary education; It may be possible to call it a fundamental stage in terms of



students' attitudes towards courses, their interest and therefore their academic success, and a critical stage in terms of whether they like or dislike the course. For this reason, it is necessary to raise individuals who can use mathematics efficiently in their daily lives and understand the relationship of mathematics with other disciplines (Dinçer, 2008). In addition to reflecting cultural characteristics and providing intercultural interaction, music; It is accepted that education also has an important mission. However, in terms of personality development and general culture, music education is mandatory, continuous and uninterrupted for every individual; It was stated by the "Heads of the Department of Music Education" who met in 2005 (Tarman, 2006). The aim of this research is to examine postgraduate thesis research relating mathematics and music in education in Turkey, thesis type (master's degree, doctorate), publication year, university where the thesis was conducted, discipline in which the research was conducted (mathematics education/music education), research topic, research method, sample type. to examine in terms of variables. In line with the purpose of the research, answers were sought to the following problems:

1. What is the distribution of postgraduate theses relating mathematics and music in education according to type?
2. What is the distribution of postgraduate theses relating mathematics and music in education by years?
3. What is the distribution of postgraduate theses relating mathematics and music in education according to the universities where they are written?
4. What is the distribution of postgraduate theses relating mathematics and music in education according to the discipline in which the research was conducted (mathematics education/music education)?
5. What is the distribution of postgraduate theses relating mathematics and music in education according to research methods?
6. What is the distribution of postgraduate theses relating mathematics and music in education according to sample types?

## Method

In this study, document analysis, one of the qualitative research designs, was used. Qualitative research; It represents the process of examining events and phenomena in a holistic manner in a realistic environment, and examines human and social behavior. Qualitative research; It is used to find answers to questions such as why, how and in what way (Yıldırım & Şimşek, 2008).

## Data Collection Tools

A study review and evaluation form developed by the researcher was used as a data collection tool. This form was designed to reveal the type of thesis (master's degree, doctorate), year of publication,



university where the thesis was conducted, discipline in which the research was conducted (mathematics education/music education), research method, and sample types and consisted of 6 items.

### **Analysis of Data**

Data was collected with the data collection tool and the scope of the subject to be analyzed and the reason for analysis were established. Afterwards, the questions were determined and the data were grouped using the document review method. In this study, content analysis was used to analyze the data. Content analysis is generally a scientific method that systematically examines written materials, groups them according to certain criteria, and compiles them to disseminate information and guide future research (Yıldırım & Şimşek, 2008).

### **Findings**

Mathematics is a science that has existed since the dawn of humanity and is used in almost every branch of science. For years, scientists have been constantly working to develop new methods to teach mathematics to people. One of these efforts is to teach mathematics by associating it with music. Therefore, in this study, postgraduate studies relating mathematics and music were examined under various variables. The findings obtained as a result of the investigations are given below in line with the sub-problems.

1. What is the distribution of postgraduate theses relating mathematics and music in education according to type?

It was observed that 12 of the 14 postgraduate theses were master's theses and 2 were doctoral theses.

2. What is the distribution of postgraduate theses relating mathematics and music in education by years?

It was observed that 6 of the 14 postgraduate theses were before 2010, 7 were before 2020 and 1 was after 2020.

3. What is the distribution of postgraduate theses relating mathematics and music in education according to the universities where they are written?

The universities to which the theses can be accessed in the light of the data obtained; It has been seen that there are Kırıkkale University, Abant İzzet Baysal University, Siirt University, Gazi University, Dokuz Eylül University, Ondokuz Mayıs University, Marmara University and Dicle University.



4. What is the distribution of postgraduate theses relating mathematics and music in education according to the discipline in which the research was conducted (mathematics education/music education)?

When the postgraduate theses associating mathematics and music in education were examined according to the discipline in which the research was conducted, it was seen that 6 of them belonged to mathematics education and 8 of them belonged to music education.

5. What is the distribution of postgraduate theses relating mathematics and music in education according to research methods?

When the distribution of the accessible theses according to research type was examined, it was seen that 4 of them belonged to case studies, which are descriptive research methods, 5 of them belonged to experimental design, survey method, and 5 of them belonged to experimental design with pre-test-post-test control group.

6. What is the distribution of postgraduate theses relating mathematics and music in education according to sample types?

When the distribution of postgraduate theses associating mathematics and music in education was examined according to sample type, it was seen that 9 of them used purposeful sampling, 1 of them used random sampling, 2 of them used study groups instead of sampling due to the use of quasi-experimental design method, and 2 of them used stratified sampling.

## Results

Mathematics is one of the most difficult subjects for many students in the world. Music can be used by taking a new approach in mathematics education, especially in pre-school education. In addition, the relationship between musical talent and mathematical ability can add new dimensions to education. These two disciplines have been compared and associated since ancient times. Both have an aesthetic, universal language and style. Just as a musician can recognize Bach from his first melodies, a mathematician can recognize Gauss from his first lines. The relationship between mathematics and music can be considered in various dimensions, such as the mathematics at the origin of music. The harmonic structure of music is mathematical (Karşal, 2005). It is wrong to say that it is only mathematical, but it is formatted according to certain rules. Different rules were applied in different periods of history, but there was definitely a mathematical origin. Both music used as background music and music education improve people's cognitive performance and therefore their mathematics performance. While music is a 'source of entertainment' for many people and mathematics is a 'nuisance' for many people, it would be a very rational behavior to use the positive effects of music on



mathematics education. With the acceleration of technology in recent years, the human brain has begun to be examined with various techniques. The effect of music on the human brain can be seen much more clearly thanks to these techniques. Another dimension is related to the ability relationship. A relationship between mathematical ability and musical ability can bring great innovations to education. The study of the relationship between music and mathematics dates back to the ancient Greeks. In ancient Greece, music was considered one of the four main branches of mathematics. Music according to the program of the Pythagorean school; Arithmetic is accepted on the same level as Geometry and Astronomy. Pythagoras, who discovered that different sounds can be obtained with different lengths of a string, dates back to B.C. He lived in the 6th century and did a very important job in establishing the basis of the musical series used today. Pythagoras divided a 12-piece string into two and obtained the octave. The resulting length of 6 units (half of the string) is one octave treble of the length of 12 units. Pythagoras discovered the 5th interval with a length of 8 units ( $\frac{2}{3}$  of the string) and the 4th interval with a length of 9 units ( $\frac{3}{4}$  of the string). In ancient times, the principle of hearing four voices together was called 'tetrachord' and was considered the basic rule of music theory. In short, Pythagoras is one of the discoverers of mathematics in the universe and music. Mathematics is the most difficult subject in terms of education in many countries and as a result, almost everyone agrees on this issue: New approaches are needed in mathematics education. The preschool period is of great importance in terms of revealing and directing children's talents. The foundations of mathematics and music should be laid in this period. Mathematics and music are two interrelated disciplines in many ways. This relationship has been noticed since ancient times and has attracted the attention of many mathematicians and thinkers. This study shows that the effective use of the relationship between these two disciplines, which are considered representatives of science and art, can produce positive results in many aspects today (Gürcan, 2016).

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## Ethical and Unethical Behaviors in Management: A Conceptual Evaluation for Managers

**Prof. Dr. Adnan CELİK**

Selcuk University, FEAS, Department of Business, Konya/Turkiye.

E-Mail: [adnancelik@selcuk.edu.tr](mailto:adnancelik@selcuk.edu.tr)

ORCID ID: 0000-0002-8538-9937

**PhD. Candidate Hasan Basri KOCAMAN**

Institute of Social Sciences, Selcuk University, Konya/Turkiye.

E-Mail: [basrikocaman@gmail.com](mailto:basrikocaman@gmail.com)

ORCID ID: 0009-0004-5326-1295

### Abstract

Work organizations are necessary units for the survival of life. Here, human and technical capital collaborations are intense. Every organization interacts with various stakeholders. Their expectations may also vary widely. Parties may have common expectations that activities be carried out in line with ethical principles. Naturally, organizational management comes to the fore here. Other stakeholders expect managers to demonstrate ethical behavior. Within the concept of corporate governance, expectations such as transparency, responsibility, accountability and meeting quality standards should be considered normal. Demands for the company's life to be sustainable, to achieve competitiveness, or at least to maintain the current situation may increase. In fact, a management philosophy based on ethical principles is for the benefit of everyone. Even if various problems are encountered in the short term, this should be internalized as an important organizational culture. The saying "A right wall never falls" is a very appropriate and timely statement. Ethical practices are essential for long-term management and business success. Unethical behavior disrupts the regular operation of the system. Resources are used inefficiently. The market system breaks down. Indirectly, the economy and people are harmed. Stakeholders who pay a fee and have expectations from the business want to receive full value for this price. If they do not receive this response, the supply-demand balance will be disrupted, things will go bad, and as a result, the business will fail. The business that encounters negative results stops, slows down and begins to go backwards. Trust is very important in business life. The saying "The greatest wealth is trust" explains this. Trust is reputation, wealth, success. The concept that will ensure trust in competitive business life is ethics. These are ethical practices. This study was prepared on the basis of "A Conceptual Evaluation of Managers' Ethical and Unethical Behaviors". In the study, respectively; Literature review, methodology, findings and discussion sections are included. At the end of the study, useful suggestions were made for the relevant environment.

**Keywords:** Concept of Ethics, Ethical Behaviors in Management, Unethical Behaviors in Management



## INTRODUCTION

The organizational environment can be considered in two dimensions: internal and external. These environments are indispensable elements for every business organization. Because it involves stakeholders. They demand various things from the organization's management. Employees, customers, suppliers, distributors, shareholders, industry members, competitors, society, other institutions and organizations may have expectations. Here, one of the main starting points is to exhibit ethical behavior. This type of behavioral dimension may have been revealed by the relevant environment. Top managers may also have engaged in such a practice. If there is, it can also be done in accordance with the organizational culture. Legal legislation may also have introduced various regulations and sanctions. In general, it is important for managers and employees to exhibit ethical behavior. Ethical behavior requires the regulation of various procedures and principles. Sustainability is an important goal for business organizations. However, this is expected to be continued with the principles of institutionalization. Transparency is required in organizational activities. Social responsibility and accountability are also sought. It is also essential to ensure quality production and protect the safety of living beings. It is necessary to move away from the idea that everything is for financial gain. Even if there is intense competition, human values should be protected in production and marketing activities. The quality of work and life of all stakeholders, especially employees, should be improved.

Unethical behavior is not tolerated in socio-economically developed societies. Because it negatively affects developments at the individual, organizational and social levels. It can shake the foundations of macroeconomic balances. It can create a source of distrust and anxiety within the society. It may lead to wastage of resources. It also creates a wide variety of problems in the context of microeconomics. For example, it can disrupt the market mechanism. It can render organizational levels dysfunctional. It disrupts the business peace. Priorities may get mixed up. Motivational losses may occur. Quality standards may be deviated from. Partners may doubt their investment. Customers or consumers may feel cheated. These situations bring up many problems, both macro and micro. In the case of businesses, goals cannot be achieved. As the company moves away from its goals, all kinds of problems may arise for stakeholders.

This study titled "Ethical and Unethical Behaviors in Management: A Conceptual Evaluation for Managers" includes three separate dimensions. In the literature review title, the concept and scope of ethics, ethical behaviors and managerial activities interaction issues are explained. In the second dimension, the methodology is introduced. The last dimension is for findings and discussion. Here, general manager behaviors are discussed first. Then, a conceptual evaluation of managers' ethical and unethical behaviors was shared. The study was concluded with conclusions and recommendations.

## 1. LITERATURE REVIEW

Here, the concept and scope of ethics are explained first. Then, the interaction of ethical behaviors and managerial activities is discussed.



### 1.1. Concept and Scope of Ethics

Ethics is a phenomenon that dates back to ancient times. Antiquity is the period in which this subject is concentrated. During these periods, there were efforts of Socrates, Plato, Aristotle and other thinkers. Although ethical rules have not been formed in a systematic sense, the concept of morality has been greatly emphasized. Later, Greek and Roman ethics studies began. Development was also achieved during the Renaissance and the Reformation periods. Subsequently, Rousseau, Kant, Hegel, Marx, Nietzsche and their followers appeared. There are also important contributions from Chinese, Indian, Japanese, Iranian, Arab and Turkish civilizations. Belief systems also had a lot of influence. Indian, Chinese, Japanese, Iranian and Central Asian cultures were shaped by the religions of “Hinduism, Buddhism, Sikhism, Taoism, Jainism, Shintoism, Confucianism, Zoroastrianism and Tengriism”. The influence of Abrahamic religions, which have a more widespread influence all over the world, has been greater. In other words, “Christianity, Judaism and Islam” has imposed various teachings on ethical and moral regulations all over the world. In the following periods, it was witnessed that principles independent of religions were also developed. Within the scope of the normative framework describing what the ideal norms of moral principles would be, there have also been classifications such as “teleological (utilitarianism), deontological and virtue ethics”. Ideas have begun to be put forward that a more livable world can be established in the cooperation of religious teachings and independent ethical principles (Iwuagwu, 2018: 42, 52; Aksoy & Kocanci, 2019: 352-353; Britannica, 2024; BBC, 2024).

The Latin concepts of “Mores”, “Moralitas”, “Ethos”, “Ethos”, “Ethica” have formed the basis of the literature. Ethics means putting all activities and goals in place; what to do or not to do; what to want or not to want; It is knowing what to have or not to have. Ethics, as a philosophical discipline, investigates the essence and foundations of moral values and guides moral behavior in both individual and social life. Here we constantly ask “What is good?” Idealism is targeted by asking questions such as “What should we do?” or “What should we do?” (Meydan Larousse, 1971; Akarsu, 1984: 62; Simsek et al., 2020: 135).

While ethics is “related to the values that a person wants to express in a particular situation”; Morality is the way to “implement” this. Although one of them is used interchangeably in daily life, in reality the scopes of these words are different. Morality is the reflection of human relations on social life and the intellectual whole of behavior. Morality is about human behavior, which we describe as right and wrong, positive and negative, indifference, conscience, and finally good and bad. Ethics is moral philosophy. In other words, it is a kind of relationship between moral behavior, actions and judgments. It also appears as a systematic field of study that has an important place in terms of philosophy and science (Billington, 1997: 45; Guven & Cay, 2020: 48; Aydın, 2023: 4).

Within the scope of ethics, the following stand out (Izveren, 1980: 97-99; Kolcak, 2012: 20; Guven & Cay, 2020: 48): “Awareness of duty, sense of responsibility, justice, egalitarianism, conscience, mercy, goodwill, truthfulness, honesty, reliability, loyalty, love-respect, helpfulness and idealization”.



## 1.2. Ethical Behaviors and Managerial Activities Interaction

Management activity is carried out by individuals. Another aspect is social. It also includes cultural values. It can also be argued that individual morality reaches the dimension of organizational ethics. Because ethics appears as a kind of moral philosophy. Moral behavior in individuals, organizations and society can be subjected to criticism. As a result, the aim is to direct and manage the individual of the organization in line with organizational goals.

Every organization operates within a social environment. Cultural transitions between individuals and societies are natural. Moral philosophy sees society as the bearer of morality; It is called “social moral philosophy”. There are also those who call social ethics “ethical relationship values”. Ethical relationship values are experiences such as love, respect, gratitude and trust, determined by the value provisions in a person's relationship with another person (Akarsu, 1984: 175; Kucuradi, 1996: 176).

When ethical behavior in management is mentioned, various elements come to the fore. Some of these may include written and published rules or principles. Some of them were accepted based on experience, experiences and verbal trust. That is, formal regulations may not have been made for all behavioral patterns. An organization member may have made some verbal acceptances or agreements within the scope of business life. This can be seen as a sub-version of social contract ethics. Rousseau's pioneering works in this direction were taken further in later periods. Social contract ethics consists of a number of sub-elements. There are legal authorities to sustain social life. There are also generally accepted ethical values for individuals and society. These may not all be in writing. But there are general acceptances. These institutions can exercise authority in the implementation of these generally accepted principles. The elements that make up the society determine the limits of freedom depending on the legal authority. According to Rousseau, it is an egalitarian and just authority, a form of protection for individuals (Froese, 2001; 579; Toksoy, 2011: 2; Aydın, 2023: 23).

While performing management functions, individual morality and corporate ethics need to cooperate. The ethical dimension does not occur spontaneously. It is shaped by beliefs, attitudes, customs, traditions, customs, experiences, experiences. Right or wrong behavior becomes theoretical over time, both in society and in organizational life. The situation reflected in the members of the organization creates moral practices. We can talk about ethical principles rather than moral principles. Starting from here; One can talk about moral behavior rather than ethics. That is, ethics relates to the values a person wants to express in a particular situation. Morality may emerge as a way of putting this into practice (Billington, 1997: 45; Simsek et al., 2022: 136).

Everyone at management levels must be sensitive to the principles of individual moral life and organizational ethics. This also applies to other stakeholders. If the parties respect these, it will be beneficial for everyone. Managers can prioritize behaviors appropriate to the organizational culture. Employees can think about both these and their individual goals. Because every employee is also a human. They may have many physical and social needs. They want to receive financial reward for their labor. They may also pursue a partially free thought and way of doing business. They may want modern management. Ethical principles envisage respect, tolerance, helpfulness, egalitarianism and fair sharing of resources. Professional ethics principles draw a framework that includes a moral dimension and is needed by organizations and employees in solving problems arising from inside and



outside the organization. This framework has a motivating effect on employees to act in accordance with ethical principles and at the same time, it significantly affects the organizational culture and defines the desired behaviors of individuals within the organization. For a normal person, peace and tranquility at work is very important. This may require determining “what is good and what is bad” through consensus (Toksoy, 2011: 2; Aydın, 2023: 24,55).

## 2. METHODOLOGY

In the methodology, “the problem, purpose and importance of the research” and “research method and scope” are introduced respectively.

### 2.1. The Problem, Purpose and Importance of the Research

Throughout the historical process, questions like “What is ethical?”, “Which practices are ethical?” “What is the organizational dimension of ethical practices? Answers to such questions were sought. In other words, “what is ethical and what is not” has been discussed. Individual morality and corporate ethics are among the important issues of today. States, institutions, universities, institutes, businesses and NGOs (Non-Governmental Organizations) are developing various projects. In business terms, ethical management practices attract attention. Because of this; It has come to the fore that it is an important element for institutionalization, sustainability and organizational success. Since this subject has been researched extensively throughout history, a strong literature has emerged. Within the scope of previous studies, works of significant number and quality have been produced. In this study, the interaction of relevant literature and popular sources is aimed. Based on the existing information, an effort has been made to create significant up-to-date results.

### 2.2. Research Method and Scope

This study is basically based on “A Conceptual Evaluation of Managers' Ethical and Unethical Behaviors”. Naturally, ethical and unethical behaviors in management are highlighted. The subject was approached with the aim of a conceptual evaluation for managers. A literature review was conducted. The concept and scope of morality are explained. Individual, organizational, professional and managerial ethical dimensions have been clarified. At the end of the study, useful suggestions were made for the relevant environment.

## 3. FINDINGS AND DISCUSSION

General manager behaviors are discussed first in the findings and discussion heading. Then, a conceptual evaluation of managers' ethical and unethical behaviors was shared.

### 3.1. General Manager Behaviors

Behavior is primarily the activities performed by humans or animals individually or collectively (Erdogan, 1997: 2). Biologically, it is a type of movement. It is closely related to attitudes towards stimuli (Eroglu, 2017: 1-2). According to psychologists, there must be a stimulus for a person to



behave. When a stimulus comes, people behave. This process; It can be formulated as “stimulus-organism-response = behavior” (Guney, 2007: 26). In the most general sense, behavior is a concept that covers all actions (actions and reactions) of people. One of the most important characteristics of human behavior, which constitutes the basic subject of psychology, is that they are multi-causal and complex. It is a fact that, in terms of behavior, every event is the result of a number of conditions that precede it. This is also related to the principle of determinism.

After general behavior is defined in this way, it is useful to also provide information about organizational behavior. Because in the study specifically, managers were taken into consideration. Undoubtedly, every organization has many internal and external elements. Those at management levels are important stakeholders. Through these, organizational goals are tried to be achieved. Managers also enter into close relationships with some elements.

For managers, the following may stand out: “Behavioral plane, status, role behaviors, social institutions, organizational culture, belief, attitude, personality, perception, learning, communication, motivation, delegation of authority, team management, talent management, job rotation, job enrichment, conflict management, alienation management, stress management, organizational change in line with customers' expectations, organizational development that can move the organizational structure forward, sustainability, institutionalization, sensitivity to social responsibility and ethical principles” (Kocel, 2020: 657; Simsek et al, 2022: 16-17; Diken & Celik, 2023: 3-8).

Although our subject is general manager behavior, it also has an employee dimension. So, it may be necessary to look at it from the stakeholders' perspective. Managers who can observe organizational members and ethical behavior well can be more successful. “Organizational structure” is one of the primary factors affecting the formation of ethics in organizations. Organizational features such as excessive centralism in the organization, lack of defined duties and responsibilities, lack of job descriptions, the organization becoming too large and cumbersome, lack of transparency and emphasis on confidentiality have a negative impact on the ethical behavior of individuals. Individuals' personal characteristics also play an important role in influencing their ethical behavior. Employees may exhibit “1. Self-interested, 2. Dutiful, 3. Moralistic” behavioral patterns (Simsek et al., 2022: 137).

### **3.2. A Conceptual Evaluation of Managers' Ethical and Unethical Behaviors**

Ethical and unethical behaviors are among the areas of interest to humanity. Efforts have been made to understand this throughout the historical process. Undoubtedly, official studies of societies and/or states have played an important role. Individuals and institutions have also conducted numerous studies. Alternative publications, oral histories, and institutional archives are also available. There is a variety of information that has survived to this day. Now, theoretical evaluations can be made. Here, types of ethical behavior are listed in general. Then, ethical practice topics in management are listed. Finally, certain unethical behaviors were shared.

Types of ethical behavior can be discussed under the subheadings “individual, organizational, professional and managerial” as follows (Mengusoglu, 1965: 15; Tuzcuoglu, 1994: 265; Kucuradi, 1996: 175; Hakko & Kivanc, 2018; Cetin, 2019: 112; Aydın, 2023: 71-89; Simsek & Celik, 2023: 4):



1. **Individual Ethics:** There is an orientation towards the basis of all human actions and activities. In other words, it examines the basis of a person's arguments, speeches, attitudes, defending or rejecting something, liking or hating something, liking or disliking something, respecting or not respecting something. In the phenomenon of individual ethics, all human actions and actions arise from a basis called "value". Individual ethics is the awareness that a person has about the value provisions that base his behavior. Characteristics of a person who has knowledge of the value of being human and takes this into account in every action and attitude, such as honesty, respect, egalitarianism and therefore freedom, are listed as "ethical person values". When ethical values are looked at from the perspective of the individual; These appear before us as knowledge of the continuity of life, the possibilities of taking action and forming attitudes.

2. **Organizational Ethics:** Organizations are structures created to accomplish work and tasks. In other words, it includes people, task, position, functioning, cooperation and work performance. Organizational ethics is an internal culture of behavior that consists of determining rules for solving problems. Here, there may be various written and verbal rules. With these, the general value system of the organization is revealed. Communication between employees is determined. It is revealed how the organizational functioning will be.

3. **Professional Ethics:** Profession is an important concept. First of all, it is important throughout life for the person concerned. Profession does not only contain material or monetary elements. It has a career dimension. It also has social effects on the individual, family, organization and society. Naturally, this concept will also have a close interaction with ethics. An integrated structure may be the goal in professional ethics. In other words, the socio-economic structures of those doing similar work on a world scale can be compared. Generally accepted behaviors and ethical codes can be discussed. The important thing is to consider social benefit. It is the display of behavior in accordance with general rules. Professional ethics are the rules of behavior that must be followed, especially in professions related to people. It is desirable that the codes here receive similar response in organizations and societies. Naturally, everyone is expected to comply with these. Employees who act inconsistently or adversely may harm their profession and their individual reputation.

4. **Managerial Ethics:** Management is a universal process. It aims to direct a group of people towards determined goals. It aims to ensure cooperation and coordination among stakeholders. Their efforts are combined in processes such as "planning, organizing, directing, coordinating and controlling". Ethical behavior is needed in all of these processes. One must definitely act in the most appropriate way.

Ethical practices in management can be distinguished among themselves. In other words, groupings can be made in terms of individual, family, organization and society. However, they are all discussed in their entirety here. Therefore, the following types of ethical practices are listed (Kolcak, 2012: 20; Guven & Cay, 2020: 48; Simsek & Celik, 2023: 122-130; Aydın, 2023: 55-73; OECD, 2023: 4-5); "Moral attitude, openness, fairness, unity of purpose, democracy, truthfulness, honesty, institutionalization of education, respect for labor, flexibility, equality, impersonal relations, future-proofing, reliability, rights and freedoms, accountability" accountability), hierarchical order, tolerance, humanism, rule of law, freedom of belief, human rights, division of labor and specialization, job design and standardization, quality management, evidence-based, inclusiveness, career management effectiveness, institutionalization (institutionalisation), privacy and confidentiality of key information,



positive human relations, prevention and protection, organizational belonging, professionalisation, loyalty, love, responsibility, transparency, impartiality, technical ability and “Respect for professional knowledge, frugality, whole-of-society collaboration, visionary, efficiency, not fulfilling illegal orders, equality of authority and responsibility, timeliness”.

All parties “so-called” want everything to develop within ethical rules. But real life is not like this. There are various problems at the individual, family, organizational and social levels. In other words, the ideal structure cannot be established. Undoubtedly, this is also true in business organizations. Business organizations are also a complement to life. There may be differences in inter-societal and inter-cultural dimensions. However, the problems are similar. More or less, unethical practices are encountered at every level of management. Certain unethical behaviors can be listed as follows (Sayli et al., 2009: 171; Aksoy & Kocanci, 2019: 355, 356; Paksoy, 2020: 365-370; Yildirim. & Sunman, 2020: 383-390; Aydın, 2023: 76-83; Tekin & Celik, 2023: 89): “Discrimination, bigotry, selfishness, flattery, gossip, dogmatic behavior, favoritism, abuse of office, unsafe behavior, insults and swearing, negligence, favoritism, intimidation, bad habits, cronyism.”, mobbing, nepotism, bribery, exploitation, irregularity, taking advantage, misuse of authority, failure to differentiate knowledge levels, hindering analytical skills, intimidation, corruption.”

## CONCLUSION AND RECOMMENDATIONS

The concepts of morality and ethics are among the concepts that are talked about more and more every day. States, societies, institutions, organizations and individuals cannot stay away from these concepts. Here, mostly “ethical and unethical behaviors of managers” were studied. For this purpose, a “conceptual evaluation for managers” was conducted. Individuals have to somehow observe the elements of moral life. Organizations are structures that have many stakeholders, especially individuals. Here too, corporate ethical principles should prevail.

The world can become more livable with moral philosophy and ethical principles. In this study, business organizations were highlighted more. A business life that complies with ethical principles can produce beneficial results for everyone. First of all, it becomes easier to achieve organizational goals. Companies that act ethically and operate in social responsibility have a more positive image. They may be more liked by the public. Their products may be in greater demand. Even if the market contracts, they can continue their sales. The company can operate more efficiently and more profitably. This result is a desired situation for business owners and senior management. Reaching a good place in the industry also pleases the partners. However, it is not just about the satisfaction of these circles. Everyone should be able to live in health, peace and happiness.

Organizational culture should aim for the good of all stakeholders. Universal organizational principles should be applied effectively at all levels. Organizational managements should make their workplaces a livable place. “Discrimination, inconsistency, mobbing, abuse of duty and authority, nepotism, cronyism, favoritism, deviations from quality, exploitation of labor, exploitation of resources, unjust enrichment, harm to the environment and ecological structure” are definitely not nice things. Undoubtedly, these concern other elements as well as managers. So, everyone should not exaggerate



the sources of problems. The important thing is to create more livable organizations within cooperation and teamwork.

Managers have many duties. Above all else, they must demonstrate ethical leadership. They should make internal regulations that include ethical principles. Undoubtedly, the legal structure of the institution or the size scale of the companies are also important here. Ethics committees and/or boards may need to be established. As basic values, “managerial responsibility, fairness at the individual and organizational level, transparency in organizational activities, accountability in business transactions, reliability for all stakeholders, rule of law” must be ensured. Organizational culture and organizing principles must be compatible with these core values. Organizational democracy, humanism, valuing the individual, respect for labor, union organization, division of labor and specialization, quality management system, environmental awareness, social responsibility projects, and a modern career management system are also important issues. Employees must also act ethically. The important thing is to carry out activities in “moral behavior and in accordance with ethical values”. Organizational cultures appropriate to these should be created. Sustainability is important. An understanding of social responsibility that is sensitive to the ecological structure should be adopted. Institutionalization of education should be ensured. In these activities, due attention should be paid to professional ethics training. Universally accepted ethical codes should be easily transferred to organizational activities. It should not be forgotten that managers who remove obstacles to learning will create more successful organizations.

As emphasized in the methodology heading, in this study, literature information was evaluated. An effort has been made to create significant current results by making conceptual and institutional evaluations. This can be seen as a fundamental limitation. It would be beneficial to make numerical and proportional evaluations through studies specific to institutions and companies.

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## Sait Faik'in "Hişt Hişt" Öyküsünü Alımlama Estetiği Bağlamında Çözümleme Denemesi

### Sait Faik's Aesthetics of Reception of the "Hişt Hişt" Story Analysis Attempt in Context

Cafer GARİPER

Dr. Öğretim Üyesi, SDÜ Fen–Edebiyat Fakültesi Türk Dili ve Edebiyatı Bölümü, Türkiye

e-posta: [cafergariper@sdu.edu.tr](mailto:cafergariper@sdu.edu.tr)

#### Öz

Modern Türk öykülüğünün öncülerinden biri olan Sait Faik Abasıyanık, öykü sanatında önemli yenilikler yapmış bir yazardır. O, öyküde serim, düğüm, çözüm kısımlarını kaldırır. Başlangıcı ve sonu olan, olay örgüsünü gerilimin yönlendirdiği öykü yerine okuyucuda bitmemiş izlenimi uyandıran bir öykü yazma yoluna gider. Çehov tarzı öyküden hareketle kendine özgü yazma tekniği geliştirir. Öykülerinde hayatın içerisinde sıkça karşılaşılan *küçük insan*ı konu alan Sait Faik, gözleme ve izlenime dayanan bir teknik geliştirir. Öykülerinde gittikçe insan ve tabiat sevgisi, yaşama sevinci, yalnızlık teması öne çıkmaya başlar. Hastalığının da etkisiyle son yıllarında gerçeküstücü/sürrealist bir anlayışa yönelir. Onun ele alınmaya çalışılacak olan "Hişt Hişt" öyküsü de sanat hayatının son döneminde yayımlanan *Alemdağ'da Var Bir Yılan* adlı kitabında yer alır. Bu bildiride Sait Faik'in "Hişt Hişt" başlığını taşıyan öyküsü alımlama teorisi/estetiği çerçevesinde anlamlandırılmaya/çözümlemeye çalışılacaktır.

**Anahtar kelimeler:** Alımlama teorisi, Sait Faik, öykü, "Hişt Hişt".

#### Abstract

Sait Faik Abasıyanık, one of the pioneers of modern Turkish storytelling, is a writer who has made important innovations in the art of short stories. He removes the exposition, knot and solution parts from the story. Instead of a story that has a beginning and an end, where the plot is driven by tension, it resolves to write a story that leaves the reader with the impression of being unfinished. Unique writing technology technology based on the story in Chekhov style. The subject of Sait Faik's stories, the little person who is frequently seen in life, is a technical development based on observation and impressions.



Gradually, the themes of love for people and nature, joy of life, and loneliness begin to come to the fore in his stories. In the last years of knowledge, its proportions tend towards a surrealist approach. His story "Hişt Hişt", which will be tried to be captured, is in Alemdağ'da Var Bir Yılan, whose artwork was recently published. It is located as. In this paper, Sait Faik's story titled "Hişt Hişt" will be tried to be interpreted/analyzed within the framework of reception theory/aesthetics.

**Keywords:** Reception theory, Sait Faik, öykü, "Hişt Hişt".



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## School Leader Innovative Leadership Model

**Muhammad Faizal A. GHANI, Phd**

**Norhisham SHAMSUDIN**

**Norfariza Mohd RADZI, Phd**

Faculty of Education, University of Malaya, Kuala Lumpur, Malaysia

**Mohd Haizam AHMAD**

Department of Pahang State Education, Ministry of Education, Malaysia

### Abstract

It is a necessity for a developing country to have a leader who is capable to lead a country comparable to a developed country. The characteristics of the leader should have high-order thinking skills such as creativity and innovation. However, the number of such leaders is still small compared to leaders who apply traditional leadership styles. Therefore, this study aims to develop an innovative leadership model. The data to develop the model were collected through qualitative research methods by applying a meta-analysis approach. The meta-analysis approach which was implemented by focusing on the previous studies of five models about innovative leadership. This research finding reported that there are five new characteristics for an effective innovative leadership: (a) sharing mission, vision, and values, (b) developing a collaborative culture, (c) leading changes, (d) leading networking and partnership among stakeholders, and (e) owning professional leadership style. By having this innovative leadership model, school leaders are able to use the model as a guideline to lead their educational institutions that often encounter with environmental changes, especially policies related to education.

**Keywords:** School Leader, Innovative, Leadership, Model



## Impact of Energy Transformation on the Valuation of Renewable Energy Companies

**Eliasz CZAJKOWSKI**

**Poznan University of Economics and Business, Poland**

### Abstract

The ongoing global process of energy transformation, influenced by climate change and the economic repercussions of the Ukraine war, has profound implications for the valuation of companies in the renewable energy sector. This study explores the shift away from fossil fuels by governments worldwide through financing programs supporting modern and environmentally friendly alternatives, leading to a decline in market value for companies reliant on fossil fuels and a rise in valuation for renewable energy firms. One of the key drivers behind the increasing significance of renewable energy companies is their growing market share. Additionally, the continuous growth in revenue and operational cash flows generated by these companies directly influences their valuation using the income approach. This is a result of a growing number of businesses investing in modern heating sources and energy supply methods, such as photovoltaics, heat pumps, and the utilization of hydro and wind energy. The decreasing operational costs over time due to innovation, coupled with rising sales revenue, contribute to higher cash flows for these renewable energy companies. Post-discounting, these cash flows translate into an augmented present value for these companies. Consequently, the heightened valuation provides renewable energy companies with opportunities to secure higher capital values in the market, as potential investors recognize their potential for further value growth and potential dividends from their investments. The ongoing discussions on the international stage regarding the impact of climate change and the resultant energy transformation enhance the credibility of renewable energy companies regarding the stability of their future development. The research delves into the influence of energy transformation on the valuation growth of renewable energy companies and the correlation between this growth and the decrease in market value for fossil fuel-based energy companies. This study employs financial statements, non-financial reports related to energy and environmental activities, and financial indicators concerning profitability, liquidity, and efficiency in assessing the impact of energy transformation on the valuation of renewable energy companies. It also scrutinizes risk factors for the operations of these companies, including variable political regulations and fluctuations in commodity prices.

The findings from this research regarding the valuation of renewable energy companies are pertinent for potential investors and policymakers seeking to stimulate the development of the renewable energy sector. This study contributes to understanding the dynamics of the energy market within the context of energy transformation and its effects on the value of companies in the renewable energy sector. It complements previously published works and reports in this field, which have seen increased attention in the past 2-3 years due to recent global events.



## The Relationship between Self-Adjustment and Degree First-Year Student Anxiety in Yogyakarta

**Ratna Yunita Setiyani SUBARDJO**

University 'Aisyiyah Yogyakarta, [ratnayunita@unisayogya.ac.id](mailto:ratnayunita@unisayogya.ac.id) , Indonesia

**Rafikatul ULYA**

University 'Aisyiyah Yogyakarta, [rafikatululya@gmail.com](mailto:rafikatululya@gmail.com) , Indonesia

### Abstract

Students are people who are enrolled in one of the institutions and enrolled in education and are currently still enrolled there. This student can be defined as a person who studies at the university level in public and private schools, every first-year student must experience a transition period from high school to college. Here they will face a new environment, such as gaining a larger, less personal school structure, interaction with peer groups from more diverse regions and sometimes with even more diverse ethnic backgrounds, and increased attention to academic achievement and assessment. At this time, first-year students will unconsciously adjust to various new things faced in college, in this adjustment, it is not uncommon for first-year students to feel anxiety in themselves. The purpose of this study was to determine whether there is a relationship between self-adjustment and the anxiety level of first-year students in Yogyakarta. This research is quantitative research that uses a correlational method. The number of respondents to the study was 116 respondents of first-year students in Yogyakarta with vulnerable ages of 18-21 years. The measuring instrument of this study has two scales, namely the scale of self-adjustment and anxiety with purposive sampling techniques. The data analysis used in this study is Person Product Moment Correlation. The results of the hypothesis test show that anxiety has a relationship with self-adjustment with a significance level of  $0.000 < 0.05$ , meaning that there is a relationship between anxiety and self-adjustment experienced by first-year students with the direction of a negative relationship that can be assumed where the higher the level of adjustment of first-year students, the lower the anxiety, And vice versa, if the lower the level of adjustment of first-year students, the higher the anxiety. The r-square value is 0.363 so the efficacy contribution is 36%. There is a significant negative relationship between anxiety and adjustment in first-year students in Yogyakarta.

**Keywords:** anxiety, adjustment, first-year student, academic achievement.



## INTRODUCTION

Students are people who are registered at an institution and are enrolled in education and are currently still enrolled there. Students This can be defined as people studying at the university level in public or private schools. Other institutions at the same level as universities are considered by people to have a high level of intelligence, both intelligence in thinking and planning.

Students have responsibility for their development, including having responsibility for their lives when they enter adulthood, which usually occurs when they are between 18 - 25 years old. (Hulukati and Djibran 2018). According to Siswoyo (2007), students can be defined as individuals who are studying at the tertiary level, either public or private or other institutions at the same level as tertiary institutions.

Every first-year student experiences a transition period from high school to college. Here they will face a new environmental atmosphere, for example getting a larger and less personal school structure, interaction with peer groups from more diverse areas and sometimes with even more diverse ethnic backgrounds, and increased attention to academic achievement and assessment (Santrock, 2002). The transition from school to college is a complex process for almost all students. Pascarella and Terenzini (1991) describe this transition as a "culture shock" involving significant social and psychological involvement, resulting in the need to relearn in the face of encounters with new ideas, new teachers, and peers with quite varied values and beliefs. , new freedoms and opportunities, and new academic, personal and social demands" (pp. 58- 59).

During the transition period as a first-year student, a person indirectly adjusts to various new things faced in college. According to Arkoff (1968 in Estiane, U. 2015), adjustment to college reflects a person's achievements in passing various demands in college and has an impact on personal development. In other words, they adapt depending on their ability to achieve graduation.

First-year students experience very different climates between when they were in high school and as college students. This transition time involves moving the school structure towards a larger university, with more diverse peer interactions and with different geographical and cultural backgrounds. As stated by Rohmadani (2017), this certainly creates problems, plus the pressure to get and achieve good results, therefore adjustment is very important for new students.

Many new students are reported to have mental tension, such as being irritable, anxious, avoiding social environments, feeling lonely, and being pessimistic (Sharma, 2012 in Irfan and Suprapti, 2014). Social processes, friendship culture, and financial management are also problems that students often face (Sholichah, 2016). So adjustments are needed to prevent anxiety in students. This was also stated by Rohmadani (2017) that this certainly creates problems, plus the pressure to get and achieve good results, therefore self-adjustment is very important for new students (first-year students).

All mental health disorders begin with feelings of anxiety. According to Sadock, et al, (2010) anxiety is a response to certain threatening situations and is a normal thing to happen. Anxiety begins with a threatening situation as a dangerous stimulus (stressor). At a certain level, anxiety can make a person more alert (aware) of a threat, because if the threat is considered not dangerous, then a person will not carry out self-defense. defense). Concerning dealing with anxiety, it must be managed well and maintained awareness even though the COVID-19 pandemic has passed. This change in the learning



system has resulted in students having to make adjustments, especially for new students who are starting their first year.

According to research by Nurfitriana (2016), the problems that arise and are experienced by new students in their first year are lack of interaction with college friends, difficulty accepting the material being studied, difficulty interacting with new environments, and lack of communication between boarding house friends. This results in students not being able to explore themselves in the higher education environment, then feeling anxious if they do not get satisfactory grades, and experiencing tension.

This results in students being less able to explore themselves in the university environment, then feeling anxious if they do not get satisfactory grades, experiencing mental tension, and the potential to avoid the social environment.

Baker & Siryk (1984); and Uthia Estiane (2015) stated that adjustment to higher education is an individual's response as a student in facing demands which include academic, social, and personal-emotional aspects, as well as attachment to the institution. The adjustment process is very important during the first year of college because it is the basis of work for other events during their subsequent college life. Based on this, it can be seen that it is important for students to adjust to college.

The teaching style in universities makes it difficult for them to understand the class lessons and makes it difficult for them to concentrate. Subjects are also afraid of the pattern of tasks given and anxious about unexpected problems that arise. They feel they made the wrong decision in choosing a major and this makes them think about leaving college and choosing another major. The attitude that students think that they have chosen the wrong major can be detrimental to students because many of them admit that their expectations when choosing a major are different from the reality when they are already studying and 40% of students decide to drop out in the first year because they think they have taken the wrong major and feel that the learning process does not match their expectations, according to Hermawan, (2012 in Maharani, et al, 2021). Feelings of anxiety experienced by students are very common because they begin to have views that make a connection between their real life and their uncertain future career decisions. Almost 50% of students experience confusion in making decisions about their careers because of the many choices of work, education, and future needs (Saparingga, 2012).

Anxiety is something that is often experienced by everyone (Babayiğit, 2022; Babayiğit & Balcı, 2023), including new people coming in the lecture environment or new students. First-year students are them who are easily exposed to various psychological stresses such as anxiety. When they enter college, they face a learning process situation that is different from when they were at school. This situation gives rise to pressure if not accompanied by the right solution. Annisa and Ifdil (2016) show that the pressure they face can trigger anxiety in them, namely isolated and unclear worries related to feelings of helplessness and insecurity. The prevalence of anxiety in the world population in 2015 was 3.6%. In 2015, the estimated total number of people living with anxiety in the world was 264 million and there was an increase of 14.9% from 2005. Cases of anxiety in the Southeast Asia region were 23% (60.05 million of the world's 264 million population of anxiety (WHO, 2017).



First-year students must actively seek information related to initial course activities. Scheduling courses using the Semester Credit Unit (SKS) system, as well as scheduling courses using Curriculum Cards (KRS), ultimately requires new students to actively read and ask questions. New students feel uncomfortable, anxious, or even afraid when they need information. Javanese customs, which are very different from the traditions of the reporting area's origin, inevitably must obey all the rules that have been set, and if you violate the rules you will receive sanctions from the community. However, the informant said that the people of Malang, who belong to the Javanese tribe, are very friendly and fluent in the language. Apart from that, the environment is well organized and the people are polite (Devinta et al, 2015). The fear factor of first-year students, students are afraid to study at university because they have not yet adapted to the campus environment, especially because their duties and responsibilities as students are relatively high and many first-year students in Yogyakarta come from outside the region when they live in Yogyakarta, many first-year students the first to live in boarding houses, dormitories, etc. First-year students must be able to assimilate into the environment and culture of Yogyakarta or its surroundings.

## RESEARCH METHODS

The type of research used is quantitative research methods. Quantitative research is research that is used to examine populations or samples randomly, collect data using research instruments, and statistical data analysis, and has aim of testing predetermined hypotheses (Sugiyono, 2015). According to Azwar (2015), data collection activities in research aim to reveal facts about the variables studied. For this purpose, data collection methods are needed.

The method used in this research uses a questionnaire which aims to find information in the form of short written questions on the topic to be researched by the subject (Supratiknya, 2015). This research uses a Likert scale to measure the subject's behavior, attitudes, opinions, and perceptions about social phenomena by the variables examined by this research. The purpose of using a Likert scale is to reveal the existence of a significant relationship between self-adjustment and the anxiety level of first-year students in the city of Yogyakarta. In the Likert scale, there are two types of attitude questions, namely favorable (supporting or siding with the attitude object) and unfavorable questions (not supporting the attitude object) (Azwar, 2015).

## RESULTS AND DISCUSSION

This research took place in the city of Yogyakarta which has 136 tertiary institutions with categories including academic, polytechnic, high school, institute, and university. This research was carried out using an online system, namely distributing the scale via social media with the help of a Google form to the research subjects. The subjects of this research were active students. Based on the data from 116 respondents above, it can be seen that 51 respondents were male with a percentage of 44.0%, and 65 respondents were female with a percentage of 56.0%. there were 23 respondents aged 18 years with a percentage of 19.8%, 32 respondents aged 19 years with a percentage of 27.6%, 39 respondents aged 20 years with a percentage of 33.6%, and 22 respondents aged 21 years with a percentage of 19.0%. Based on the results of the categorization analysis carried out via IBM Statistics version 26.0, it can be



seen that the level of anxiety of research respondents can be seen that as many as 1 or 0.9% of respondents are at a low anxiety level, as many as 6 or 5.2% of respondents are at a moderate anxiety level, and then 109 or 94.0% of respondents were at a high level of anxiety.

Based on the results of the categorization analysis carried out via IBM Statistics version 26.0, it can be seen that the level of self-adjustment of respondents in this study can be seen that as many as 1 or 0.9% of respondents are at low self-adjustment, as many as 33 or 28.4% of respondents are at moderate self-adjustment, as many as 82 or 70.7% of respondents were in high self-adjustment.

Based on the results of the reliability tests that have been carried out, it can be seen in the table above that each indicator of the variables in this study has a Cronbach Alpha value close to 1.00. So, we can conclude that each indicator that has been carried out in. This research is reliable.

Based on the linearity test in the table above, it shows that the significant value (Linearity) is  $<0.05$ , which indicates that it is 0.00. So, we can conclude that the two variables are the Anxiety variable and the variable. From this research, the R Square is 0.363 or equal to 36.3%, so it can be interpreted that the independent variable Self-adjustment can influence the dependent variable, namely Anxiety, with the possibility of this occurring being 36.3%. This research shows that the significant value  $P = 0.00 < 0.05$  which can be interpreted as meaning that there is a significant relationship between self-adjustment and anxiety, namely where the P value can be said to be significant if  $p < 0.05$ . These results indicate that the hypothesis proposed in this research is that there is a relationship between the two variables in this research. The results of the Person Correlation Product Moment Test using IBM SPSS Version 26.0 show that the results of the correlation test between the independent variable and the dependent variable get a correlation coefficient of -0.603. This means that the magnitude of the correlation coefficient between the variables. Self-adjustment and anxiety have a strong level of relationship. There is a very significant correlation at a significance level of 0.00. Apart from that, the negative correlation coefficient indicates that the relationship between the independent variable, namely self-adjustment, and the dependent variable, namely anxiety, has a strong negative relationship. It can be assumed that the higher the level of self-adjustment of first-year students, the lower their anxiety, and conversely, if the lower the level of self-adjustment of first-year students, the higher their anxiety and the large contribution to effectiveness is 36%, then it can be said that there is a significant relationship. There is a significant relationship between self-adjustment and anxiety levels, especially in first-year students in the Special Region of Yogyakarta. The results of this research show that of the two variables tested using the SPSS for Windows version 26 program, the analysis results show that the linearity test results of the two scales have a linear relationship, proven by the analysis results which have a value of 0.000. This means that the two now have a linear relationship. This happens because the Linearity value is  $<0.05$ . It was also added that  $RSquare (r^2) = 0.363$  with a percentage of 36.3%, which means that 36.3% of the self-adjustment obtained can influence the level of anxiety felt by first-year students.

The results of the statistical tests above have proven that self-adjustment has a significant negative relationship with anxiety, therefore it is known that the higher the self-adjustment, the lower the anxiety of first-year students. The results of these statistical tests are confirmed by several studies showing that self-adjustment in students The first year has a relationship with anxiety levels



On the other hand, the anxiety level of first-year students has a relationship with students' adjustment. First-year students' self-adjustment is very influential in supporting a person's survival both in social interactions and with the community around where they live. As social creatures who interact with other humans, this sense of self-confidence is important for the smooth running of the process. When someone does not have self-confidence, the process of interaction with other humans will not run smoothly. Alifa Inggit Widyana & Robertus Budi Sarwono (2023). This is also following the results of interviews conducted with several first-year student subjects in Yogyakarta, who said that self-adjustment influenced the anxiety they felt. Therefore, from the explanation above it can be concluded that all anxiety and adjustment scales have a very significant relationship with negative patterns. So, the higher the self-adjustment of first-year students in Yogyakarta, the lower their anxiety. Vice versa, the lower the self-adjustment of first-year students in Yogyakarta, the higher their anxiety.

One of the key concepts of contemporary social theory is the concept of risk and, accordingly, of risk society, fixing the fact of our being in a situation of breaking the modern society. The main category of sociology of risk is knowledge that brings to the fore the concept of reflexivity together with criticism of science and the culture of experts by the mass public. Everyone becomes an expert in the risk society, thereby the objectivity of scientific knowledge becomes highly controversial. "As a consequence, a momentous *demonopolization of scientific knowledge claims* comes about: science becomes more and more *necessary*, but at the same time, *less and less sufficient* for the socially blinding definition of truth" (Beck, 1992: 156).

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# Android-Based Stem-AR and Its Contribution to Environment Literacy of Primary School Students

Ika MARYANI

Universitas Ahmad Dahlan, [ika.maryani@pgsd.uad.ac.id](mailto:ika.maryani@pgsd.uad.ac.id), Indonesia

Cindy Joe SANJUN

Universitas Ahmad Dahlan, [cindy1900005377@webmail.uad.ac.id](mailto:cindy1900005377@webmail.uad.ac.id) Indonesia

## Abstract

This research is motivated by environmental literacy and student learning achievement which is still low in elementary school students. This research aims to measure the influence of Android-based STEM-AR on the Environmental Literacy of elementary school students. The type of research used is quantitative research with One Group Pretest-Posttest Design. A total of 31 grade 5 elementary school students in Yogyakarta, Indonesia were involved as samples. Samples were taken randomly from 9 public schools in Yogyakarta, Indonesia. The research instruments include lesson plans and Augmented Reality media which can be accessed with an Android cellphone. STEM is a reference for compiling subject matter. Treatment was carried out 4 times with a duration of 70 minutes per meeting. Students' environmental literacy was measured before and after treatment. Validated multiple choice tests are used to measure these variables. data were analyzed using descriptive statistics with categorization and inferential statistics with simple regression techniques. This research contributes to proving that the use of Android-based STEM-AR can have an influence on the Environmental Literacy of elementary school students.

**Keywords:** STEM-AR, environmental literacy, elementary school.

## INTRODUCTION

Science learning is one of the essential subjects in elementary schools. Science is one of the subjects that has an important role in education because it can be a provision to face challenges in the global era (Dilah, 2023; Hayati & Setiawan, 2022). Science learning in elementary schools aims to enable students to have the ability to understand concepts and their application in everyday life (Rieschka, 2020). This application focuses mainly on understanding and responding to surrounding environmental conditions. Ideal science learning is learning that can help students understand the aspects around them (Rini & Aldila, 2023; Winarni et al., 2020). Science learning must be able to help students develop



environmental literacy skills. Science learning is one of the right solutions in an effort to increase environmental literacy. In the science learning process, it is important to instill the concept of environmental literacy in students. This means that the science learning process should be able to help students understand their environment.

Environmental literacy is a conscious attitude toward protecting the environment so that its balance is maintained (Kusumaningrum, 2018). Environmental literacy has components that focus on knowledge, skills, attitudes, and behavior. In an effort to increase environmental literacy, strategies and an understanding of environmental issues are needed. Environmental issues are a global threat, both in developed and developing countries. Environmental issues and climate change are serious topics of discussion. However, in reality, the results of the WEF survey on country sustainability show that in environmental, social, and governance (ESG) aspects, Indonesia is ranked 54th out of 65 countries. This shows that sustainability is still considered low (Suryawati et al., 2020).

The behavior of ignorance towards the environment is one of the factors that causes environmental damage. (Direktorat statistik ketahanan sosial, 2018) shows that people's ignorance towards the environment, especially on the island of Java-Bali, Indonesia, is still dominated by waste management and private vehicles. In the water-saving dimension, the Special Region of Yogyakarta, Indonesia, is the region with the highest figure. Exposure to environmental pollution that occurs in the dimensions of saving water, private vehicles, and waste management apparently has an impact on the water cycle. The high level of public ignorance towards the environment is caused by a lack of environmental literacy. There need to be efforts to foster environmental literacy from an early age. Therefore, as part of society, elementary school students should have the ability to be environmentally literate.

Environmental problems are an urgent problem to overcome. One effort to overcome this is through learning, assisted by learning media. This is a preventive effort to educate someone from an early age about the importance of protecting the environment. Media is one of the main factors in why students are interested in the learning process while increasing their awareness of environmental issues (Chung et al., 2020; Puspitarini & Hanif, 2019). Media that is suitable for elementary school students today is digital media such as AR, VR, metaverse, and similar media that are able to bring abstract concepts in front of them. This research will focus on the use of AR, which is more accessible to students in Indonesia because of its convenience. AR can be accessed on mobile phones with various types of OS. Indonesia has more Android users, so the AR in this research uses the Android OS base. The AR created is media with STEM (science, technology, engineering, and mathematics) content on the water cycle and aims to foster students' environmental literacy through abstract concepts that can be visualized in AR form. The advantages of AR include interactivity and a deeper user experience; increased user involvement; providing contextual information; and more interesting learning (Dunleavy et al., 2009; Pellas & Kazanidis, 2019). For teachers, AR can increase creativity in developing applications.

STEM is used as a basis for preparing material because of its advantages in bringing real-world environmental problems into the classroom. This bridges the gap between life and school (Boeve-de Pauw et al., 2020). Students become closer to their world in learning so that it is more meaningful. One of the advantages of STEM in learning is that it is able to train students both cognitively and emotionally. Apart from that, students are not only taught theoretically but also practically so that they



experience the learning process directly (Kelley & Knowles, 2016). STEM-based learning can also train students to understand technology, hone cognitive and affective skills, and apply knowledge (Zollman, 2012). STEM learning is claimed to be able to improve critical thinking skills (Roberts et al., 2022), stimulate student creativity (Rayner & Papakonstantinou, 2015), involve students in the entire learning process (Dass, 2015), prepare students for future careers (Rayner & Papakonstantinou, 2015), develop collaboration skills (Pasani & Amelia, 2023), and facilitate contextual problem solving (Roberts et al., 2022)(Martaningsih et al., 2022).

Several studies have been conducted that apply AR and STEM to learning. The influence of AR and STEM is quite positive in some cases. The achievement of environmental literacy concepts in classes that use augmented reality is on average higher than in classes that use conventional learning media (Oktaviana et al., 2022). This means that the use of augmented reality is more effective than conventional learning media. Augmented reality learning media can create an interesting and enjoyable learning atmosphere (Nurhidayat & Azhar, 2023; Radu, 2014). Augmented reality learning media has a big influence on increasing learning motivation (Khan et al., 2019), learning outcomes (Georgiou & Kyza, 2018), Learning Performance (Chen, 2019; Aslantas, 2024), reducing anxiety levels (Chen, 2019), and increasing higher-order thinking skills (Haryadi & Pujiastuti, 2023). These advantages increasingly convince the author to research this field. Therefore, this research will test the contribution of AR-STEM to environmental literacy, which will be tested in science learning for the Water Cycle material. The findings in this research can make a major contribution to learning innovation, especially strengthening the importance of STEM and digital technology as learning media.

## METHOD

This research uses a quasi-experiment with a one-group pretest-posttest design. Experimental research is a method used to look for cause-and-effect relationships between two factors that are deliberately manipulated by researchers (Białowas, 2021). The researcher chose this design because there is a pretest before it is implemented and a posttest after it is implemented. A total of 31 grade 5 elementary school students are in grade 5 elementary schools in Yogyakarta. Simple random sampling was carried out as a sampling technique. Simple random sampling is simple random sampling, meaning that  $n$  samples are taken from population  $N$ , and each member of the population has the same chance of being taken.

The variables in this research are the independent variable and the dependent variable. Independent variables, or independent variables, are variables that cause or have the theoretical possibility of having an impact on other variables [15]. The independent variable or independent variable in this research is STEM-based Augmented Reality Media. Dependent variables, or dependent variables, are variables that are influenced by or are the result of the existence of an independent variable. The dependent variable in this research is environmental literacy. The instruments used in this research include research instruments and data collection instruments. Research instruments include lesson plans and STEM-augmented reality. Mobile phones are used as tools to access media. Data collection instruments include literacy tests and documentation in the form of photos of the learning process.



Validity in this research uses the point-biserial formula. With the help of Statistical Product and Service Solution (SPSS) 25.00. After the calculation is carried out, the question item is said to be valid if the calculated  $r_{\text{value}}$  is greater than the  $r_{\text{table}}$  value ( $r_{\text{calculated}} > r_{\text{table}}$ ) for a significant level of  $\alpha = 5\%$  and  $n =$  the number of sample members. Reliability in this research uses Kuder Richardson's (KR) 21. Because the test used in this research is a multiple-choice form with discrete data types, an instrument is said to be reliable if the KR reliability coefficient value is more than 0.70 ( $r_1 > 0.70$ ).

The data analysis technique in this research is preparation for checking identity, completeness of data, and types of data entries. The second is tabulating scores, grouping data, changing data types, and providing codes in relation to data processing. The data obtained in this research was taken from the results of environmental literacy tests. The data was then analyzed using descriptive statistics and inferential statistics. Descriptive statistics uses the mean and standard deviation to produce data categorization. The inferential statistics in question are paired sample t-tests to determine the difference between tests before and after treatment, followed by simple regression to determine the contribution of the media to environmental literacy.

## RESULTS

Environmental literacy data for fifth grade students using Android-based STEM-AR can be seen in Table 1.

**Table 1.** Student Environmental Literacy Data

<b>parameter</b>	<b><i>Pretest</i></b>	<b><i>Posttest</i></b>
<i>Mean</i>	59.19	81.61
Median	60.00	80.00
Modus	50.00	85.00
Std. Deviation	12.25	9.94
Minimum	35.00	55.00
Maximum	80.00	100.00

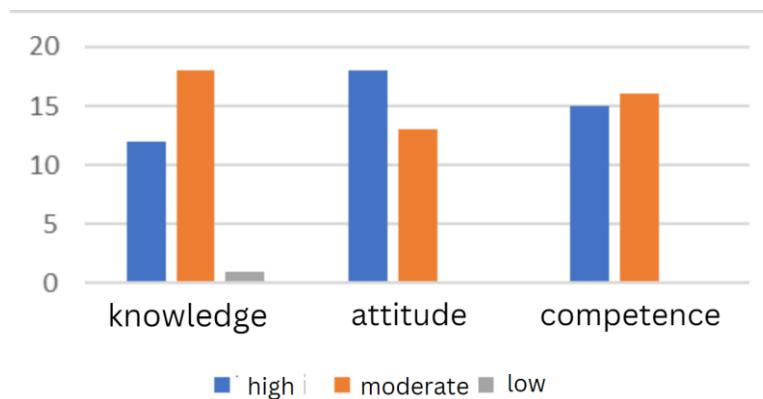
Based on Table 1, a categorization was then made for each research variable. The categorization of students' environmental literacy results can be seen in Table 2.



**Table 2.** Categorization of Students' Environmental Literacy

Category	Intervals	Frequency	%	Frequency	%
high	>67	8.00	25.9	29.00	93.60
moderate	33 s/d 67	23.00	74.1	2.00	6.40
low	< 33	0.00	0.00	0.00	0.00
Amount		31.00	100.00	31.00	100.00

In the environmental literacy aspect, indicators include knowledge, attitudes, and competencies. The results of the analysis for each indicator can be seen in Figure 1.



**Fig 6.** Frequency of Environmental Literacy for Each Indicator

Data analysis in this research is used to answer the allegations or hypotheses that have been put forward. The data analysis used in this research is the normality test, the linearity test, and the hypothesis test.

### Normality Test

Table 3 is the result of the normality test for students' environmental literacy.

**Table 3.** Normality Test

Data	<i>Shapiro-Wilk</i>			decision
	Statistic	Df	Sig.	
<i>Pretest</i>	0.964	31	0.381	Normal
<i>Posttest</i>	0.965	31	0.382	Normal



### Hypothesis testing

The test for differences in environmental literacy means on data before and after treatment was carried out using a t-test with the Paired Sample T-Test type with the help of the SPSS program. Meanwhile, in determining the t-count, a significance level of 5% is used. The results of the paired sample t-test can be seen in Table 4.

Table 4. Paired Sample T-Test

		Paired Samples Test								Significance	
		Paired Differences				95% Confidence Interval of the Difference		t	df	One-Sided p	Two-Sided p
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper					
Pair 1	Pre Test - Post Test	-22.581	13.957	2.507	-27.700	-17.461	-9.008	30	<.001	<.001	

To determine the contribution of media to environmental literacy, a simple linear regression test was carried out and produced the data in Table 5.

Table 5. Simple Linear Regression Test Summary Model

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.714 <sup>a</sup>	.510	.502	11.161

a. Predictors: (Constant), literasi lingkungan

Table 5 explains that the correlation value (R) is 0.714 and explains the percentage influence of the independent variable on the dependent variable, which is called the coefficient of determination (R<sup>2</sup>) of 0.510, which means that the independent influence on the dependent variable is 51%. So, Android-based STEM-AR media has a 51% influence on environmental literacy, while the remaining 49% is influenced by other factors.

### DISCUSSION

The application of concepts is important for students to understand when responding to environmental conditions. Therefore, learning should be able to help students develop environmental literacy skills. Ideal learning is one that helps students understand the natural environment and its applications. Based on the research results, it can be concluded that using Android-based STEM-AR can increase students' environmental literacy. The achievement of environmental literacy concepts in classes that use



augmented reality is on average higher than in classes that use conventional learning media (Sumarni & Feranita, 2018). The increase occurs due to the use of appropriate and good media and the delivery of material. This relates to educators' considerations in determining learning strategies, methods, models, and media (Nuraini et al., 2023).

Learning in the experimental class has gone well, but the use of technology-based learning media still needs to be improved. The learning media used will influence learning outcomes (Nuraini et al., 2023). Applying learning using memorization or writing methods will be difficult for students to understand. The teacher's assertion that the water cycle material's learning outcomes require improvement lends credence to this. Based on the research results, it can be concluded that using Android-based STEM-AR can increase students' environmental literacy. Augmented reality-based media has a big influence on increasing student motivation and learning outcomes (Chin et al., 2019; Ziden et al., 2022). Android-based STEM-AR is expected to provide a positive stimulus to students so that they can easily understand the material and improve learning outcomes.

Hypothesis testing with the t test shows that there is a significant influence of Android-based STEM-AR media on environmental literacy. Based on observations, students' environmental literacy skills still need to be improved. One effort to increase environmental literacy is by integrating it into learning. STEM-based AR should be used in an effort to increase students' environmental literacy. STEM-based learning can train students to understand technology, hone cognitive and affective skills, and apply knowledge (Craig et al., 2021). AR in education can stimulate students' mindsets to think critically about problems and events that occur in the environment or everyday life (Wirayudi Aditama et al., 2022). This opinion supports how the use of STEM-based AR can influence environmental literacy. During the research, it was seen that students were able to apply learning and think more critically about problems in the environment or everyday life. This was supported by test results, which had increased The magnitude of the influence of the application of Android-based STEM-AR on environmental literacy was 51%, while the remaining 49% was influenced by other factors, namely daily habits at home, self-awareness to care about the environment, and students' knowledge. have, and factors looking at organizations operating in the environmental sector (Hargreaves, 2017).

The research results show that there are differences between the pretest and posttest results in students' science learning outcomes. The increase in test results after using Android-based STEM-AR was due to students experiencing learning that was more interesting, more active, and more fun. So that students can better remember the material presented. This can be seen during the learning process. STEM-AR can increase students' science literacy in vocational education (Agustina et al., 2019), ICT literacy and STEM knowledge (Hasnah Tanalol et al., 2021). Learning in the STEM approach is able to link and integrate science with phenomena that occur in real life (Anwar et al., 2022). Contributions to AR in learning include engagement and motivation (Dakeev et al., 2021), real-world context (Draxler et al., 2020), hands-on learning (Cheng et al., 2024), Information Visualization on Large Interactive Displays (Reipschlagel et al., 2021), collaborative learning, accessibility and inclusivity (Marín Díaz, 2017), field trips and virtual tours (Bursztyn et al., 2017), and instant feedback (Turkan et al., 2017).

STEM-AR creates a more engaging and interactive learning environment, capturing students' attention and motivating them to actively participate in lessons (Dakeev et al., 2021). The interactive nature of



STEM-AR applications makes the learning process enjoyable and memorable. This allows learners to overlay digital information onto the real-world environment (Anwar et al., 2022) . This helps in providing context and relevance to the learning material, making abstract concepts more tangible and easier to understand (Draxler et al., 2020). STEM-AR enables hands-on learning experiences without the need for physical objects (Cheng et al., 2024). For example, students can dissect virtual animals or explore historical artifacts in a 3D space, promoting experiential learning. Abstract and complex concepts become more accessible when visualized through STEM-AR. Students can interact with 3D models, simulations, and animations, gaining a deeper understanding of subjects such as biology, chemistry, physics, and more. STEM-AR fosters collaboration among students, as they can work together on shared STEM-AR experiences. Collaborative projects and activities in STEM-AR promote teamwork and communication skills. AR can cater to different learning styles and abilities, providing a more inclusive learning environment (Marín Díaz, 2017). It helps accommodate various needs, such as visual, auditory, or kinesthetic learning preferences. STEM-AR enables virtual field trips and tours, allowing students to explore historical sites, museums, and other locations without leaving the classroom (Bursztyn et al., 2017). This is especially valuable when physical visits are impractical or impossible. STEM-AR applications can provide instant feedback to students, reinforcing correct answers or guiding them through problem-solving processes. This immediate feedback enhances the learning experience and helps students learn from their mistakes (Turkan et al., 2017).

## CONCLUSION

Learning with Android-based STEM-AR makes a major contribution to environmental literacy. This can be seen from the learning process that involves students; they are motivated and very enthusiastic about the media. Real-world context learning makes the learning process enjoyable and memorable. This allows learners to overlay digital information onto the real-world environment. Abstract concepts will look concrete, so learning will be more meaningful. Environmental literacy is not only influenced by this medium but also by other factors, for example, daily habits at home, self-awareness to care about the environment, the knowledge that students have, and looking at organizations working in the environmental sector.

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## **Revolutionizing Glioblastoma Treatment with NK Cells: The Triad of Cytokines, Checkpoints, and CARs**

**Kamila MOZGA**

**Olga SYNOWIECKA**

**Wiktor MILEWCZYK**

**Igor RYDZYK**

**The Student Scientific Circle at the Department of Epidemiology and Clinical Research Methodology, Medical University of Lublin, Poland**

### **Abstract**

Glioblastoma (GBM) represents a formidable challenge in the field of oncology due to its aggressive nature and resistance to conventional therapies. Natural killer (NK) cells, integral components of the innate immune system, have shown significant promise as an off-the-shelf allogeneic cell-based immunotherapy for combating GBM. This review explores various strategies and methods to harness the potential of NK cell-based therapy for GBM treatment.

To bolster the efficacy of NK cell-based immunotherapy for GBM, various approaches have been explored. Engineered NK cells have been developed to block adenosine signaling via CD73 and achieve dual antigen recognition by modifying them with multi-CARs targeting disialoganglioside (GD2) and NK group 2D (NKG2D) ligands. These engineered NK cells also release an antibody fragment that disrupts immunosuppressive purinergic signaling by cleaving a tumor-specific linker. This trifunctional construct allows NK cells to target heterogeneous antigen combinations, sparing healthy cells. The success of human CAR-NK therapy in GBM treatment depends on administration regimen, dosage, and adoptive transfer frequency.

Additionally, therapies that combine NK cells with other agents have shown promise. NK cell-mediated tumor regression can be enhanced by combining STING agonists and anti-PD1 antibodies. Clinical trials have demonstrated the safety of allogeneic primary NK cells in humans, and genome-edited NK cells have the potential to prevent inhibitory receptor expression. Furthermore, memory-like NK cells that develop in response to specific antigens or cytokines offer long-term anti-tumor responses.

The methods employed to enhance NK cell activity in GBM therapy include blocking immunosuppressive receptors, disrupting inhibitory signaling, and utilizing cytokines such as IL-2, IL-15, and other interleukins. Moreover, combination strategies involving NK cells, chemotherapeutic



drugs, and immunomodulatory cytokines have demonstrated promise in improving the anti-tumor response.

In conclusion, optimizing the activity of NK cells is crucial in developing effective immunotherapies for GBM. Various methods and combination therapies have been explored, each contributing to the potential for enhanced NK cell-based treatment strategies. These approaches hold promise for the future of GBM therapy by harnessing the innate immune system's potent antitumor capabilities.

**Keywords:** Adoptive cell therapy, Antigen recognition, CAR-NK cells, Checkpoint blockade, Cytokines, Glioblastoma, Immunotherapy, NK cell activity, Tumor microenvironment, Triad therapy



## Nurullah Ataç'ın Günce I-II adlı denemelerinde yer alan deyimleşmiş fiil gövdeleri

### Idiomatized compound verbs found in Nurullah Ataç's journals I-II

İzzet ŞİRİN

Arş. Gör. Artvin Çoruh Üniversitesi, Türkiye

#### Öz

Dinamik bir yapıya sahip olan dil sürekli ve çeşitli yollar vasıtasıyla yeni kavramlar üretir. Yeni kavramların oluşturulmasında kullanılan yollardan biri, varolan kavramların birleştirilmesidir. Dilimizde yer alan birleşik fiiller bu yolla oluşturulmuştur. Birleşik fiil, bir yardımcı fiilin, bir veya birkaç isim, isim yerine geçen sıfat-fiil veya asıl fiilin bir araya gelmesinden oluşur. Bu birleşik fiillerin içerisinde yer alan deyimleşmiş fiil gövdeleri ise, zaman içinde anlam kayması ve kalıplaşması sonucunda, bir asıl fiil ile birleşen isim veya isim soyundan gelen bir veya birden çok sözcüğün birleşmesi ile ortaya çıkar. Bu tür birleşik fiillerdeki asıl fiil olan unsur sözlük anlamını yetererek yardımcı fiil değeri kazanmıştır (Korkmaz 2009; Daşdemir 2015). Nurullah Ataç'ın Nurullah Ataç'ın günce I-II adlı denemelerindeki metinlerin yaklaşık üçte biri taranarak deyimleşmiş fiil gövdeleri tespit edilmiştir. Bu tespit edilen deyimleşmiş fiil gövdeleri Nesne tamlaması şeklinde deyimleşmiş fiil gövdeleri, Zarf tamlaması şeklinde deyimleşmiş fiil gövdeleri, Çekimli isim + fiil şeklinde deyimleşmiş fiil gövdeleri başlıkları altında tasnif edilmiştir.

**Anahtar kelimeler:** deyimleşmiş fiil gövdeleri, birleşik fiil, dil bilimi, anlam bilimi

#### Abstract

Language, with its dynamic structure, constantly generates new concepts through various means. One of the methods employed in creating new concepts is the combination of existing ones. Compound verbs in our language are formed through this process. A compound verb consists of an auxiliary verb, one or more nouns, adjectival verbs replacing nouns, or the combination of the main verb with these elements. The idiomatized verb stems found within these compound verbs emerge through the fusion of a main verb with one or more words derived from a noun, resulting in a shift and solidification of meaning over time. In these compound verbs, the main verb element has acquired auxiliary verb value



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by sufficiently encompassing the dictionary meaning (Korkmaz 2009; Daşdemir 2015). Approximately one-third of the texts in Nurullah Ataç's essays in "Nurullah Ataç'ın Günce I-II" were analyzed, revealing idiomatized verb stems. These identified idiomatized verb stems are categorized under Object Phrase-Formed idiomatized verb stems, Adverbial Phrase-Formed idiomatized verb stems, and Inflected Noun + Verb-Formed idiomatized verb stems.

**Keywords:** idiomatized compound verbs, compound verb, linguistics, semantic



## **Innovative Small and Medium Enterprises in Poland – directions of development**

**M.Sc. Irmina FLOREK**

**The Maria Curie-Skłodowska University in Lublin, Poland**

### **Abstract**

Innovations have become an inseparable element of contemporary economy. For enterprises, innovative solutions bring new opportunities but also new challenges. Global market, new investments in technology as well as strong competitions oblige enterprises to move forward with products and services, methods and processes implemented in the company. Innovations can be an answer to that needs.

Small and Medium Enterprises (SME) in Poland are a specific group of enterprises. They are smaller and more delicate in case of crisis, but they are more flexible and prone to change. Innovations in SME can lead to fast growth and new opportunities, like internationalization or new products, but for small and medium enterprises they can also bring a high risk. Nowadays, more and more enterprises decide to be involved in innovative solutions as a chance to keep up with developing economy, even though the risk of failure is still at a high level.

SME on their way to implement innovations should take into consideration many aspects directly or indirectly impacting an innovation's process. R&D investments or educated, experienced human capital can be a key aspect of success in the area of innovations. Companies needs to consider their strength and owned assets that can turn into an advantage in the whole innovation process.



## The Effect of Talent Management Strategies on Work Engagement in the Finance Sector: A Study on Bank Employees <sup>1</sup>

Mirac ASLANTAS

### Abstract

As the significance of human resources increases, effectively utilizing the human potential within organizations has become a crucial factor in gaining competitive advantage. In recent years, advanced human resource management practices focusing on the talents of employees in business organizations have been gaining importance. This study examines the applications of talent management in the banking sector, encompassing fundamental elements such as the appropriate employment, training, development, and retention of organization employees based on their talents. The aim of the research is to elucidate the impact of talent management practices in banks on work engagement. Towards this aim, hypotheses have been formulated, and surveys have been conducted among bank employees to test these hypotheses. The data obtained have been analyzed using various statistical methods and testing techniques (Frequency Distribution, t-Test, ANOVA, Correlation, and Regression). A statistical significance level of  $p < 0.05$  has been adopted for the analyses. Consequently, it has been determined that there is a positive and significant relationship between talent management and work engagement, and furthermore, it has been observed that talent management practices enhance work engagement behavior.

### 1. INTRODUCTION

In today's business world, it has become evident that human capital is the most critical competitive advantage for organizations, given the broad spectrum of competition. Qualified, skilled, and loyal employees constitute the desired workforce profile for all organizations. Organizations aim to gain a difficult-to-imitate competitive advantage by harboring employees with these qualities. The 'core competency' strategy, which constitutes a significant difference in strategic management, is based on the principle of organizations possessing unique qualities and competencies to sustain themselves in the business world. Talented and competent employees, being among the most critical elements of these qualities, bring greater value to organizations than other resources. The concept of talent management has evolved in recent years as a specialized practice within strategic human resource management, envisioning organizations to adopt a strategic approach in recruiting, training, developing, and retaining talented individuals. Talent management is of paramount importance for

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<sup>1</sup> The article, derived from Aslantaş's (2016) doctoral thesis and translated into English



organizations, not only in terms of achieving their core objectives but also in recognizing the presence of talented employees who are more selective about the work environment and conditions.

The focus of this study is to delineate the impact of talent management on employees' work engagements behaviors in the banking sector and to identify the necessary steps in this context. Below is a literature review encompassing the conceptual framework of talent management and work engagement.

### 1.1. Talent Management

In today's business world, the competitive advantage of organizational entities is closely linked to the abilities, competencies, and adaptability to change of their employees (Whitley, 2007). In an environment where the organizational workforce is perceived as a key element, the selection, training, and retention of qualified employees come to the forefront for organizational objectives. Organizations strive to invest in their employees, aiming to find individuals with suitable potential and talent to ensure that this investment is not in vain and yields returns. The efforts made by organizations underscore the significance of talent management practices.

When definitions related to talents are examined in the academic literature, it is observed that the concept of talent is expressed by highlighting its various characteristics.

The concept of talent is defined as, the quality, ability, or aptitude of an individual to understand or accomplish something (www.tdk.gov.tr). Talent is the capability of an individual to perform tasks more easily, enhance productivity, and mobilize those around them to achieve success within a specific period (Doğan & Demiral, 2008:150). According to Çırpan and Şen, talent can be described as individuals with superior qualities at a level that could play a role in the destiny of an organization, possessing the potential to fill managerial and technical positions with a promising future (Çırpan & Şen, 2009:110). In another definition, talent encompasses the entirety of a person's mental features, such as the ability to grasp specific relationships, analyze, solve problems, and reach conclusions, as well as certain physical characteristics (Erdoğan, 1999). While talent is an innate potential that accompanies an individual, particularly in a specific field, it can be defined as the systematic development and enhanced activity of this potential in a specific skill area (Gagne, 2013:2). Individuals with exceptional abilities (giftedness) have greater talents. However, the concept of exceptional talent includes productivity and motivation (Renzulli, 1978). Talented employees must have skills, wills, and purposes; they must be capable, committed, and contributing (Ulrich & Smallwood, 2011:60). With these considerations, talent can be expressed as the innate, individual capacities that individuals utilize in organizing their perception, evaluation, actions, and behaviors, which develop through innate learning and application.

With the rise in the well-being of employees and the increasing importance of knowledge workers in contemporary business organizations, the expectations of employees are undergoing a transformation (Kelloway and Barling, 2000). Working in a meaningful, motivating, self-improvement-oriented, continuously learning, talent-compatible, work-life balanced, and justly distributed job is among the most crucial expectations of individuals today. Furthermore, the desire to manage career development within a certain systematic framework is another significant expectation (Çırpan & Şen, 2009:112; Aksoy, et al., 2016). Retention of talent does not only mean of ensuring that a well qualified



workforce is retained but it is also linked to how these talents can be nurtured and motivated to consistently strive for success and growth. The more employees' talents are managed and developed the more they are likely to focus their energies on improving their performance and focus their individual energy to the success of the organisation (Mpofu, 2012). In modern businesses, talented employees perceive themselves not merely as assets but as investors, expecting a return on investment from their organizations. In situations where their expectations are not met, these employees may easily leave the organization or, in cases of dissatisfaction, work with low productivity, resulting in poor performance that may lead to their own dismissal by managers, not voluntary departure (Doğan & Demiral, 2008:156). From this perspective, according to Ulrich & Smallwood, talent means investing in the next generation (Ulrich & Smallwood, 2011:57).

The expectations of new talented employees are generally higher compared to other employees. While these expectations vary, it can be stated that they are looking for a work environment that is suitable for their talents and allows them to develop those talents. Simultaneously, they expect to be rewarded in proportion to the contributions they make to the organization (Gallardo-Gallardo, 2018; Ng et al., 2010). According to Freiberg and Freiberg, individuals aware of their talents do not base their job and workplace preferences solely on material conditions; rather, they blend their financial and emotional expectations when making decisions. These expectations are outlined below (Freiberg and Freiberg, 2005; cited in Altuntuğ, 2009):

- A work environment that considers the concepts of career and family together
- Assignment that is meaningful and can reveal talent
- Flexible working environment and hours
- Sincere and warm business friendship
- Management approach that enables and supports the sharing of information
- A work environment that includes hobbies and social relationships

The concepts of talent and talent management were brought to the forefront through McKinsey research in 1997. McKinsey, a U.S.-based management consulting firm, conducted research on talent with approximately 6,900 executives in 56 major American companies. The research revealed that despite these companies not experiencing growth-related issues in the past five years, they faced challenges in terms of a competent workforce. The most significant issues reported by managers were identified as attracting talented individuals to the organization (at a rate of 89%) and retaining talented employees (at a rate of 90%). In the updated study in 2000, it was found that attracting talent had become more challenging compared to the findings in 1997 (Axelrod, et al., 2001). Furthermore, according to the Talent Shortage research conducted by Manpower Inc. in 2006, which involved 33,000 employees in 23 countries, problems related to talented employees were identified (Atli, 2013:59).

The concept of talent management involves a planned and structured approach by the organization, encompassing the recruitment, placement, and development stages of talented individuals, with the desire to employ individuals who consistently demonstrate high performance (Akar, 2015:25). Stockey defines talent management as a conscious and planned approach to the execution of attracting,



hiring, developing, and retaining actions in alignment with the organization's current and future needs, along with the skills and abilities of the workforce (Stockey, 2003). Viewing talent management as a process, Çırpan and Şen assert that it is a management process centered around the 'Human Resources,' systematically working to bridge the gap between the talents needed for coping with the challenges the company may face and achieving its goals by implementing strategies (Çırpan & Şen, 2009). According to Rustawian, talent management is the management of people through the continuous and effective analysis, development, and use of competencies for business needs (Rustiawan, 2023).

Taking these definitions into consideration, talent management can be expressed as a specialized advanced human resources practice that focuses on the employee, according to the understanding of talent. It involves identifying key positions, tasks, and activities required in the organization, attracting suitable talent for these positions, selecting, placing, orienting, training, and developing them, as well as motivating and retaining them. The execution of necessary planning and implementation efforts is integral to this talent-oriented approach.

So, for an effective implementation of talent management, organizations need to determine in advance the strategy they will adopt, along with the roadmap and methodology. Expectations related to talent management practices may vary within the framework of the organization's field of activity and needs.

All of these statements emphasize the significance of the talent management process for organizations. Different researchers have proposed various models related to the talent management process.

## 1.2. Work Engagement

The concept of work engagement is one of the topics that has garnered attention in the business world in recent years, with research in this area showing an increasing trend (Shuck and Reio, 2014:43). While initially stemming from some studies related to occupational burnout, the emergence of the concept of work engagement is also influenced by positive psychology, which directs attention to individuals' strengths and productive aspects rather than their weaknesses (Seligman and Csikszentmihalyi, 2000). Positive psychology largely developed following World War II. The general scope of positive psychology encompasses positive thoughts regarding well-being, satisfaction, happiness, optimism, hope, and belief. Within the realm of positive psychology related to groups, areas include responsibility, spiritual interest, sacrifice, moderation, tolerance, work ethic, virtues, and enhanced citizenship. Individually, positive psychology encompasses love, courage, high talent, wisdom, and interpersonal skills (Seligman, 2002:3). It can be argued that the positive psychology movement gained popularity through Seligman's research. Alongside the positive psychology movement, studies have been conducted on positive behavior within organizations, with work engagement being one of them.

In studies focusing on job-related negative attitudes such as burnout, a behavior initially identified as the direct opposite of burnout and termed "work engagement" has been observed. Within the scope of research on employee burnout, the behavior exhibited by employees who do not display signs of burnout and demonstrate more energetic and effective performance in job-related activities has been defined as "work engagement." While burnout is perceived as a combination of exhaustion and depletion related to work, work engagement signifies vitality and dedicated effort towards work-



related tasks. Engaged employees maintain an energetic connection with their job tasks and are able to cope with the demands inherent in their roles. Despite burnout and work engagement being perceived as contrasting behavioral patterns (exhaustion and cynicism versus vigor and dedication), there exist distinct underlying reasons for these behaviors (Schaufeli et al., 2002:72-74).

Conceptually, "engagement" is defined as behavior that exceeds formal expectations and is limited to an individual's actions (Demirhan & Karaman, 2014), expressed as positive thoughts and satisfaction regarding the work performed. Upon reviewing the definitions of work engagement in the literature, Kahn describes work engagement as employees projecting their own identities onto their work in physical, emotional, and cognitive dimensions (Kahn, 1990:700), while Schaufeli and colleagues define work engagement as a positive mental state related to work, encompassing vigor, dedication, and absorption (Schaufeli et al., 2002:74; Schaufeli & Bakker, 2004:295). Some authors suggest that work engagement is characterized by positive feelings, well-being, and effective motivation, serving as the opposite of burnout (Leiter & Bakker, 2010:2; Schaufeli & Bakker, 2004:294). According to Saks, work engagement is defined as a distinct and unique structure consisting of cognitive, emotional, and behavioral components associated with individual role performance (Saks, 2006:602). Work engagement is a concept related to employee well-being and work behavior that arises from various reasons. Accordingly, work engagement involves a positive experience within the individual, associated with good health and positive work effects, aiding productivity in a stressful work environment, having effects on positive organizational commitment, and influencing employee performance (Sonnentag, 2003:518; Barkhuizen & Rothmann, 2006:38; Kingir et al. 2016). The concept of work engagement entails employees dedicating themselves to their work beyond mere commitment and job satisfaction, integrating themselves with their work (Maslach et al., 2001:416). Evaluating these statements, work engagement behavior can be defined as demonstrating a positive attitude toward one's job, engaging with it emotionally, physically, and mentally, expressing positive energies related to work, acting with high sensitivity to work-related matters, and integrating with one's job. An engaged employee, when the job aligns with their abilities, can unleash their latent power derived from their talents, utilize their talents to their fullest potential, and reach peak performance levels.

Upon reviewing the literature, it is evident that there are some differences in the concept of work engagement. These concepts have been expressed with similar meanings. In foreign sources, they are articulated as job engagement, employee engagement, and work engagement, each with distinct differences as summarized below (Erim, 2009:141):

**Job engagement:** This concept denotes an individual's emotional and physical attachment to their job roles.

**Employee engagement:** It encompasses the enthusiasm individuals have for their jobs, their attitudes towards work, and their job satisfaction.

**Work engagement:** It refers to the state of vigor, dedication, and absorption related to work.

Four main approaches have been identified in the literature concerning work engagement (Schaufeli, 2014:18):

#### A- The Needs-Satisfying Approach



- B- The Burnout-Antithesis Approach
- C- The Satisfaction-Engagement Approach
- D- The Multidimensional Approach

#### **A- The Needs-Satisfying Approach**

This approach was proposed by Kahn (1990), who examined the extent to which individuals' physical, cognitive, and emotional characteristics influence their performance in job roles. Kahn's research significantly contributed to the emergence of the concept of work engagement. According to Kahn, individuals exhibit or conceal their individual characteristics related to work in conjunction with the characteristics of the work environment. Work engagement, according to Kahn, is expressed as the individual's manifestation or withdrawal of their identity based on their psychological experiences related to work and the characteristics of the work environment. In his study, Kahn stated that employees demonstrating their identity in their work in physical, emotional, and cognitive dimensions represent personal engagement behavior. Conversely, employees' failure to project their identity onto their work and their passive withdrawal from their job roles for various physical, emotional, and cognitive reasons are described as behaviors opposite to work engagement (personal disengagement) (Kahn, 1990:700-701). According to Schaufeli and colleagues, although Kahn presents a comprehensive psychological model with his study, he does not propose a functional structure (Schaufeli et al., 2002:74). Kurtpinar suggests that Kahn laid the foundations of work engagement behavior with his study, and until studies related to burnout were associated with work engagement, no other theory than Kahn's had been encountered (Kurtpinar, 2011:9).

#### **B- The Burnout-Antithesis Approach**

This approach is rooted in the concept of occupational health psychology. There are two main theses in this approach.

The first thesis proposes that the burnout-antithesis approach acknowledges both positive and negative endpoints of work engagement and burnout. It suggests that the three dimensions of burnout (exhaustion, cynicism and lack of accomplishment) are countered by the concepts of energy, involvement, and efficacy, respectively. When employees are highly engaged in their work, their levels of burnout are low, and vice versa. Work engagement behavior was defined by Maslach and Leiter in 1997 within this perspective (Schaufeli et al., 2002:73; Schaufeli, 2014:18).

The second thesis presents the concept of "work engagement" as a separate concept from "negative burnout." Burnout behavior is expressed as "wear and tear" occurring in work engagement. While burnout behavior is characterized by low activation and low identification with work, work engagement is characterized by vigor and dedication. This perspective was introduced by Schaufeli and Bakker in 2001 (Schaufeli et al., 2002:74; Schaufeli, 2014:18). According to this more widely accepted approach compared to other existing ones, work engagement is examined in three dimensions: vigor, dedication, and absorption. These are expressed as follows (Schaufeli and Bakker, 2003; Schaufeli et al., 2002:74; Schaufeli and Bakker, 2004:295; Schaufeli, 2014:19):

**Vigor:** It refers to the employee working with high energy, being voluntarily engaged in their work, persevering in overcoming challenges, and being willing to make efforts for their job.



**Dedication:** It signifies the individual performing their work with enthusiasm and excitement, understanding the importance and meaning of their job. It also implies the individual taking pride in their work and feeling inspired by it.

**Absorption:** It denotes the individual fully immersing themselves in their work and deriving enjoyment from it. It indicates the work becoming enjoyable for the employee and problems encountered not posing a significant issue.

### **C- The Satisfaction-Engagement Approach**

Developed by Harter and colleagues, this approach defines work engagement as satisfaction and enthusiasm experienced by individuals through their desire and participation. Evaluating work engagement based on individuals' willingness and involvement, it is suggested that it is synonymous with traditional concepts of job satisfaction and job involvement, as indicated by the evaluation of research findings conducted by the Gallup Organization. Studies have found a correlation between work engagement and customer satisfaction, profitability, productivity, and employee turnover rate. This research not only provides significant data for managers regarding employee satisfaction but also contributes valuable insights to the literature (Harter et al., 2002; Schaufeli, 2014:19).

### **D- The Multidimensional Approach**

This approach, developed by A. M. Saks in 2006, is based on the social exchange theory. According to Saks, "work engagement" is defined as a distinct and unique structure consisting of cognitive, emotional, and behavioral components associated with individual role performance (Saks, 2006:602). Saks suggests that work engagement behavior should be examined in two parts: "job engagement" and "organization engagement." He identifies job engagement as relating to organizational support, procedural justice, job satisfaction, turnover intention, and organizational commitment (Saks, 2006:613), similar to the multidimensional approach proposed by Kahn (1990) in the "needs-satisfying approach." An innovative aspect of Saks's model is the use of "work engagement" instead of job involvement and "organizational engagement" instead of performance in organizational roles (Schaufeli, 2014:19).

In a study conducted by Sonnentag (2003), it was found that committed employees have better physical, mental, and emotional health compared to other employees. They are active in work-related matters, exhibit high performance, demonstrate extra-role behaviors related to organizational tasks, have a positive attitude towards time pressure, can make critical decisions regarding their tasks, and have increased learning motivation (Sonnentag, 2003:524:527). Various studies on work engagement have shown results such as positive attitudes towards work, personal work health, exhibiting positive behaviors beyond expectations in tasks and responsibilities, and increased performance levels. It has been observed that employees genuinely engaged in their work show high job satisfaction, demonstrate higher organizational commitment, have lower intentions to leave their jobs, have better job health, experience lower burnout rates, have higher organizational identity, lower depression levels, exhibit more extra-role performance, and have higher job motivation (Hu et al., 2013; Bakker and Bal, 2010:200; González-Romá et al., 2006:172; Hakanen et al., 2006:507; Aslantaş, 2024:496; Bakker et al., 2008:196; Ozer et al., 2023). These findings indicate that employees' commitment to their work is a significant factor in their attitudes towards their jobs and their performance levels.



Employees with these qualities focus on their jobs with higher effort and energy levels and achieve higher levels of success.

### **1.3. The Relationship Between Work Engagement And Talent Management**

To elucidate the effects of work engagement behavior, the roles of individual and organizational factors must be examined. Employing individuals in positions that match their talents can encourage work engagement behavior. This is because a conducive work environment can facilitate employees' dedication to their work and serve as a natural source of motivation. Therefore, testing the relationship between talent-based employment and work engagement is an important research area that could yield significant results for businesses.

## **2. METHODOLOGY OF THE RESEARCH**

This section of the study comprises subsections outlining the research's objectives and significance, the research model and hypotheses, the population and sample of the study, the limitations of the research, data collection and instruments, as well as the methodology of the research.

### **2.1. The Aim and Significance of the Study**

In today's business world, having a low rate of replicability for the goods and services produced constitutes a significant competitive advantage. Businesses operating in this realm adopt the concept of talent management to create the necessary conditions for hiring, training, developing, and sustaining the performance of talented employees, particularly those aiming for success by employing core competency strategies (Aslantas, 2024). This research aims to investigate the impact of talent management strategies employed by banks, operating in sectors critical for the quality of services produced by employees, on employees' work engagement and to determine the effectiveness of these strategies across the industry.

Work engagement behavior, which denotes the intense interaction and integration of employees with their work roles on emotional, physical, and mental levels, is a concept that has emerged as increasingly significant in recent times. This study examines the influence of talent management in the banking sector on employees' work engagement behaviors and aims to raise awareness, particularly in this sector, regarding planning and implementation practices. In this context, the goal is to employ, train, develop, and plan careers for employees based on their talents, thereby increasing their levels of work engagement to enhance service quality and foster a healthy work environment.

### **2.2. Research Model and Hypotheses**

In the research, a descriptive research model was employed based on the comparative research method.

The research question, "Does talent management practices affect work engagement behavior?" stands out. The hypothesis to be tested regarding this issue is presented below:



H1: There is a significant relationship between talent management and work engagement behavior.

H1a: There is a significant relationship between the core talent assessment sub-dimension of talent management and work engagement behavior.

H1b: There is a significant relationship between the career talent assessment sub-dimension of talent management and work engagement behavior.

H1c: There is a significant relationship between the organisational talent assessment sub-dimension of talent management and work engagement behavior.

### 2.3. Research Population and Sample

The total number of employees in public banks operating in Turkey is 62,696 (<http://www.tuik.gov.tr/>). The population of the study consists of employees working in public banks in Diyarbakır, Şanlıurfa, Mardin, Gaziantep and Batman provinces in Turkey. A total of 550 questionnaires were randomly distributed to bank employees in these provinces. Out of these questionnaires, 442 were returned. Among them, 21 questionnaires were marked in a way that rendered them unprocessable and thus excluded from the analysis. Consequently, 421 questionnaires were considered for evaluation.

A table indicating the statistical adequacy of the sample size representing the population in a research for a confidence level of 0.95 and a sampling error of 0.05 is presented below.

**Table 1.** Necessary Minimum Sample Sizes for Population Sizes

Population size	20	100	500	1000	2000	5000	10000	50000	100000	1000000
Sample size	19	80	217	278	322	357	370	381	383	384

**Source:** Sekaran, 2003:294. Research Methods for Business: A Skill Building Approach. Fourth Edition. New York: John Wiley and Sons Inc

According to the data shown in Table 1, it can be observed that a sample size of 384 individuals can represent one million people with a confidence level of 0.95 and a sampling error of 0.05. Based on this data, it can be said that the 421 samples obtained in the research represent employees in the banking sector.

### 2.4. Data Collection and Measurement Instrument

The data collection phase of the research employed a questionnaire consisting of two sections. The demographic variables section of the questionnaire included items such as gender, age, marital status,



educational background, title, and years of service. The second section of the questionnaire comprised the talent management scale and work engagement scale.

In the classification of the scales, a 5-point Likert scale was used, with  $n=5$ , and the value of  $n-1/n=0.8$  was determined. Additionally, the following value range was utilized for making general interpretations about the scale-related data:

$1.00 < n \leq 1.80$  Range: Very Low

$1.80 < n \leq 2.60$  Range: Low

$2.60 < n \leq 3.40$  Range: Moderate

$3.40 < n \leq 4.20$  Range: High

$4.20 < n \leq 5.00$  Range: Very High

Factor and item averages have been interpreted and discussed in accordance with the classifications mentioned above.

**Table 2. Value Ranges for 5-Point Likert Type Preferences**

Weight	Options	Bounds	Classification
1	Strongly Disagree	1.00 – 1.80	Low
2	Disagree	1.81 – 2.60	Low
3	Partially Agree	2.61 – 3.40	Moderate
4	Agree	3.41 – 4.20	High
5	Strongly Agree	4.21 – 5.00	Very High

The correspondences of the marked items based on preference weights are provided in the table.

#### 2.4.1. Talent Management Scale

The Talent Management Scale was formed by incorporating certain items taken from a scale developed by Tutar et al. (2011), along with additional items added through literature review and expert opinions.

Factor Analysis and Reliability Coefficient of Talent Management Scale Items were analyzed. It is seen that the scale consists of 3 dimensions. These dimensions are Self Talent Assessment, Career Talent Assessment and Organizational Talent Assessment. The reliability coefficient (Cronbach Alpha) of all items of the talent management scale, which consists of 18 items in total, was found to be 0.942. While naming the dimensions of talent management, the following evaluations were taken as basis.

**Self-Talent Assessment Dimension:** This dimension represents an individual process where employees evaluate their tasks based on their own skills and competencies.



**Career Talent Assessment Dimension:** This dimension refers to organisational processes that support employees in determining their individual development and future career goals based on their existing talents.

**Organizational Talent Assessment Dimension:** This dimension evaluates, from the employees' perspective, the organization's attitude towards talented employees and its practices in talent assessment.

#### 2.4.2. Work Engagement Scale

The (UWES) scale developed by Schaufeli et al. (2002) and used in a study by Eryılmaz and Doğan (2012) was taken as a reference. Some items of this scale and some items added through literature review and expert opinion were used to form the work engagement scale. Subsequently, the scale underwent factor analysis and reliability coefficient analysis. It is seen that the scale is divided into two dimensions: work dedication and work fanaticism. The reliability coefficient (Cronbach Alpha) of all items of the work engagement scale, which consists of 9 items in total, was found to be 0.91.

**Work dedication**, entails an individual's enthusiastic and excited approach to their work, driven by a deep understanding of its significance and meaning, alongside feelings of pride and inspiration derived from their job (Schaufeli et al., 2002:74).

Work fanaticism is can described as a behavior in which employees excessively admire themselves in relation to their work, exhibit a high level of attachment and integration with their work, based on an element of affection. Koçel states that the highest levels of organizational dedication are characterized by organizational fanaticism (Koçel, 2014:534,537). Accordingly, it can be argued that one dimension of the highest degree of work engagement is fanaticism.

#### 2.5. Research Method

In this study, the survey research method was employed. Evaluations from a total of 421 employees were gathered using a constructed questionnaire, and analyzed using various statistical methods and test techniques (frequency distribution, mean, t-test, ANOVA, correlation, and regression) through the SPSS program. A statistical significance level of  $p < 0.05$  was accepted in the analysis. To determine whether parametric or nonparametric tests would be applied on the survey data, a normality test was conducted. The Shapiro-Wilk test is utilized when the sample size is below 30, while the Kolmogorov-Smirnov test is used when the sample size is 30 or above (Can, 2014:89).



**Table 3. Normality Test**

One-Sample Kolmogorov-Smirnov Test		Work Engagement	Talent Management
N		421	421
Normal Parameters <sup>a,b</sup>	Mean	3,7195	3,4221
	Std. Deviation	0,85244	0,79834
Kolmogorov-Smirnov Z		1,669	1,553
Asymp. Sig. (2-tailed)		<b>0,008</b>	<b>0,016</b>

As seen in Table 3, based on the results of the normality test, since all scales have  $p < 0.05$ , it appears appropriate to apply nonparametric tests. In SPSS, if the p-value in the significance tests of hypotheses exceeds 0.05 ( $p > 0.05$ ), it indicates no significant difference, whereas if the p-value is equal to or less than 0.05 ( $p < 0.05$ ), it suggests a significant difference (Can, 2014:79).

Parametric tests necessitate that the data exhibit normal distribution. If the data to be analyzed do not meet the parametric requirements, nonparametric tests should be applied (Altunışık et al., 2007:154,158). However, due to the abundance of the dataset, a decision has been made to assess the Skewness and Kurtosis values (Field, 2013:188).

**Table 3. Skewness and Kurtosis Table**

	Work Engagement	Talent Management
N	421	421
Skewness	<b>-0,734</b>	<b>-0,432</b>
Std. Error of Skewness	0,119	0,119
Kurtosis	<b>0,470</b>	<b>-0,227</b>
Std. Error of Kurtosis	0,237	0,237

It has been determined that the work engagement, turnover intention, and talent scales exhibit normal distribution when the Skewness-Kurtosis values from Table 3 fall within the range of (-1.96; +1.96), hence the decision to apply parametric tests.

Data must demonstrate normal distribution for the application of parametric tests (Altunışık et al., 2007:154). As a commonly accepted rule, if the values obtained by dividing the skewness coefficient



and kurtosis coefficient by their respective standard errors are between -1.96 and +1.96, the distribution can be considered normal (Can, 2014:84).

### 3. RESULTS

This section presents the findings obtained through the analyses conducted in the study.

#### 3.1. Demographic Characteristics of the Study Participants

The section on participants' demographic characteristics includes tables and evaluations specifying the gender, age, marital status, educational background, position in the organization, and years of service of the employees participating in the study.

##### 3.1.1. Distribution According to Participants' Genders

The distribution of participants by gender is shown in Table 4.

**Table 4. Table of Participant Distribution According to Gender**

Gender	Number	Percentage (%)	Total Percentage (%)
Male	204	48,5	48,5
Female	217	51,5	100
Total	421	100	

When examining the distribution of bank employees participating in the study according to gender, as presented in Table 4, it was determined that 48.5% of the employees (204 individuals) were male, while 51.5% (217 individuals) were female.

##### 3.1.2. Distribution According to Age Groups of Participants

The distribution of participants according to age groups is illustrated in Table 5

**Table 5. The Table of Distributions According to Age Groups of Participants**

Age	Number	Percentage (%)	Total Percentage (%)
21-30	218	51,8	51,8
31-40	150	35,6	87,4
41-50	52	12,4	99,8
51-60	1	0,2	100
Total	421	100	



When Table 5 is examined, it is determined that the distribution of bank employees participating in the research according to age groups is as follows: 51.8% (218 individuals) in the 21-30 age range, 35.6% (150 individuals) in the 31-40 age range, 12.4% (52 individuals) in the 41-50 age range, and 0.2% (1 individual) in the 51-60 age range. There are 218 employees in the 21-30 age group and 150 employees in the 31-40 age group

### 3.1.3. Distribution According to Marital Status of Participants

The distribution according to the marital status of the participants is shown in Table 6.

**Table 6. The Table of Distributions According to Marital Status of Participants**

Marital Status	Number	Percentage (%)	Total Percentage (%)
Married	280	66,5	66,5
Single	141	33,5	100
Toplam	421	100	

Upon examining the distribution according to marital status of bank employees participating in the research, as indicated in Table 6, it was found that 66.5% of the employees (280 individuals) are married, while 33.5% (141 individuals) are single.

### 3.1.4. Distribution According to Educational Levels of Participants

The distribution according to the educational levels of the participants is presented in Table 5.

**Table 7. The Table of Distributions According to Educational Levels of Participants**

Educational Status	Number	Percentage (%)	Total Percentage (%)
High School	38	9	9
Associate Degree	18	4,3	13,3
Bachelor's Degree	311	73,9	87,2
Postgraduate	54	12,8	100
Total	421	100	

Upon examining the distribution according to educational levels of bank employees participating in the research, as indicated in Table 7, it was found that 9% of the employees (38 individuals) have completed high school, 4.3% (18 individuals) have completed an associate degree,



73.9% (311 individuals) have completed a bachelor's degree, and 12.8% (54 individuals) have completed postgraduate education. It is observed that the total percentage of those with high school and associate degree education is 13.3%.

### 3.1.5. Distribution According to Titles of Participants

The distribution according to the titles of the participants is presented in Table 8.

**Table 8. The Table of Distributions According to Titles of Participants**

Title	Number	Percentage (%)	Total Percentage (%)
Bank Assistant	54	12,8	12,8
Service Representative	17	27,8	40,6
Service Supervisor	97	23	63,7
Specialist Assistant	5	1,2	64,8
Specialist	8	1,9	66,7
Assistant Director	70	16,6	83,4
Director	49	11,6	95
Branch Manager	21	5	100
Total	421	100	

Upon examining the distribution according to the titles of bank employees participating in the research, as indicated in Table 8, it was found that 12.8% of the employees (54 individuals) hold the title of bank assistant, 27.8% (17 individuals) are service representatives, 23% (97 individuals) are service supervisors, 1.2% (5 individuals) are specialist assistants, 1.9% (8 individuals) are specialists, 16.6% (70 individuals) are assistant directors, 11.6% (49 individuals) are directors, and 5% (21 individuals) are branch managers. The titles mentioned here are based on the positions in Ziraat Bank, while titles in Halk Bank and Vakıflar Bank may differ, they have been categorized accordingly for the purpose of this classification.

### 3.1.6. Distribution According to Years of Service of Participants

The distribution according to the years of service of the participants is illustrated in Table 9.



**Table 9. The Distributions According to Years of Service of Participants**

Years of Service	Number	Percentage (%)	Total Percentage (%)
0-5 year	202	48	48
6-10 year	135	32,1	80
11-15 year	10	2,4	82,4
16-20 year	63	15	97,4
21-25 year	11	2,6	100
Total	421	100	

When examined according to the years of service, as shown in Table 9, it is determined that 48% of the bank employees participating in the research (202 individuals) have 0-5 years of service, 32.1% (135 individuals) have 6-10 years, 2.4% (10 individuals) have 11-15 years, 15% (63 individuals) have 16-20 years, and 2.6% (11 individuals) have 21-25 years of service.

### 3.2. Relationship (Correlation) Analyses

The correlation table of talent management and its sub-dimensions, namely self-talent sub-dimension, career talent sub-dimension, and organizational talent subdimension talent sub-dimension with work engagement is presented in Table 10.

**Table 10. Correlation Table**

	Talent Management	Work Engagement
Talent Management	1	
Work Engagement	<b>0,621**</b>	1
Self Talent Subdimension	0,790**	<b>0,564**</b>
Career Talent Subdimension	0,916**	<b>0,536**</b>
Organizational Talent Subdimension	0,925**	<b>0,550**</b>

\*\* . Correlation is significant at the 0.01 level (2-tailed).

When examining the relationship (correlation) analyses presented in Table 10, the following findings have been reached:



There is a positive, linear, and moderate correlation ( $r=0.62$ ) between 'talent management' and 'work engagement' behavior, which is statistically significant ( $p<0.01$ ). Hypothesis H1 is confirmed.

There is a positive, linear, and moderate correlation ( $r=0.56$ ) between the sub-dimension of talent management, 'self talent,' and 'work engagement' behavior, which is statistically significant ( $p<0.01$ ). Hypothesis H1a is confirmed.

There is a positive, linear, and moderate correlation ( $r=0.53$ ) between the sub-dimension of talent management, 'career talent,' and 'work engagement' behavior, which is statistically significant ( $p<0.01$ ). Hypothesis H1b is confirmed.

There is a positive, linear, and moderate correlation ( $r=0.55$ ) between the sub-dimension of talent management, 'organizational talent,' and 'work engagement' behavior, which is statistically significant ( $p<0.01$ ). Hypothesis H1c is confirmed.

### 3.3. Effect (Regression) Analyses on the Work Engagement and Talent Management

The impact analysis on the intention to leave and behavioral aspects of talent management sub-dimensions, namely intrinsic talent, career talent, and organizational talent, is presented in Table 11.

**Table 11. Table of Impact Analysis on Work Engagement and Talent Management**

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Estimated Standard Error
1	0,633 <sup>a</sup>	0,401	0,396	0,66232

a. Influencers: Self Talent, Organizational Talent, Career Talent

#### ANOVA<sup>b</sup>

Model		Sum of Squares	df	Square of the Mean	F	Sig.
1	Regression	122,273	3	40,758	92,912	0,000 <sup>a</sup>
	Residual	182,925	417	0,439		
	Total	305,197	420			

a. Influencers: Organizational Talent, Self Talent, Career Talent

b. Dependent Variable: Work Engagement

A multiple regression analysis (Table 11) was conducted to examine the influence of 'talent management' on 'work engagement' behavior at a significance level of 0.01, indicating 99% confidence. The regression analysis revealed that at the significance level of  $p<0.01$ , 'work



engagement' behavior was found to be influenced by 'talent management' in a linear and positive manner, accounting for 39.6% (0.396) of the variance ( $R = 0.633$ ,  $R^2 = 0.401$ , Adjusted  $R^2 = 0.396$ ;  $F = 92.912$ ,  $p < 0.01$ ).

**Table 12. The Impact Analysis (Regression) Table of Work Engagement and Talent Management Sub-Dimensions**

Coefficients<sup>a</sup>

Independent Variables	B	Std. Error	Adjusted Beta	t	Sig.
(Sabit)	1,188	0,165		7,178	0,000
1 Self Talent	0,396	0,056	0,345	7,092	0,000
Career Talent	0,093	0,057	0,109	1,621	0,106
Organisational Talent	0,235	0,056	0,269	4,212	0,000

a. Dependent Variable: Work Engagement

In the multiple regression analysis conducted to examine the effects of dimensions of talent management on work engagement behavior (Table 12), the impact between intrinsic talent, career talent, organisational talent dimensions, and work engagement behavior is explored. According to the regression analysis conducted, at the significance level of  $p < 0.01$ , it has been determined that the "self talent" dimension of talent management positively affects work engagement behavior by 0.396 (39.6%), and the "organisational talent" dimension affects it by 0.235 (23.6%) linearly and positively. It can be stated that the "career talent" dimension of talent management either has no significant effect or has a very low level of effect ( $p > 0.05$ ).

The  $R^2$  values identified in the regression analysis demonstrate the extent to which the talent management dimensions in the research model influence work engagement behavior. The  $R^2$  value is determined as 40.1%. This value indicates that the talent management dimensions affect work engagement behavior by 40.1% and that this effect is positive.

When the impact values are substituted into the regression formulation  $Y = a + bX$  as follows:

$$\text{Work Engagement} = 1.188 + 0.396 X_{\text{self talent}} + 0.093 X_{\text{career talent}} + 0.235 X_{\text{organisational talent}} + \mathcal{E}$$

can be expressed.

The regression analysis results reveal that talent management positively influences work engagement behavior



### 3.4. ANOVA Analyses

Talent management and its sub-dimensions, namely self talent, career talent, and organizational talent, were analyzed to determine whether there are differences in work engagement based on demographic characteristics using t-tests and ANOVA analyses. Only significant differences are reported in the findings.

#### 3.4.1. Findings Based on Age Variable

The significant values obtained from the ANOVA analyses conducted based on the participants' age variables are shown in Table 13.

**Table 13. Age Variable ANOVA Table**

Age-Related Variable	Age	Sum of Squares	Mean Difference	F	P
Talent Management	21-30	267,7	-0,22714*	4,56	0,004
	31-40		-0,33994*		
Self Talent Sub-dimension	21-30	232,1	-0,38381*	12,95	0,000
	31-40		-0,50731*		
Work Engagement	41-50	305,2	0,63631*	8,723	0,000
	31-40		0,45693*		

As seen in Table 13, whether there is a significant difference in talent management according to participants' age variable at a 95% confidence level has been tested. The analysis resulted in a significant difference in talent management based on age variable at a significance level of 0.05 or 95% confidence ( $F=4.56$ ;  $p<0.05$ ). This difference was subjected to Post Hoc Scheffe analysis to determine its direction, revealing a favor towards those aged between 31-40 and 41-50, while employees aged between 21-30 showed a disadvantageous trend.

A similar analysis was conducted to examine whether there is a significant difference in the sub-dimension of talent management, namely 'intrinsic talent sub-dimension,' based on participants' age variable at a 95% confidence level. The analysis revealed a significant difference in the 'intrinsic talent sub-dimension' based on the age variable at a significance level of 0.01 or 99% confidence ( $F=12.95$ ;  $p<0.01$ ). Post Hoc Scheffe analysis indicated a favor towards those aged between 31-40 and 41-50, while employees aged between 21-30 exhibited a disadvantageous trend.

Furthermore, participants' age variable was tested for a significant difference in 'work engagement behavior' at a 95% confidence level. The analysis revealed a significant difference in 'work engagement behavior' based on the age variable at a significance level of 0.01 or 99% confidence



( $F=8.723$ ;  $p<0.01$ ). Post Hoc Scheffe analysis indicated a favor towards employees aged between 41-50, while those aged between 21-30 and 31-40 showed a disadvantageous trend.

### 3.4.2. Findings Based on Educational Status Variable

The significant values found for the ANOVA analyses conducted based on participants' educational levels are shown in Table 14.

**Table 14. ANOVA Table for Educational Level Variable**

Educational Level Variable	Education Level	Sum of Squares	Mean Difference	F	P
Work Engagement	High School		-0,2741		
	Postgraduate Associate's Degree	305,2	-0,4547	2,74	0,043
	Bachelor's Degree		-0,34311*		

The analysis tested whether there is a significant difference in 'work engagement' at a 95% confidence level based on participants' level of education. The analysis revealed a significant difference in 'work engagement' based on the level of education variable at a significance level of 0.05 or 95% confidence ( $F=2.74$ ;  $p<0.05$ ). Post Hoc Scheffe analysis was conducted to determine the direction of this difference. The analysis indicated a favorable trend towards employees with a bachelor's degree, while employees with a postgraduate degree showed a disadvantageous trend.

### 3.4.3. Findings According to Job Title Variable

The significant values found for the ANOVA analyses conducted according to the participants' job title variables are shown in Table 15.

**Table 15. Job Title Variable ANOVA Table**

Dependent Variable by Job Title	Job Title	Sum of Squares	Mean Difference	F	P	
Talent Management	Service Representative	267,69	Director	3,47	0,001	
	Branch Manager		Service Supervisor			-,52060*
						-,58031*
Self Talent Sub-dimension	Bank Assistant	232,1	Director	7,41	0,000	
			Branch Manager			-,44273**
						-,83333*



The analysis examined whether there is a significant difference in 'talent management' at a 95% confidence level based on participants' job titles. The analysis revealed a significant difference in 'talent management' based on the job title variable at a significance level of 0.05 or 95% confidence ( $F=3.47$ ;  $p<0.05$ ). Post Hoc Scheffe analysis was conducted to determine the direction of this difference. The analysis found a favorable trend towards directors and branch managers in terms of talent management, while service representatives showed a disadvantageous trend.

Similarly, the analysis tested whether there is a significant difference in the sub-dimension of talent management, namely self talent management sub-dimension,' at a 95% confidence level based on participants' job titles. The analysis revealed a significant difference in the self talent management' sub-dimension based on the job title variable at a significance level of 0.01 or 99% confidence ( $F=7.41$ ;  $p<0.05$ ). Post Hoc Scheffe analysis was conducted to determine the direction of this difference. The analysis found a favorable trend towards service representatives and branch managers in terms of intrinsic talent management, while bank tellers showed a disadvantageous trend.

#### 3.4.4. Findings Based on Years of Service Variable

Significant values obtained from the ANOVA analyses conducted based on the participants' years of service variable are presented in Table 16.

**Table 16. ANOVA Table for Years of Service Variable**

Variable Dependent on Years of Service	Years of Service		Sum of Squares	Mean Difference	F	P
Talent Management	0-5 year	6-10 year	267,7	-0,15621	5,71	0,001
		11-15 year		-0,18152		
		16-20 year		-0,43827*		
Self Talent Sub- dimension	0-5 year	6-10 year	232,05	-0,25061*	16,56	0,000
		11-15 year		-0,26172		
		16-20 year		-0,66847*		
Work Engagement	0-5 year	6-10 year	305,2	0,01197	9,11	0,000
		11-15 year		-0,0868		
		16-20 year		-0,55136*		

Participants' job tenure variable was tested for a significant difference in 'talent management' at a 95% confidence level. The analysis revealed a significant difference in 'talent management' based on job tenure variable at a significance level of 0.05 or 95% confidence ( $F=5.71$ ;  $p<0.05$ ). Post Hoc Scheffe analysis was conducted to determine the direction of this difference. The analysis indicated a trend



favoring employees with 16-20 years of tenure and a disadvantageous trend for those with 0-5 years of tenure in terms of talent management.

Similarly, participants' job tenure variable was tested for a significant difference in the sub-dimension of talent management, namely 'intrinsic talent management,' at a 95% confidence level. The analysis revealed a significant difference in the 'intrinsic talent management' sub-dimension based on job tenure variable at a significance level of 0.01 or 99% confidence ( $F=16.56$ ;  $p<0.01$ ). Post Hoc Scheffe analysis was conducted to determine the direction of this difference. The analysis indicated a trend favoring employees with 6-10 years and 16-20 years of tenure and a disadvantageous trend for those with 0-5 years of tenure in terms of intrinsic talent management.

Furthermore, participants' job tenure variable was tested for a significant difference in 'work engagement' at a 95% confidence level. The analysis revealed a significant difference in 'work engagement' based on job tenure variable at a significance level of 0.01 or 99% confidence ( $F=9.11$ ;  $p<0.01$ ). Post Hoc Scheffe analysis was conducted to determine the direction of this difference. According to the analysis, employees with 16-20 years of tenure showed a favorable trend, while those with 0-5 years of tenure exhibited a disadvantageous trend in terms of work engagement.

## CONCLUSION

The study examines the relationships between talent management, job engagement, performance, and intention to leave in the banking sector. The selection of banks as the sector of focus is due to their dynamic nature and rapid responsiveness to changes in demand, which positions them as among the sectors that best motivate employees. This dynamic nature of banks and their suitability for talent management practices have been emphasized in studies by Akbaş (2013) and Karabıyık (2015).

The findings highlight that the dynamic nature of banks and their ability to respond quickly to rapid changes in the business environment are critical factors influencing employee motivation. Observations reveal a positive impact of talent management practices in banks on job engagement. Furthermore, it is concluded that the preference for young employees aligns with the dynamic nature and high-performance expectations of banks. Additionally, the education level of employees and their commitment to their work play significant roles. It is noted that employees are generally dedicated and satisfied with their work, focusing on completing tasks on time and with quality. These findings demonstrate the potential of talent management practices in the banking sector to enhance job engagement and performance. Working in roles that align with their talents increases job engagement levels and fosters long-term organizational commitment. It is also noted that jobs that match employees' talents serve as a natural source of motivation, leading to more energetic performance. Analyses conducted within the scope of the research indicate that talent management practices in banks positively influence employee job engagement behaviors. These findings are supported by studies in the literature (Arora & Adhikari, 2013; Abazeed, 2018; Sopiha et al., 2020; Aslantas, 2024).

Additionally, it has been observed that young employees exhibit lower awareness of their talents compared to older age groups. This phenomenon may stem from a lack of full understanding of talents at a young age. It is evaluated that young employees tend to overlook their talents due to reasons such as job search anxiety and concerns about job security, with awareness increasing in later years. This



situation can be interpreted as talents manifesting as a need in individuals and potentially leading to job dissatisfaction. The increase in demands related to talents in older age groups can be explained by the ability to achieve personal fulfillment and productivity more quickly in roles that align with talents.

Considering merit and competency-based practices in banks, where successful employees occupy higher positions and awareness of talents increases with age, it can be stated that awareness of talent management increases depending on title and years of service, parallel to which job engagement behavior also increases.

It is evident that job engagement levels among young employees are lower compared to other age groups. This situation may be attributed to young employees not sufficiently engaging with their tasks, resulting in lower levels of job engagement. The lack of job engagement among young employees can be associated with decreased internal loyalty, in addition to expectations such as flexibility, meaningful work, and freedom. According to a study by Guthridge et al. (2008:51), individuals born after 1980 have expectations such as flexible work, meaningful tasks, freedom, high rewards, more comfortable working environments, and shorter working hours, with a lower likelihood of exhibiting job engagement behavior. Michaels et al. (2001:6) indicate that the new profile of employees tends to be more mobile across organizations, with lower organizational loyalty compared to previous years, a trend more pronounced among young employees. These findings corroborate the observation that job engagement levels among young employees are lower. It can be suggested that further research on this topic would provide deeper insights.

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## SWOT Analysis of Voluntary Insurance for Individuals in Poland

**Pawel OLBRYCHT**

**State University of Applied Sciences in Krosno, Poland**

### **Abstract**

In Poland, we can divide insurance into, among others, social and economic. Social ones are compulsory and aim at the preventive and insurance protection of life, health and ability to perform work. This system is intended to protect employees and their families against temporary or permanent inability to perform gainful employment.

Business insurance, on the other hand, is voluntary and is designed to pass on to the insurer potential financial problems resulting from random damage caused by unexpected events beyond the control of the insured.

By analysing the strengths and weaknesses as well as the opportunities and threats associated with taking out voluntary personal and non-life insurance, we can reaffirm the

that it is worth investing in your own protection. In case of unexpected random events causing material, but also human losses. Whether looking at the increase in various illnesses or the occurrence of damage to health caused by more than just accidents. In each of the above-mentioned and unmentioned cases, a so-called 'cash injection' is welcome in order to meet needs and be able to return to normal life as quickly as possible.

Insurance companies meet people's needs and financial possibilities so that everyone has the opportunity to take advantage of additional voluntary protection for themselves and others.



## Analysis of Difficulties in Understanding Physics Concept for Blind Students: A Systematic Literature Review

**WINARTI**

UIN Sunan Kalijaga Yogyakarta, [winarti@uin-suka.ac.id](mailto:winarti@uin-suka.ac.id), Indonesia.

**Nur Arviyanto HIMAWAN**

Universitas Terbuka, [arvians21@gmail.com](mailto:arvians21@gmail.com), Indonesia

### Abstract

Equal learning opportunities are the right of every child, including the opportunity to learn physics. Physics, characterized by its interpretation of natural phenomena, poses challenges for blind students due to its complexity and abstract nature. The limitation in visually interpreting concepts affects blind students' understanding of physics materials. This study aims to identify which physics materials are perceived as difficult for blind students to learn. Conducted as a literature review, data were analyzed through stages of reduction, presentation, and conclusion. The study sourced articles from primary science education journals indexed in leading research databases to gather data on conceptual understanding of physics and inclusive education. Using the document analysis method, relevant studies in the literature were systematically searched from two databases. The investigation focused on Indonesian studies published between 2020 and 2024, reflecting the most recent findings on physics concepts for blind students. The results indicate that blind students find physics materials such as the solar system, thermometer, dan mathematics pendulum particularly challenging.

**Keywords:** Difficulties in Understanding, Physics Concepts, Blind Student

### INTRODUCTION

The fulfillment of learning necessity becomes the primary right for every learning in the ideal learning process. Learners are unique individuals with diverse characteristics. In some cases, they are also gifted. Maryanti et al., (2021) explains that gifted learners refer to those with growth processes and academic problems. Thus, they need specific treatments. The fulfillment of learning necessities for disabled individuals requires a proper and systematic plan. They also need some adjustment in terms of complexity and material comprehension for each lesson, including physics.

Physics is a lesson with various senses involved, especially observation. This situation influences the situation of blind individuals to learn the concepts of physics. Blind learners tend to use their auditory



sense instead of their ocular sense. Thus, they could receive information from the sounds to construct concepts (Winarti, 2018). The physics concepts for normal learners may be very abstract moreover for the blind learners to learn. The teachers also encounter challenges in sharing the specific materials for blind learners (Ediyanto et al., 2020). Winarti, (2015) explains that teachers may encounter difficulties in designing the learning process, including the teaching materials. Therefore, blind learners have lower learning achievement than normal learners.

This fact requires further review to describe the difficult concept of physics to master by the learners. This review is useful as the basis to improve the physics learning process and the necessary analysis to develop inclusive physics learning research. Therefore, the necessity of blind learners could be facilitated. The first goal of this research is to identify physics concepts that are difficult for blind students to understand. The second aim is to analyze the obstacles blind students face in understanding physics concepts

## **THEORY**

### **Physics Lesson**

The learning system at schools requires the learners to learn various aspects of science. Educators must share the knowledge during the classroom learning process. The implementation of the learning process on each science that the learners obtained has specific acquisitions. A lesson that invites the learners to define and conceptually analyze natural phenomena in a formulaic manner is physics (Ramma et al., 2018). Learning physics makes learners find the answers from nature indirectly. This nature leads to the complicated and abstract nature of physics cognitive pattern. Some learners also found the difficult to interpret the concepts and the formula. Four influential reasons learners have difficulties understanding physics concepts are (a) the understanding and expression of the learners upon a physics phenomenon; (b) the association between the theory of physics and the formula or the equivalent of physics; (c) the difficulty to collaborate the phenomena and the formula; and (d) the demand of realistic and rational thinking (Bouchée et al., 2022).

The achievement of a physics lesson relies on the educators to communicate the concepts. Learners and educators have significant communication differences about the lesson materials. Thus, educators must minimize communication gaps while delivering the physics materials (Ekici, 2016). Before the educators share the problems related to physics concepts, the learners must have an understanding of the problem identification (Puspitasari et al., 2021).

### **The Gifted Children (Blind Learners)**

Physics and science lessons are compulsory lessons. Every learner must join this session, including the gifted children or blind learners. Every learner has a different mindset and talent, including gifted children or learners. These learners have some limitations to promote normal functions. They may also suffer from incapacities to manage their emotion and mentality (de Verdier et al., 2020). A learner with a specific necessity or a gifted one may lose his capability to see, blind learner. This learner has the equal opportunity to learn various sciences at school. Thus, parents, peer learners, educators, and school environments must support these learners to learn and develop at schools. Learners with special



necessity must receive specific treatment to synergize their social relationships and classroom learning (Manitsa & Doikou, 2022). Thus, a supportive social environment is important to develop their confidence. Many blind learners have a strong interest.

However, their physical limitations make them cannot see visually. Thus, they cannot visualize a phenomenon directly or a concept they learn (Andriyani et al., 2018). This situation requires the roles of teachers in the learning process of blind learners. Many researchers found the strength beyond the blind learners' senses to learn. A blind learner may develop orientation, motion, kinesthetic, or auditory skills excellently. These learners can visualize the concepts from braille to explore the materials instinctively (Toenders et al., 2017). Media and any aids may assist the learners to understand the concepts. Some physics materials have alternatives to provide excellent delivery. The same matter goes with the possible media to deliver the materials. These blind learners require educators to observe and develop their learning achievements from various resource perspectives (De Azevedo et al., 2015). Educators could use this opportunity to develop blind learners' learning skills and material understanding with kinesthetic actions (Ediyanto & Kawai, 2019). The importance of teachers' roles becomes the key to the blind learners' conceptual understanding. Teachers must be sensitive to applying specific media. The media may be different from one learner to another normal learners.

The auditory skills of blind learners may be useful to understand the conceptual and reasonable materials. The sonification of the material could improve the learners' understanding of certain phenomena within the science concept (Lahav et al., 2019). Bülbül (2013) explains that the material components of learning and the learning process require educators to provide some period for the learners to understand and participate actively. This action could boost their cognitive skill and express themselves about the materials they learn.

## METHOD

This qualitative research applied a systematic literature review to determine the complicated physics concept for blind learners in Indonesia. In this case, the investigation took articles published in the science-education journal, inclusive education journal, and indexed journal outlets. It was to obtain data on inclusive education in physics. The researchers applied systematic searches from Google Scholar database with a document analysis method to identify any relevant studies from the literature. The research was limited to articles published between 2020 and 2024. The multistage process was followed by reading each article. The applied keywords were physics learning, blind, inclusion, and specific necessity. The data analysis technique applied is based on the analysis framework proposed by Miles et al., (2019). The data analysis consisted of data reduction, display, verification, and conclusion. The data reduction includes the specific article selections. The data display includes the mapping of complex physics concepts to learn. Then, the verification or conclusion stage included the descriptions of the promoted mapping process. There was an iterative process during the article searches. Each obtained article reference list was added as a new reference source. The accepted articles were comprehensively investigated within physics learning based on physics for blind students.



## RESULTS AND DISCUSSION

The researchers grouped the articles based on the research types and determined the physics learning distribution and the discussed physics concepts for blind learners. The consideration of choosing the population and the sample was the published research results from various national and international journal articles from 2020 to 2024. The article browsing process on the Google Scholar database found related articles about physics learning of blind learners. The researchers reduced the results to obtain specific data. Table 1 shows the results.

**Table 1.** The Mapping of Physics Concepts Reviewed from 2020 to 2024

Authors	The Reviewed Concepts	Objectives
Alatas & Solehat, (2020)	Solar System	Developing the Al-Qur'an integrated audio boo.
Widiyatun et al., (2020)	Solar System	Developing the audio-based solar system props
Pramata et al., (2023)	Thermometer	Developing the thermometer props with audio output
Maryam et al., (2023)	Mathematic Pendulum	Developing the mathematic pendulum for practical tool base don voice apparatus digital.

Table 1 shows that from 2020 until 2024, only four articles discuss specifically the physics concept for blind learners. First, the concept of the solar system by Alatas & Solehat, (2020) and Widiyatun et al., (2020). These researchers emphasized the auditory and palpable senses. The solar system becomes a complicated concept for blind learners because the material requires visualization, such as the planetary characteristics. Therefore, the researchers assisted the blind learners to visualize with audio assistance. Besides that, the learners received some facilitations from the props based on their palpable sensing to improve the learning process.

Secondly, the thermometer concept is a complicated concept to teach for blind learners due to its association with specific temperatures. Besides that, the common thermometer displays the measurement in the form of increased height of mercury. Therefore, the implementation of the tool is not suitable for blind learners. Pramata et al., (2023) found that blind learners usually had some sunbathing to understand the concept of heat. However, the material did not proceed with the material of measuring temperature. Therefore, Pramata et al., (2023) developed a special thermometer with the audio output as the measurement. The thermometer had an ergonomic design for blind learners and could measure the temperature from 0°C to 100°C.

Thirdly, the concept of the mathematics pendulum is a complicated concept to understand for blind learners since no proper practical device to support it. The mathematics pendulum is useful for measuring the gravitational acceleration of a place. Blind learners are having difficulties joining the



automatic pendulum practicum because the practicum requires the learners to calculate how many the pendulum swings. The limited senses make the learners have difficulties to practice. Maryam et al., (2023) developed a practicum device dealing with a mathematics pendulum to calculate the numbers of the swings and the duration of the pendulum with audio-based output. This device facilitated the blind learners to elaborate on the pendulum motion.

The context of learning science requires the learning source or media to facilitate the abstract concept so that the learners can easily understand it. Wulandari & Winarti (2019) also explain that most inclusive schools attended by blind learners need various learning media and sources to make the delivered materials clear. Thus, the schools need media to realize this objective. Media assistance could simplify the material complexity.

The results found that blind learners had difficulties to learn various physics concepts. Therefore, a collective commitment to providing excellent inclusive education services for learners is important. Maryanti et al., (2021) also explains the related matter as shown in Table 2.

**Table 2.** Problems and Necessities of the Blind Learners

Problems	Necessities
Impaired visual capability	Requiring simple, concrete, and relevant auditory learning media based on the necessity
Having difficulties to understand the symbols or abstract components	Requiring a simple and interesting learning strategy based on the necessity
Having low cognition about certain concepts	Applying the learning method by involving palpable and auditory senses
Having difficulties in understanding the complex information and visual information	Requiring the adaptive and assistive technological media
Having difficulties in realizing abstract instruction and promoting the instruction of visual information	
Having difficulties in promoting oriented and mobility activities	
Having difficulties in promoting activity to identify and realize the instruction of complex activities	

Based on the review results, it is evident that most studies related to physics learning for blind students indicate a scarcity of publications in this area. While some may find this study less intriguing, as researchers, we believe it is highly significant and interesting to conduct. This study has the potential to facilitate the optimal implementation of physics learning for blind students. While learning facilities for sighted students are abundant, the same cannot be said for blind students, who often have limited access to facilities and learning resources.



Teachers must understand the needs of blind students in learning physics to effectively help them grasp the concepts. There are various strategies and resources that can aid blind students in learning physics:

1. Visually impaired-friendly teaching materials  
Provide modules and learning materials with braille letters (such as worksheet) and utilize learning videos with sound output
2. Physics experiment props  
Incorporate hands-on experiments and demonstrations that emphasize tactile sensations, sounds, and other sensory inputs. Ensure that physics teaching aids or experiment tools are equipped with braille writing or reading to support their learning. This enables blind students to actively engage in experiments, rather than just passively listening to their peers
3. Collaborative learning  
Foster a collaborative learning environment where blind students can work with peers, teachers, or mentors. Encourage discussions, questions, and exploration of physics principles through dialogue and interaction."

## CONCLUSION

Systematic literature studies reveal that blind students encounter difficulty learning several physics concepts, including solar systems, thermometers, and mathematical pendulums. These challenges arise because these concepts heavily rely on visual senses for comprehension. Furthermore, findings from literature reviews indicate a scarcity of studies on physics learning for blind students between 2020 and 2024. This study still has several limitations, such as the main reference source used as the primary source of research is still limited to research results from Indonesia. Future researchers should broaden their scope by incorporating references from scientific articles published in reputable international journals to ensure the applicability of their findings on a global scale.

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## **Jak zakupy wpływają na samopoczucie konsumentów? Analiza wpływu stanu emocjonalnego na wybory zakupowe i wzajemne relacje między procesem zakupowym a poprawą nastroju**

**Sylwia NOWAK**

**State University of Applied Sciences in Krosno, Poland**

Zakupy stanowią część życia każdego z nas, generując niekiedy skomplikowane odczucia emocjonalne. To, jak te emocje wpływają na nasze samopoczucie, staje się kluczowym aspektem przeprowadzonego badania. Celem badania ankietowego było zrozumienie, w jaki sposób emocje kształtują zachowania konsumentów. W okresie styczeń-luty 2024 br. zostało przeprowadzone badanie ankietowe za pomocą formularza Google wśród 99 respondentów. Wnioski wskazują na kilka istotnych kwestii. 42.5% osób badanych, dokonując zakupów pod wpływem pozytywnych emocji rzadziej doświadcza żalu po dokonaniu zakupów, natomiast 43.4% osób badanych robiących zakupy pod wpływem negatywnych emocji przyznaje, że czasami żałują swoich zakupów, co może sugerować, że negatywne emocje mogą skłaniać konsumentów do impulsywnych zakupów w celu złagodzenia nieprzyjemnych uczuć. Warto podkreślić, że świadomość naszych emocji podczas zakupów ma ogromne znaczenie dla późniejszego zadowolenia. Zakupy wykonane podczas pozytywnych emocji rzadziej generują wyrzuty sumienia niż te dokonane w atmosferze negatywnych uczuć.

**Słowa kluczowe:** zakupy, emocje, konsument, pozytywne emocje, negatywne emocje, impulsywne zakupy



## Principles of combating terrorism financing and money laundering on the capital market

Krzysztof MUCHA, PhD

University of Opole, Poland

### Abstract

The basis for the functioning of the national system for counteracting money laundering and terrorism financing are generally applicable legal provisions, both those that directly relate to it and those that concern areas only indirectly related to it.

These regulations define the scope of activity, including the obligations and powers of the Anti-Money Laundering and Counter-Terrorism Financing (AML/CFT) financial intelligence units, Obligated Institutions and cooperating units, and also define the rules for the use of products and services used on the financial market. The level of their coherence, completeness and adaptation to the existing level of risk of counteracting money laundering and terrorist financing has a significant impact on the effectiveness of the entire system of counteracting money laundering and terrorist financing.

The capital sector is highly diversified in terms of products and services offered to clients. Entities operating in this sector, important from the point of view of the risk of money laundering and terrorist financing, can be divided into two groups: investment companies and investment funds.

Brokerage activities (submitting orders to the regulated market operated by the Stock Exchange or another authorized domestic or foreign entity for execution) and accepting and transmitting customer orders, as well as maintaining investment accounts, which are often connected with these activities, are the activities most exposed to the risk of laundering in this sector. money and financing of terrorism.

In the case of brokerage activities, the client has access to the market through the brokerage house and may execute orders or use the cash account in a manner inconsistent with its intended purpose.

According to one of the definitions, crowdfunding is a type of collection and allocation of capital transferred for the development of a specific venture in exchange for a specific return benefit, which involves a wide range of capital donors, is characterized by the use of ICT technologies and a lower entry barrier and better transaction conditions than generally available on the market.

In the case of collecting and sending funds for terrorist activities, we are dealing primarily with donation crowdfunding. The official purpose of the fundraising will not directly indicate the intention to use the collected funds for money laundering or terrorist financing. The fundraising organizers send appeals for funds via applications such as Twitter. After finding people interested, they also contact



them via instant messenger, e.g. Skype. Donors make cash donations to the initiators of the campaign or buy international prepaid telephone cards, the numbers of which are then made available to them.

The activities of terrorist organizations (both those closely related to terrorist activities, logistics and recruitment) may also be financed from funds from legal business activities. Income from legal activities comes primarily from those sectors of the economy in which there are no formal qualification requirements when starting a business (such as a master's certificate, license) and where starting a business does not require significant investments. The risk that a company will divert funds to support terrorism is greater when the relationship between reported sales and actual sales is difficult to verify and in the case of capital-intensive activities.

Financing of terrorist activities may also take place from internal sources, including financing from families, income from one's own work and other non-criminal sources. The amounts of money needed to carry out small attacks can be raised by individual terrorists and their support networks using savings, access to credit, or other profits from activities they control.

Terrorist organizations may be largely decentralized, and self-financing may also include cases in which financing is provided by an autonomous external entity that is not directly involved in the planning or execution of the attack, despite providing funds for this purpose.

Because modern terrorism and the international money laundering system consist of various organizational structures, there is a constant evolution of techniques used in response to international efforts to counteract this phenomenon on the capital market.

Although it is difficult to determine which technique is the most common method of transferring money for terrorist purposes, it seems that from the point of view of the activities of terrorist organizations, the most convenient method is to use the capital sector. In this way, activities closely related to terrorist activities, such as logistics or recruitment, can be easily financed. Money can be transferred using the financial system both within one country and can be transferred from one country to another. Funds transfer transactions may be disguised by using accounts in false names, charities or companies to disguise the ultimate recipient.

The use of the financial system, including the capital market, to transfer funds may take the form of transferring legal and illegal funds to countries with conflicts or countries bordering countries where terrorist organizations operate. Funds are often transferred to accounts in financial and credit institutions located in jurisdictions that do not comply with international AML/CTF standards and recommendations.

Bank accounts and capital accounts belonging to individuals associated with terrorists (family and other close contacts) can be used to make cash deposits and subsequent cross-border transfers. There is also self-financing of terrorists (especially "lone wolves") from their own funds, accumulated in a bank or capital account (often from completely legal sources - earnings, credits/loans, scholarships, donations from family).



## Organic Milkfish Pond Agribusiness with Utilization of IoT Smart Sensor Monitoring to Enhance Competitiveness and Farmer Independence

**Ahmad Muhlis NURYADI**

Muhamamdiyah University of Kendari, [muhlis.nuryadi@umkendari.ac.id](mailto:muhlis.nuryadi@umkendari.ac.id), Indonesia

**Eddy HAMKA**

Muhamamdiyah University of Kendari, [e.hamka83@gmail.com](mailto:e.hamka83@gmail.com), Indonesia

**Alfiah FAJRIANI**

Muhamamdiyah University of Kendari, [alfiah.fajriani@umkendari.ac.id](mailto:alfiah.fajriani@umkendari.ac.id), Indonesia

**Titin RAHMIATIN**

Muhamamdiyah University of Kendari, [titin.rahmiatin@umkendari.ac.id](mailto:titin.rahmiatin@umkendari.ac.id), Indonesia

### Abstract

The village of Towua has tremendous potential in the field of fisheries because 52.35% of its area is fisheries area. The livelihood of the people in Towua Village is generally farming, both pond farming and rice farming. The area of ponds in Towua Village is 585.69 hectares, used for the cultivation of milkfish and Vannamei shrimp. Overall pond productivity is still very low because it is still managed traditionally with high mortality, even up to 50% of the total number stocked. The issues faced by prospective target partners certainly require efforts to minimize the losses experienced while increasing farmers' profits sustainably. One thing that can be done is to implement or apply the results of university research, including introducing organic farming systems and utilizing IoT Smart Sensor Monitoring to assist in monitoring pond water quality. In addition, solutions include increasing the supply of natural feed through organic farming systems, improving pond management, and business management training. The resolution of these partner issues is carried out through a holistic and multidisciplinary research-based approach conducted by the implementing team and support team to achieve farmer welfare and village economic self-reliance. The results achieved are: (1) Increased understanding and knowledge of partners regarding organic pond farming. (2) Increased skills of partners in organic pond farming and utilization of IoT Smart Monitoring. (3) Increased income of partners in pond farming. (4) The kosabangsa program is very beneficial for implementing universities because they receive technology assistance from the support team, which is also very beneficial for the community

**Keywords:** Pond, Organic, IoT, Towua, Sensor, Monitoring



## INTRODUCTION

Towua Village has enormous potential in pond farming, as shown by its 585.69 hectares of pond area, which is 52.35% of the total village area (1,118.9 hectares). The average income of the family head in this village is IDR 1,912,794 per month or IDR 443,000 per family member per month. The shrimp pond management in Towua Village is considered advanced because its ponds are lined with HDPE plastic and use water wheels to fulfill the pond's oxygen needs. The cultivation system is also promising, although there is a need for optimization and the ability to identify changes in water quality. However, pond farmers possess experience in pond cultivation and a strong desire to develop their businesses, which serves as essential capital for implementing innovation. This condition is particularly relevant for pond farmers with limited capital who continue to employ traditional cultivation systems, resulting in low production, despite having a sizable land area, totaling 22 hectares, where each family head has 0.5-2 hectares of land.

The discussion with the village head revealed that the productivity of community ponds remains very low due to their traditional management methods, resulting in a high mortality rate. It would be a blessing if 50% of the total stocked fingerlings could survive and be harvested. The general issues of milkfish and shrimp farming businesses in the target areas include low water quality caused by high concentrations of chemicals, low levels of dissolved oxygen, and the potential for a decrease in water quality due to the impact of nickel mining sedimentation, as well as the low quality of human resources in fishery business management. Another problem is that extreme weather and temperature changes often affect the environmental conditions of fish ponds, causing stress to fish and disrupting their growth. According to Muthalib et al. (2017), the issues that milkfish pond businesses in Southeast Sulawesi Province face include the declining quality of pond land, capital, and human resource quality.

This program aims to increase community empowerment and welfare by achieving the following indicators:

1. Improve the quality of pond farmers in cultivation technology, business management, and farmer group management.
2. Improve the quality and quantity of production, business efficiency, and income of pond farmers.
3. Increase the independence of cultivators and the competitiveness of fish farming businesses.

## METHOD

The stages of the activities are detailed below.

1. In the preparation stage, action plans were developed, and team coordination was conducted to agree on the technical implementation of the activities.
2. Coordination between the implementing team and partner groups was carried out to strengthen the implementation of activities. Equipment and materials for the program were procured at this stage.



3. Program implementation include physical and non-physical activities. Physical activities were carried out through science and technology transfer activities to partner groups by directly involving them in each activity. The activities include:
  - a. Production of organic fertilizer, pond improvement, pond drying, turning and liming of pond soil, fertilization, seeding, as well as proper feeding and harvesting.
  - b. Implementation of IoT Smart Sensor Monitoring, which includes installing tools in the field, training on tool usage, and monitoring tool performance.

Non-physical activities were conducted through individual and group training and mentoring.

- a. Individual training and mentoring were carried out for each group member at every opportunity, either during visits or on casual occasions. This training approach is expected to strengthen relationships between the implementing team and partner groups, as well as target communities. Consequently, knowledge and technology transfer become more effective.
- b. Group training and mentoring were conducted through counseling and guidance sessions for partner groups. The training topic is proper and correct cultivation, including land preparation, pest eradication, drying, liming, seeding, maintenance, controlling water quality, harvesting, and post-harvest handling.

In every training and mentoring activity, all members of partner farming groups were provided with brochures, leaflets, or bulletins, and were occasionally shown videos of the activities. The aim is to help understand the technology provided or applied. The training and mentoring topics provided to partner groups include:

- a) Management of business groups or farmer groups.
  - b) Maintenance of milkfish ponds organically with intensive management.
  - c) Methods to produce compost fertilizer and their application in milkfish cultivation.
  - d) Harvesting, post-harvest handling, and marketing.
  - e) Utilization of IoT Smart Sensor monitoring technology and its application.
  - f) Determination of time allocation in the group's Follow-up Work Plan (RKTL).
4. Activity evaluation. In the final stage, mass outreach was carried out to the broader community involving various components of society, which is intended to socialize the programs and innovations implemented.

## **RESULT AND DISCUSSION**

The achievement of each implemented solution is presented in the description below.

1. IoT devices have been 100% installed and applied and can help monitor the water quality in shrimp ponds.
2. Improvements in the pond quality have been carried out through improvements to embankments and pond water circulation, as well as the use of probiotics prior to seeding.



3. Partners have been briefed on the efficiency and effectiveness of reservoir ponds for water sterilization.
4. Socializations have been carried out incidentally and in groups during each activity.
5. Organic fertilizer production as a source of natural food growth has achieved 25%.
6. The pond embankment has been repaired, and the quality of the pond soil has been improved through drying and liming.
7. IoT technology in pond cultivation is already understood.
8. Partner farmer groups have understood business management and group management concepts.

The following are the innovations implemented in the activity.

### **1. Business Management Structuring**

The organizational structuring of partner groups was carried out by improving the organizational structure of farmer groups, improving the duties, main tasks, and functions of each group component, as well as providing training on administration, bookkeeping, and financial systems. Sustainable business development requires institutions (Nuryadi et al., 2019). The ideal agribusiness model, which connects the industry, government, and research institutions to improve human resources and transfer science and technology, requires cultivator institutions (Nuryadi et al., 2019). Therefore, strengthening and innovating integrated cultivation institutions is very important and feasible. On the other hand, cooperatives through cooperation patterns are still expected in the development of agroindustry, especially in providing raw materials and marketing (Nuryadi et al., 2020).

### **2. Organic Cultivation System**

The solutions offered for implementation are aimed at increasing the independence and sustainability of aquaculture businesses by implementing IoT and organic pond cultivation systems. The advantage of IoT sensor monitoring in cultivation businesses is that it encourages them to focus on the quality of the pond water environment. Moreover, IoT is easy to use and integrate, versatile, and durable (Victor Garrido-Momparler, Miguel Peris, 2022). Organic farming is a cultivation technique that is safe and sustainable, which brings prosperity to farmers and consumers (Notohadiningrat, T., 1995). An organic system and the use of probiotics can help accelerate the growth of milkfish and convert feed by 0.89 after 55 days. The production of organic fertilizer is shown in Figure 1. In the globalization era, marketing products to the international market must meet several criteria, including not containing antibiotic residues, pesticides, or chemicals (Malik A., 2009).



Figure 1. Production of Organic Fertilizer

### 3. Optimization of Oxygen Supply

The balance of the shrimp pond water ecosystem is expected to create a comfortable and safe environment during shrimp cultivation. Aeration using a water wheel is essential in creating aquatic conditions for pond cultivation. This mechanism introduces air into the water using aeration equipment to ensure sufficient oxygen content in the water. The water wheel in shrimp ponds functions as an oxygen supplier. A good pond ecosystem requires sufficient dissolved oxygen. The dissolved oxygen is supplied by phytoplankton, but it is insufficient for the biota and the processes that occur in it. Oxygen in pond water is required for respiration, as well as the physical, chemical, and biological processes in these waters. Water wheels in shrimp ponds are expected to support and anticipate oxygen shortages that can occur at certain times in aquaculture pond waters. The primary function of the shrimp pond wheel is to supply oxygen to the pond and find out the number of water wheels required. Figure 2 presents the optimization of oxygen supply in ponds using water wheels



Figure 2. Optimization of Oxygen Supply in Ponds using Water Wheels

### 4. Water Quality Monitoring using IoT Smart Sensor Monitoring

The output of this program is an IoT-based smart sensor for controlling fish pond water quality. This innovation enables real-time measurement and monitoring of pond water quality, including dissolved oxygen (DO) concentration and other essential characteristics. Moreover, it can automatically regulate the aerator movement based on data detected by sensors, thereby maintaining pond water conditions at an optimal level. This innovation has social and economic impacts, i.e., increasing fish productivity by reducing fish mortality rates. By maintaining optimal levels of pond water quality,



this innovation helps prevent conditions that could lead to fish mortality or suboptimal growth. This method positively impacts fish ponds by increasing the number of healthy fish available for harvest, thereby increasing profits for farmers.

The IoT-based freshwater fish pond quality monitoring tool has three layers: sensor, control, and output. The sensor layer consists of five sensors to measure the quality of freshwater fish ponds, namely a water pH sensor with an MSP340 signal processing module, a TDS sensor with a SEN0244 signal processing module, a DO sensor with a SEN0237-A signal processing module, a water turbidity sensor with a SEN0189 signal processing module, and a water temperature sensor. The second layer is the control layer, which consists of a microcontroller as the central data processor. This microcontroller is supported by an internet signal capture module, namely the ESP module, which can send data to the cloud using the internet. The final layer is the output layer, which displays the results of sensor readings sent to the cloud. Officers and farmers can monitor the pond water quality in real-time via the output layer.

The success of equipment installation and subsequent use depends on farmers' acceptance of the technology. In many cases, technology acceptance is essential for the success of technology implementation (Ulhaq et al., 2022, Jpffre et al., 2020, Ngoc et al., 2021), including IoT Water Quality Monitoring.

Community empowerment activities through developing and implementing IoT Water Quality Monitoring in shrimp cultivation have demonstrated a positive impact. Shrimp farmers currently have better access to water quality information on their farms, allowing them to make more timely and effective decisions (Nuryadi et al., 2023). Figure 3 shows the handover of IoT technology to the community.



Figure 3. Handover of IoT Technology

## CONCLUSION AND RECOMMENDATION

### A. Conclusion

The following are the conclusions from the activities.

1. There is an 80% increase in partner's understanding and knowledge regarding organic pond farming.



2. There is an 80% increase in partner's skills in organic pond farming.
3. There is a 30% increase in partner's income in the pond cultivation business.
4. The Kosabangsa program is beneficial for implementing universities because technological assistance also benefits the community.

## B. Recommendation

This paper provide some recommendations to improve the implementation of the program, as follows.

1. The overall partner involvement should be improved.
2. The Kosabangsa program should be continued and be more in-depth if implemented as a multi-year initiative.

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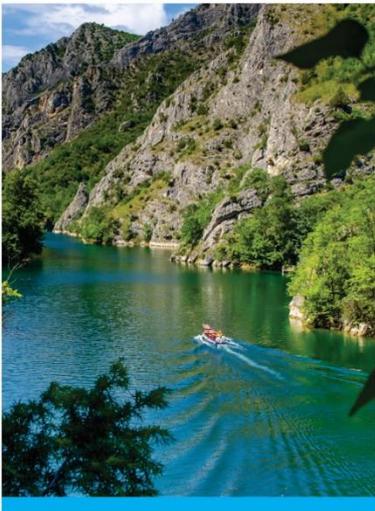
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